

How can the performance of various object detection AI models be optimized when trained on small amounts of data and applied to analog video streams in conditions of interference?

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04/24/2024

## Abstract

The expansion of the modern trend to utilize object detection in real time digital CCTV footage to wireless analog CCTV systems still presents challenges due to the high levels of noise of analog video. In this paper we aim to present a benchmark of various object detection model architectures on five new small datasets consisting of images from analog video streams with conditions of interference. The model architectures tested are Yolov8, Faster-RCNN, Masked-RCNN, and Retinanet. We compared the models using different hyperparameters, amount of training, and with or without pre-training. From this comparison we found that Yolov8 performed the best in terms of inference time, although Faster-RCNN showed the highest accuracy. We provide the observation that live object detection on analog video streams with conditions of interference is possible with commendable performance and accuracy.

## Introduction

Modern wireless closed-circuit television systems (CCTV) generally use IP cameras and wifi due to wifi's high throughput and IP camera's high resolution. Although these technologies are capable of transmitting high-quality video streams, the wifi standards reliance on the 2.4 GHz and 5.8 GHz bands limits the range of these wireless systems significantly. These high-frequency bands can carry 450 Mbps and over 1 Gbps respectively but make a trade-off with range for this high throughput. For a long-range wireless CCTV application where a single video stream might only require a throughput of ~3 Mbps, this is excessive. The use of analog cameras in combination with lower radio frequencies can increase the range and penetration of the wireless link significantly. The lowest legally available frequency for hobbyist use that meets our new throughput requirement of 6 Mhz is the 900 Mhz band. Unfortunately, the 900 Mhz band is widely used by communication protocols, Internet of Things (IoT) devices, and mobile broadband which makes it susceptible to heavy interference in long-range wireless applications.

It is common practice to analyze the video streams of modern CCTV systems in real-time using object detection artificial intelligence models for security purposes. The present paper will explore how the performance of various object detection AI models can be optimized when trained on small amounts of data and applied to analog video streams in conditions of interference. Literature specifically covering object detection on analog video systems is non-existent. Regardless, the type of noise that analog video introduces is not unique, and literature regarding object detection on degraded and noisy video streams is plentiful. This is the gap in the current literature that the present paper aims to bridge.

The research topic will be explored by training various object detection models on five different analog CCTV cameras. The data for each camera was gathered over the course of 24 hours with an interval of four and a half minutes. The hyperparameters, amount of training, and whether the model was pre-trained

will be adjusted and compared using industry-standard evaluation metrics.

## Literature Review

### Latest developments in object detection

From a high-level overview of the recent literature, it is clear that the state-of-the-art object detection models use either a one-stage or two-stage method. One-stage methods are designed to decrease inference speed as much as possible whereas two-stage methods are designed to increase detection accuracy. Examples of one-stage models include RetinaNet and YOLO. Examples of two-stage models include faster R-CNN and mask R-CNN. COCO is a family of benchmark datasets that are commonly used to evaluate the performance of various models. The Mean Average Precision metric is generally used to compare and contrast models. Contrary to the latest developments in large language models, the use of transformers is limited among top-performing object detection models. As Tu et al. (2022) explain, “the lack of scalability of self-attention mechanisms with respect to image size has limited their (transformers) wide adoption in state-of-the-art vision backbones”. Nonetheless, “the remarkable success of transformers in largescale language models, vision transformers (ViTs), have also swept the computer vision field and are becoming the primary choice for the research and practice of large-scale vision foundation models.” (Wang et al. 2022).

Zong et al. (2022) conducted “extensive experiments to evaluate the effectiveness of the proposed approach on DETR variants”. The results show a detailed benchmark table of the models: Co-DETR (Swin-L), Co-DETR and Co-DETR (single-scale) evaluated using the COCO minival, COCO test-dev, and LVIS v1.0 minival datasets. Using the box Mean Average Precision (mAP) metric it is clear that the co-DETR has the highest accuracy in this comparison. Using this mAP metric we can determine the global ranking of this model and see that it outperforms any existing current model.

Fang et al. (2022) introduce a new model ‘EVA’ which outperforms many modern models and “can efficiently scale up EVA to one billion parameters”. Although EVA’s architecture has a heavy focus on scalability and inference speed over accuracy, the results boast a box mAP value of 64.7 which places it among the top 10 on the global rankings when trained on the COCO test-dev dataset. Furthermore, when evaluated using the COCO-O dataset EVA boasts an Average mAP of 57.8 outperforming all models to date on this dataset.

Ghiasi et al. (2020) use “a systematic study of the Copy-Paste augmentation” where the training pipeline “randomly pastes objects onto an image”. “Furthermore, we show Copy-Paste is additive with semi-supervised methods that leverage extra data through pseudo labeling (e.g. self-training). On COCO instance segmentation, we achieve 49.1 mask AP and 57.3 box AP, an improvement of +0.6 mask AP and +1.5 box AP over the previous state-of-the-art. We further demonstrate that Copy-Paste can lead to significant improvements on the LVIS benchmark. Our baseline model outperforms the LVIS 2020 Challenge winning

entry by +3.6 mask AP on rare categories.”. But most notably for our use case, object detection, when evaluated using the PASCAL VOC 2007 dataset, they achieved a MAP of 89.3% outperforming all models on this dataset.

Li et al. (2023) with their release of YOLOv6, which is a model architecture that prioritizes inference speed over accuracy, “achieve better accuracy performance (50.0%/52.8% respectively) than other detectors at a similar inference speed”. According to their published benchmarks, YOLOv6-L6 outperforms all models on the COCO 2017 val dataset. Furthermore, their YOLOX-L model outperforms all models when evaluated using the Waymo 2D detection all\_ns f0val and Manga109-s 15test datasets.

MaxViT is the first model to implement the use of Transformers in its architecture. Tu et al’s paper introduces MaxVit, along with its novel architecture. Tu et al’s results “demonstrate the effectiveness of [MaxVit] on a broad spectrum of vision tasks”. Notably for object detection, MaxVit-B outperforms all existing object detection models when evaluated using the COCO 2017 data set.

Wang et al. (2022) present “a new large-scale CNN-based foundation model, termed InternImage”. “Different from the recent CNNs that focus on large dense kernels, InternImage takes deformable convolution as the core operator, so that our model not only has the large effective receptive field required for downstream tasks such as detection and segmentation, but also has the adaptive spatial aggregation conditioned by input and task information”. InternImage takes the approach many modern transformer models take by architecture-level design, scaling-up parameters, and training on massive amounts of data in hopes of increasing accuracy whilst still having the benefits of a CNN architecture. This novel approach demonstrates high levels of accuracy in datasets such as COCO minival, COCO test-dev, and ADE20K. InternImage scored particularly high when evaluated using the CrowdHuman (full body) dataset outperforming all other models.

Dagli, R. and Shaikh, A. (2021) present an interesting dataset made up of medical personal protective equipment. This dataset posed challenging for models such as FasterRCNN, YOLOv3, VarifocalNet, RegNet, Deformable Convolutional Network, and Double Heads. Although the selection of models tested is not up to date, the custom model Dagli, R. and Shaikh, A. designed and trained specifically for this data set, termed TridentNet, outperformed all other models tested.

Table 1. Datasets listed with their best performing model

<b>**Dataset**</b>	<b>**Best model**</b>
COCO test-dev	Co-DETR
COCO minival	Co-DETR
COCO-O	EVA
PASCAL VOC 2007	Cascade Eff-B7 NAS-FPN (Copy Paste pre-training, single-scale)
COCO 2017 val	YOLOv6-L6(46 fps, V100, bs1)
COCO 2017	MaxViT-B
CrowdHuman (full body)	InternImage-H
CPPE-5	TridentNet
Waymo detection allns f0val	YOLOX-L
Manga109-s 15test	YOLOX-L

This table summarizes the paragraphs above, listing each dataset alongside the model architecture that had the highest normalized score across all reported metrics.

Lastly, Shinya, Y. (2021) further justified the results from the aforementioned studies in the study “USB: Universal-Scale Object Detection Benchmark”. This study aims to fairly compare and benchmark various object detection models by mixing popular datasets such as COCO, with newer datasets such as Waymo Open Dataset and Manga109-s. This amalgamated dataset hopes to address some of the issues observed when benchmarking with COCO like datasets.

### Types of noise and their impact

There are too many sources of noise present in a CCTV camera transmitting analog video over 900 MHz to list. The nature of the noise is hard to predict due to the medium over which the video signal travels. There are many more variations in air than a standard cable. Perhaps one camera has some foilage in the signal path, other camera systems might have a direct line of sight. Regardless, there are also some constant sources of noise present in this system. The two primary sources of predictable, and constant noise are the analog-to-digital conversion circuit and the de-interlacing process of the analog video. These two components introduce a distinct type of interference which we can discuss and improve. Analog to digital video conversion is known to introduce ‘salt-and-pepper’ noise. “This kind of noise randomly changes intensities of some pixels to the maximum or minimum values of the intensity range on the image/video” (Veerakumar et al. 2011). Furthermore, analog video has certain characteristics which can also be interpreted as ‘noise’. One of which is caused by the de-interlacing process upon which both NTSC and PAL analog video protocols are built, causing analog video to have distinct visible lines going across the image. Lastly, both NTSC and PAL have a limit of transmitting 0.3 Megapixel images which can be interpreted as a ‘low resolution’ image and hence also ‘noise’.

An exhaustive search reveals that only a limited amount of literature exists on

the effects of more generally, ‘noise’, on the performance of object detection models. It is important to note that this search did not reveal any sources specifically covering noise induced from analog video transmitted over any radio frequency.

Interestingly, Momeny et al. (2021) discuss the use of noise as a data augmentation method to improve accuracy for image classification CNN models. An increase in training speed and accuracy was observed although the increase in accuracy was primarily observed in noisy images.

Nazaré et al. (2018), aim to “evaluate the generalization of models learned by different networks using noisy images”. The results indicate that if the application’s image quality is prone to noise, training the image classification model on noisy images will generally increase its accuracy. This directly contradicts Paranhos Da Costa et al. (2016) in the study “An empirical study on the effects of different types of noise in image classification tasks”, who speculate “noise makes classification more difficult due to the fact that models trained with a particular noisy/restored training set version – and tested on images with the same noise configuration – usually perform worse than a model trained and tested on the original data”.

Rodríguez et al. (2024) discuss the impact of many different types of noise on object detection models. This paper has a particular focus on Gaussian noise and brightness noise which are both types of noise that are also present in our video. The effects of these two types of noise are tested on various YOLO object detection models, as well as FasterRCNN ResNet50. The results show that “the size of objects to be detected is a factor that, together with noise and brightness factors, has a considerable impact on their performance”.

Veerakumar et al. (2011) propose an algorithm that effectively removes ‘salt-and-pepper’ noise from any given image. The proposed solution uses a 3x3 pixel search grid and determines the median pixel RGB value. This process effectively blurs the image, removing noise but also significantly lowering the resolution. Nonetheless, it is untested how applying this algorithm would impact the performance of object detection models.

### **Impact of low-resolution video on object detection**

As previously discussed, the impact of radio channel interference-induced noise on the performance of object detection models on videos streamed over 900 MHz is not well researched, thus the impact of low resolution is covered in this section in hopes that the strategies covered to increase performance can be used interchangeably between these two contexts. Uzkent et al. (2019) explore an approach to increase the performance of a reinforcement learning object detection agent in high-resolution images. The agent chooses parts of the image to analyze, effectively lowering the resolution and maintaining accuracy while increasing performance. This approach resulted in a 50% increase in runtime without compromising accuracy. Instead, Lu et al. (2015) utilize a deep convolutional

neural network to improve object detection on high-resolution images.

Contrarily, Kidwell et al. (2015) directly address the challenge of maintaining detection performance with low-resolution images. Kidwell et al. (2015) investigate object detection in low-resolution overhead imagery presenting a novel detection system that employs a fast sliding-window detector using a histogram of oriented gradient (HOG) and a supervised support vector machine classifier. This approach shows promising accuracy but sacrifices performance. Furthermore, Kidwell et al. (2015) state that this approach shows an increase in accuracy even with less annotated training data compared to their benchmark object detection algorithm. Pava et al. (2011) discuss object detection on low-resolution 3-D model animations. Pava et al. (2011) propose an elaborate system compromising of preprocessing, background modeling, information extraction, and postprocessing stages. Similarly, Kidwell et al. (2015) utilized techniques such as Histogram of Oriented Gradient (HOG) and equalization, background subtraction, and various filtering techniques. Zhang et al. (2007) introduce a novel multi-resolution framework for object detection which is inspired by human visual search patterns. Zhang et al. (2007)'s proposed algorithm artificially lowers the resolution of the image and attempts to detect the object in the image. If the confidence score of the result is low, increase the resolution and try again. This approach allows for an 'early exit' designed for real-time analysis significantly increasing performance while maintaining high detection accuracy. Most notably, Clark et al. (2023) investigate the resolution-performance trade-off of object detection models. Clark et al. (2023) found a linear relationship between resolution and detection accuracy highlighting the crucial role of resolution in object detection. The present paper will use the prior techniques discussed to attempt to increase the performance and accuracy of object detection on video streams that are missing information due to interference on the 900 MHz band.

## Methods

### Procuring the data

To evaluate the performance of various object detection models on analog video under the condition of significant interference, five live analog camera video streams were selected with varying levels of noise. The five cameras are located at:

Place: Hadji Dimitar Square, Sliven, Bulgaria  
Coordinates: 41.940300 / 25.569401

Place: Keskväljak, Paide, Estonia  
Coordinates: 59.433899 / 24.728100

Place: Duomo, Noto, Sicily, Italy  
Coordinates: 36.890140 / 15.069290

Place: Kielce University of Technology, Kielce, Poland  
Coordinates: 50.833302 / 20.666700

Place: Toggenburg Alpaca Ranch, Stein, Switzerland  
Coordinates: 47.366699 / 8.550000

Using ffmpeg and bash a frame was captured from each camera at a 4-and-a-half minute interval: `while true; do ffmpeg -i INPUT -frames:v 1 -vcodec mjpeg -f image2 \~/Downloads/frames/image$(date +%Y%m%d%H%M%S).jpg; sleep 270; done.`

Data collection lasted for 24 hours, on all cameras simultaneously, on the 2nd of January 224, resulting in 323 images (frames) captured per camera.

Each frame was labeled by hand, over the course of the next week, using a webapp called roboflow. The resulting dataset for each camera has a 70%/20%/10% split between training, test, and validation data respectively.

No augmentation methods of any kind are applied to the final datasets.

### Models

The model architectures that will be compared in the present paper are Faster-RCNN, Masked-RCNN, Retinanet, Yolov8.

### Hyper parameters

Before training, hyper parameter tuning was conducted for each dataset using Yolov8 using the AdamW optimization algorithm, for 300 iterations of 50 epochs each.

## **Training and evaluation**

To evaluate the aforementioned model architectures the industry standard metrics: precision, recall, F1-Score, and confidence will be used. To be specific, for each trained model, the graphs: precision over confidence, recall over confidence, F1 over confidence, and precision over recall will be used to evaluate each model. For all models trained using the yolov8 architecture, a normalized and non-normalized confusion matrix will also be used. Each model architecture will be trained on each dataset for 150 epochs. Whether the model has been pre-trained, and/or hyperparameter tuned will be varied. Each model will be evaluated every 50 epochs.

Independent variables:

Model Type: Yolov8, Faster-RCNN, Masked-RCNN, Retinanet-RCNN.

Training Epochs: The number of epochs each model will be trained for.

Pre-training: Whether the models are pre-trained or not.

Parameter Tuning: Whether the models will use stock parameters or will be hyperparameter-tuned.

Dependent variables:

Performance Metrics: Precision, recall, F1-score, confidence, confusion matrices.

Resource Utilization: All models will be trained on the same hardware with the same resource utilization.

## Results

### Explain the metrics

Precision is the ratio of true positives to the sum of true and false positives.

$$Precision = (TruePositives + FalsePositives) / TruePositives$$

Recall is the ratio of true positives to the sum of true positives and false negative.

$$Recall = (TruePositives + FalseNegatives) / TruePositives$$

Using precision we can effectively deduce how many objects were correctly labeled out of all labeled objects. Similarly, using recall we can deduce how many objects were correctly labeled out of all objects whether they were labeled or not.

The F1 score is simply a harmonic mean of precision and recall, allowing us to combine precision and recall into a ‘score’.

$$F1 = 2 * ((Precision + Recall) / (Precision * Recall))$$

Before analyzing the results, it is important to note that not all results are shown in the present paper. For a complete breakdown of the results see the supplementary data. A selection of representative results has been assembled and will be reviewed in the interest of brevity instead.

## Best performing final model comparison

A comparison of the best models trained on the Doumo dataset:

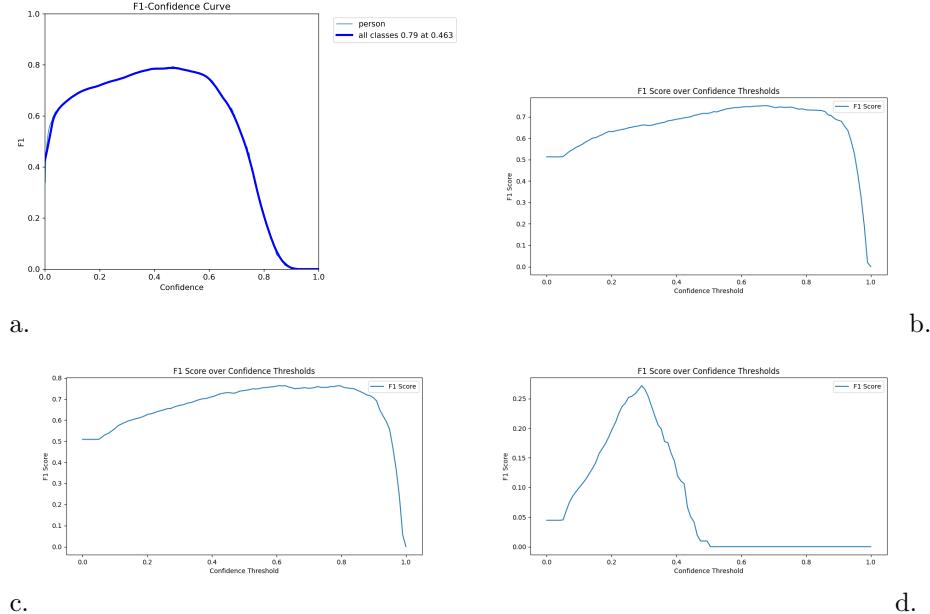


Figure 1. F1 over confidence graph for the pre-trained and hyperparameter-tuned a) Yolov8n, b) Faster-RCNN, c) Masked-RCNN, and d) Retinanet models trained for 150 epochs on the Duomo dataset.

Figure 1 indicates that the models trained using the Masked-RCNN (c) and Faster-RCNN (b) architectures undoubtedly outperformed the models trained using the Retinanet (d) and Yolov8n (a) architectures on the Duomo dataset.

A comparison of the best models trained on the Hadji Dimitar Square dataset:

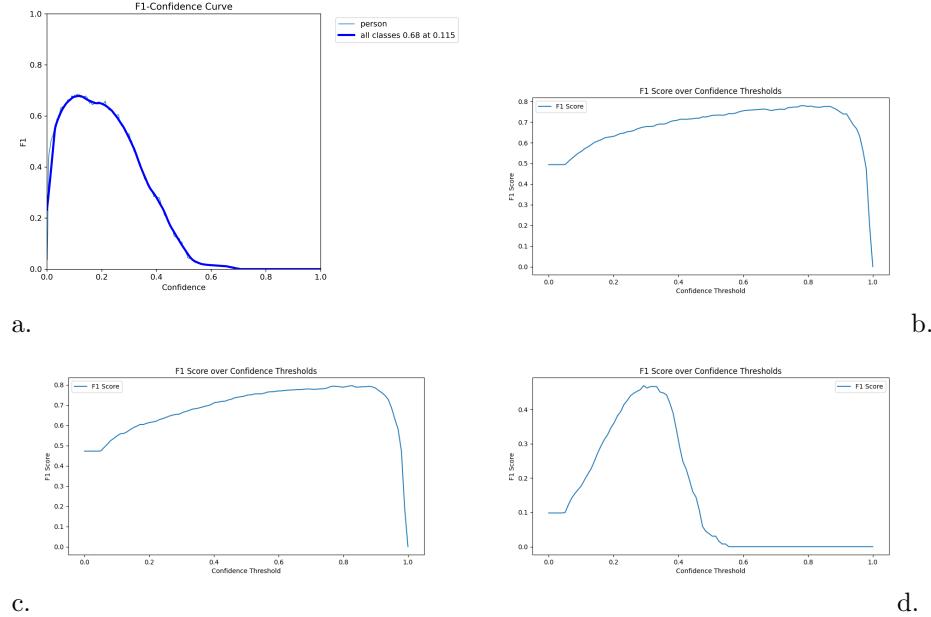
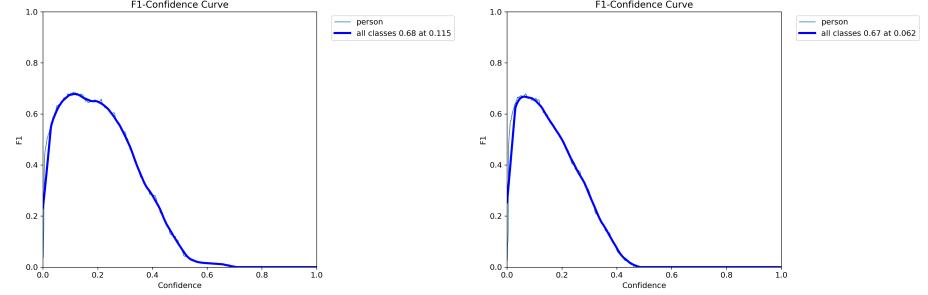


Figure 2. F1 over confidence graph for the pre-trained and hyperparameter-tuned a) Yolov8n, b) Faster-RCNN, c) Masked-RCNN, and d) Retinanet models trained for 150 epochs on the Hadji Dimitar Square dataset.

Figure 2 further supports the observations made from figure 1. Models trained using the Masked-RCNN (c) and Faster-RCNN (b) architectures again clearly outperformed the models trained using the Retinanet (d) and Yolov8n (a) architectures on the Hadji Dimitar Square dataset.

## Effect of hyper-parameter tuning

A comparison of a hyperparameter tuned model against a non-hyperparameter tuned model trained on the Hadji Dimitar Square dataset:



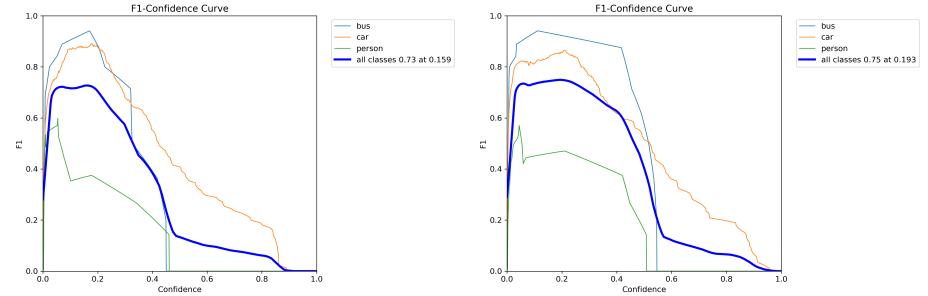
a.

b.

Figure 3. F1 over confidence graph for the a) hyperparameter tuned, and b) non-hyperparameter-tuned Yolov8n model trained for 150 epochs on the Hadji Dimitar Square dataset.

Figure 3 indicates that the hyperparameter tuned model expressed a slight performance increase over its non-hyperparameter tuned counterpart.

A comparison of a hyperparameter tuned model against a non-hyperparameter tuned model trained on the Keskväljak dataset:



a.

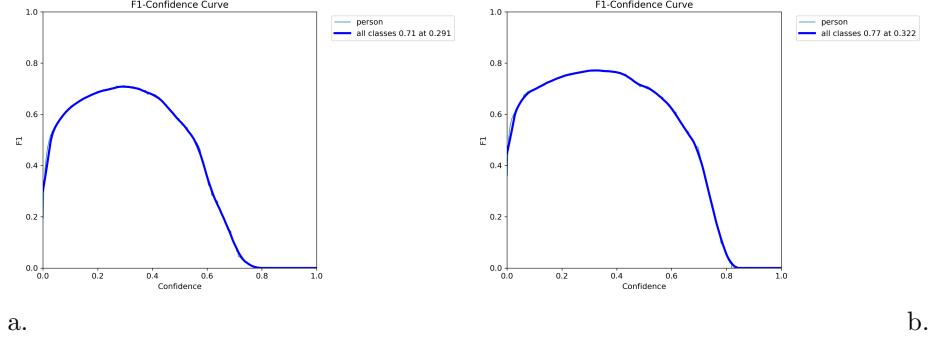
b.

Figure 4. F1 over confidence graph for the a) hyperparameter tuned, and b) non-hyperparameter-tuned Yolov8n model trained for 150 epochs on the Keskväljak dataset.

Figure 4, contrarily to figure 3 indicates that the hyperparameter tuned model expressed a slight performance decrease over its non-hyperparameter tuned counterpart. Through further analysis of the supplementary data, the conclusion is derived that the effect of hyperparameter tuning on a models performance on the tested datasets is unpredictable.

## Effect of pre-training

Comparing the performance of a Yolov8n pre-trained model against a Yolov8n non-pre-trained model that were both trained on the Doumo dataset for 150 epochs:



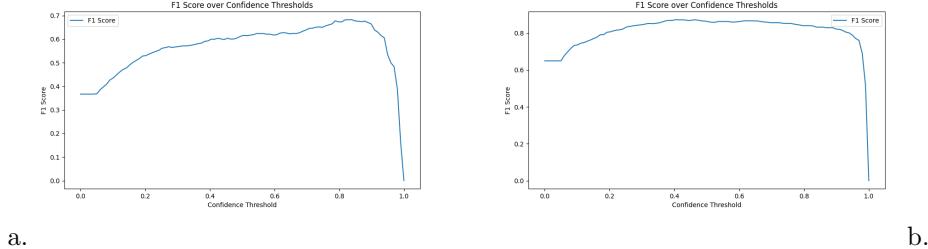
a.

b.

Figure 5. F1 over confidence graph for the a) pre-trained, and b) non pre-trained Yolov8n model trained for 150 epochs on the Doumo dataset.

A negligible effect of pre-training can be observed from figure 5. The pre-trained model performed slightly better than the non pre-trained model on the Duomo dataset.

Comparing the performance of a Faster-RCNN pre-trained model against a Faster-RCNN non pre-trained model that were both trained on the Keskväljak dataset for 150 epochs:



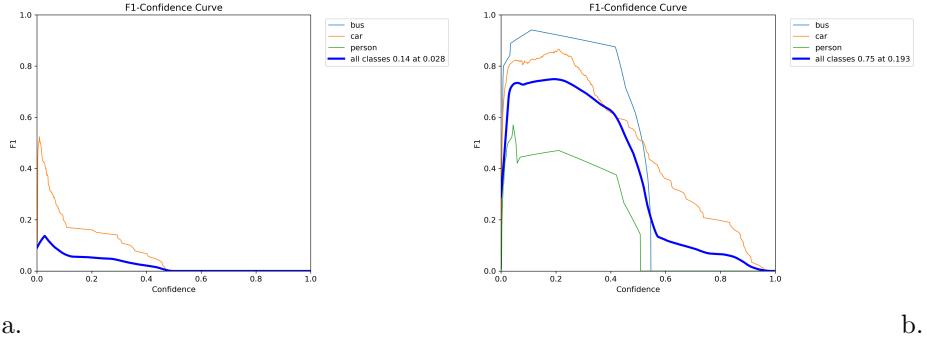
a.

b.

Figure 6. F1 over confidence graph for the a) pre-trained, and b) non pre-trained Faster-RCNN model trained for 150 epochs on the Keskväljak dataset.

Similarly to figure 5, figure 6 indicates that models trained on the Keskväljak dataset express a negligible increase in performance when pre-trained.

Comparing the performance of a Yolov8n pre-trained model against a Yolov8n non-pre-trained model that were both trained on the Keskväljak dataset for 150 epochs:



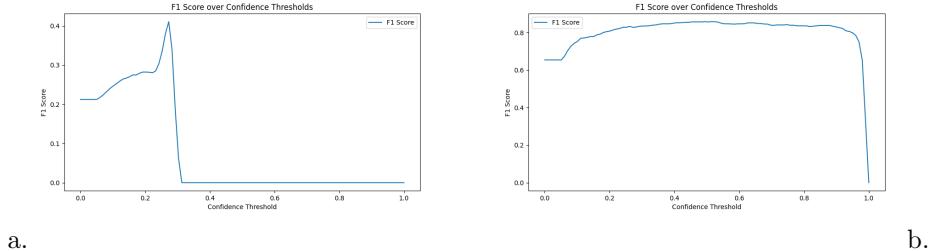
a.

b.

Figure 7. F1 over confidence graph for the a) pre-trained, and b) non pre-trained Yolov8n model trained for 150 epochs on the Keskväljak dataset.

A very significant increase in performance is observed in figure 7, notably on the same dataset as figure 6, Keskväljak. Figure 6, and figure 7 only differ in the model architecture used, and a significant change was observed. This indicates that the effect of pre-training fluctuates dramatically based on the model architecture.

Comparing the performance of a Masked-RCNN pre-trained model against a Masked-RCNN non-pre-trained model that were both trained on the Keskväljak dataset for 150 epochs:



a.

b.

Figure 8. F1 over confidence graph for the a) pre-trained, and b) non pre-trained Masked-RCNN model trained for 150 epochs on the Keskväljak dataset.

Figure 8 exhibits the same characteristics as figure 7, further supporting the observations made from figure 6 and 7. Again, only the model architecture used during training was varied between figure 6, 7, and 8.

## Effect of training on specialized data

A comparison of the effectiveness of training on data similar to the evaluation data. The following graphs demonstrate how the evaluation is effected during training. The first sample is an evaluation taken at 0 epochs, the last, at 150 epochs, with an evaluation at an interval of 50 epochs.

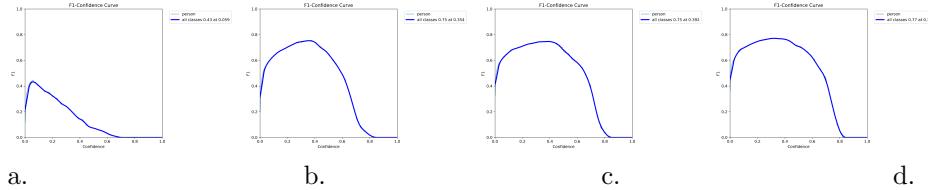


Figure 9. F1 over confidence graph for the pre-trained Yolov8n model trained for a) 0, b) 50, c) 100, d) 150 epochs on the Duomo dataset.

From figure 9 and further analysis of the supplementary data, it is clear that training increases performance significantly until reaching 100 epochs at which point performance stagnates. This was observed on all datasets and all model architectures.

## Discussion

Surprisingly, when trained for 150 epochs, the model architectures: Masked-RCNN, and Faster-RCNN consistently outperformed Yolov8n even though Yolov8n was the only model that was hyperparameter tuned for 300 iterations using the AdamW optimization algorithm. Furthermore, both the Masked-RCNN and Faster-RCNN use a Resnet50 backend. This backend is considerably outdated compared to Yolov8 which was released in 2023. Nonetheless, it's important to mention that Yolov8n has a considerably faster inference time than Masked-RCNN and Faster-RCNN and is able to keep up with a 3 fps live stream when Masked-RCNN and Faster-RCNN are only able to infer one frame every two seconds on equivalent hardware.

The effect of hyper parameter tuning on Yolov8 across all datasets did not give any conclusive results. Depending on the dataset, the accuracy increased or decreased. There was no generalizable result observed.

Similarly, the effect of pre-training, which is also commonly known as transfer learning, also gave inconclusive results. Some data sets benefited greatly from pre-training while other data sets were affected negatively. Pre-training did seem to generally increase the performance of each model particularly when only trained for a short amount of time. Regardless, without a statistical analysis it's not possible to derive a conclusion.

The observed effect of training on specialized data is doubtlessly positive. There has not been a single case where training the model on any of the datasets

decreased the performance when evaluated using a similar evaluation dataset. This aligns directly with the findings of Dagli, R. and Shaikh, A. (2021).

These results are promising for wireless analog CCTV system applications as it has been shown that high accuracy real time object detection is possible with a small dataset of 323 specialized images even under the condition of interference. From the results of the present paper it can be deduced that the type of noise that analog video introduces does not pose challenge for modern object detection model architectures, bridging this gap in the current literature.

The methods used in the present paper has many limitations. Unfortunately, the training and evaluation pipeline written in python for all models created with the Retinanet model architecture failed and produced incomprehensible results. This is a major oversight and could have been easily avoided with more rigorous testing. This is also the reason for Retinanet's exclusion in many of the comparisons in the results. A full breakdown of the results produced by any model trained using the Retinanet architecture can be found in the supplementary data.

Furthermore, another major limitation of the present paper is that not enough model architectures were compared to come to a conclusive answer. The literature review revealed the vast amount of model architectures and benchmarking datasets available. Having only rigorously tested and compared four different model architectures, the present paper would benefit significantly from a wider comparison.

Lastly, all datasets had a significant amount of analog noise. This leads to a question whether the analog noise in the datasets actually had any impact at all. To test this an analog noise generation algorithm would have to be applied to images that do not have any analog noise present. This data augmentation method could be explored as a future research.

## Conclusion

The use of modern object detection models on wireless analog CCTV systems is more than feasible. A small dataset of 323 images can be collected and labeled within a day. Without this small dataset of specialized data, the performance of any pre-trained model will be subpar. All five datasets procured in the present paper, with varying levels of analog noise, were able to train a model with sufficient performance for CCTV and security applications. Furthermore, the use of pre-training and hyperparameter tuning can have a positive impact on performance but also showed to have a negative impact depending on the dataset and chosen model architecture.

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## Supplementary data

Figure s1. f1\_over\_confidence, fasterrcnn, pre-trained=False, epochs=50, data=duomo

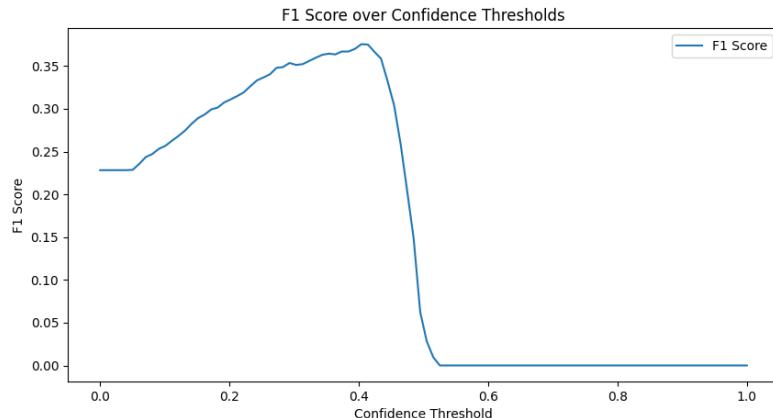


Figure s2. precision\_over\_confidence, fasterrcnn, pre-trained=False, epochs=50, data=duomo

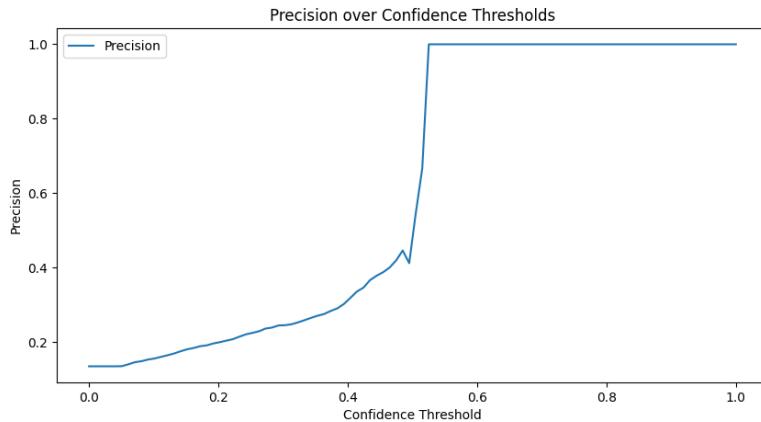


Figure s3. precision\_over\_recall, fasterrcnn, pre-trained=False, epochs=50, data=duomo

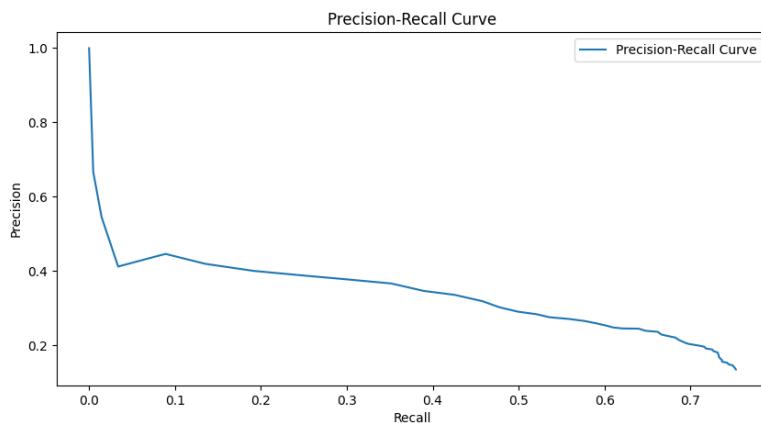


Figure s4. recall\_over\_confidence, fasterrcnn, pre-trained=False, epochs=50, data=duomo

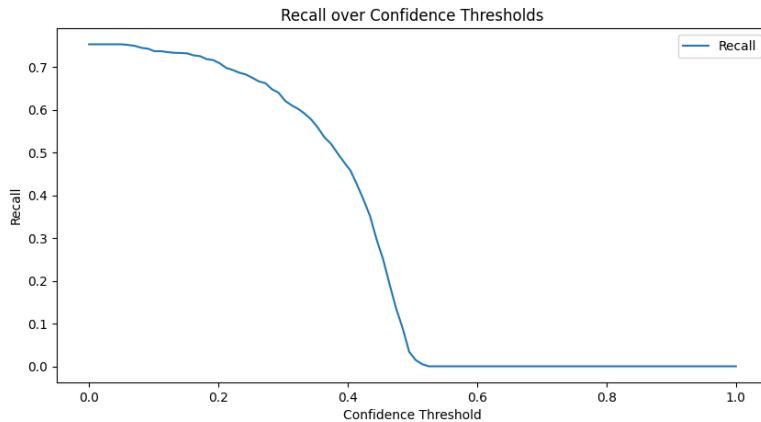


Figure s5. f1\_over\_confidence, fasterrcnn, pre-trained=False, epochs=50, data=hadji\_dimitar\_square

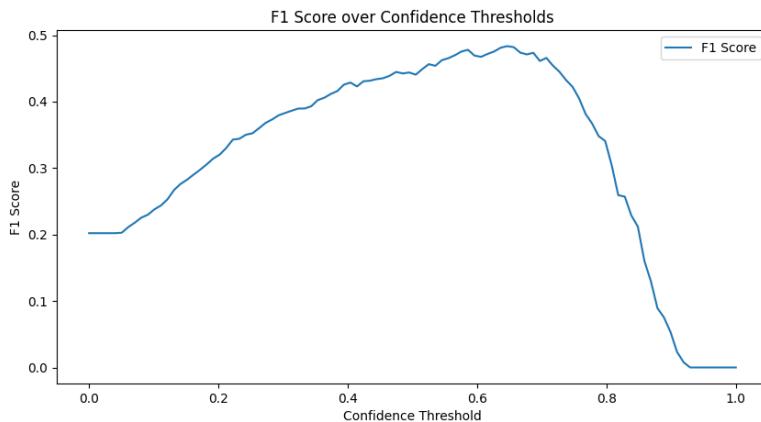


Figure s6. precision\_over\_confidence, fasterrcnn, pre-trained=False, epochs=50, data=hadji\_dimitar\_square

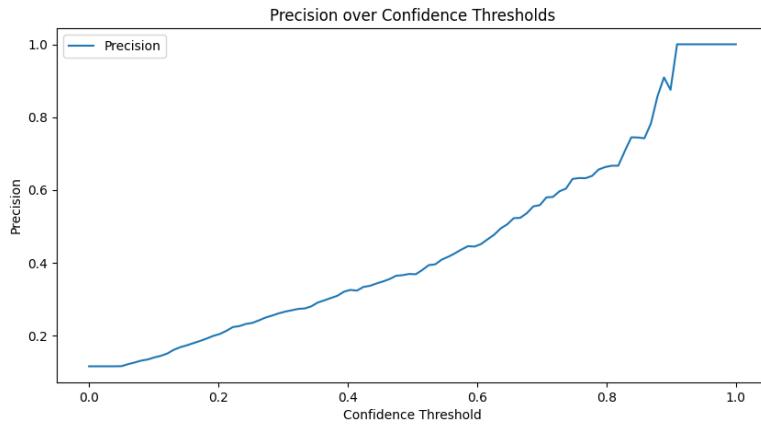


Figure s7. precision\_over\_recall, fasterrcnn, pre-trained=False, epochs=50, data=hadji\_dimitar\_square

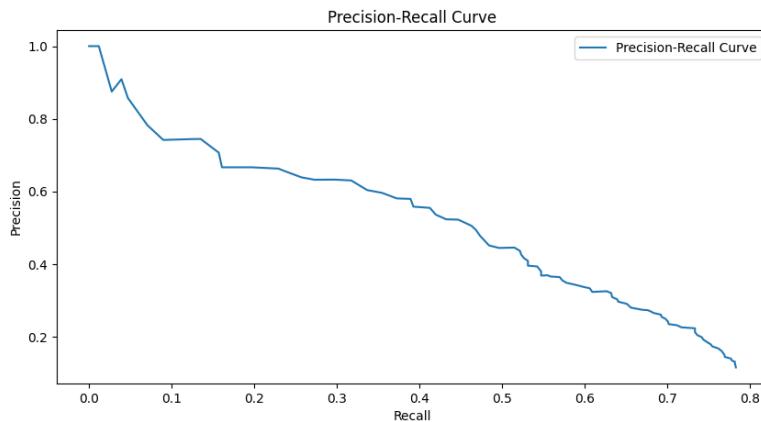


Figure s8. recall\_over\_confidence, fasterrcnn, pre-trained=False, epochs=50, data=hadji\_dimitar\_square

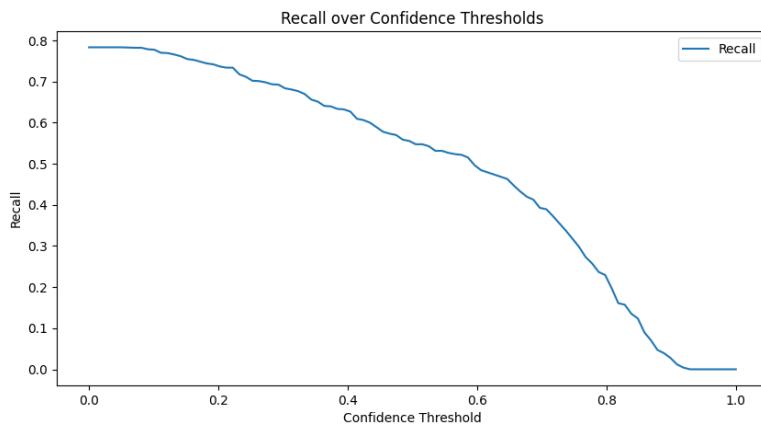


Figure s9. f1\_over\_confidence, fasterrcnn, pre-trained=False, epochs=50, data=keskvaljak

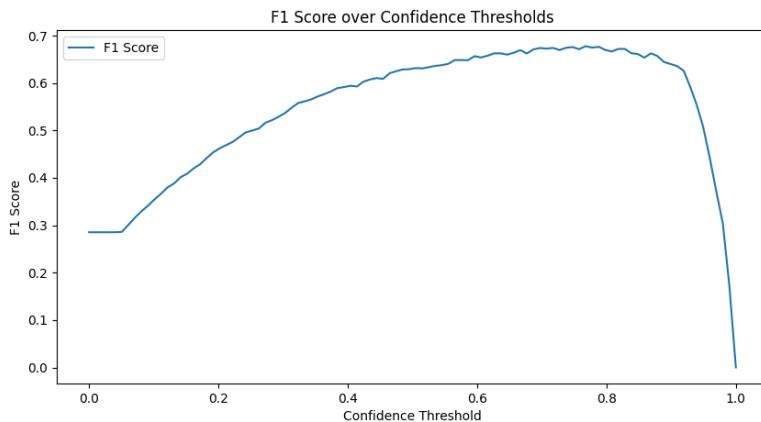


Figure s10. precision\_over\_confidence, fasterrcnn, pre-trained=False, epochs=50, data=keskvaljak

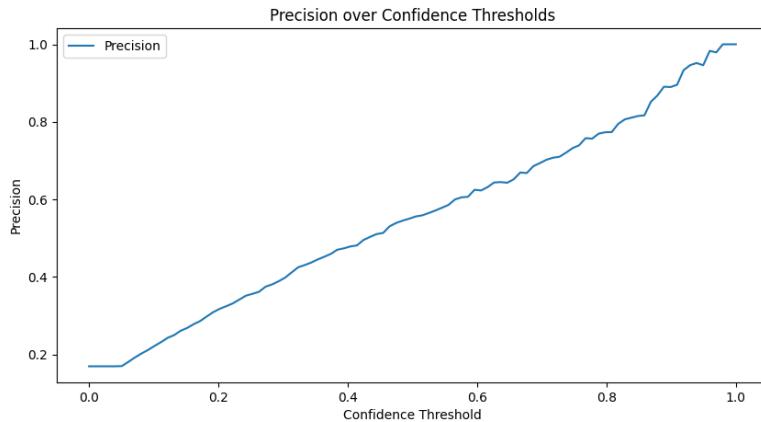


Figure s11. precision\_over\_recall, fasterrcnn, pre-trained=False, epochs=50, data=keskvaljak

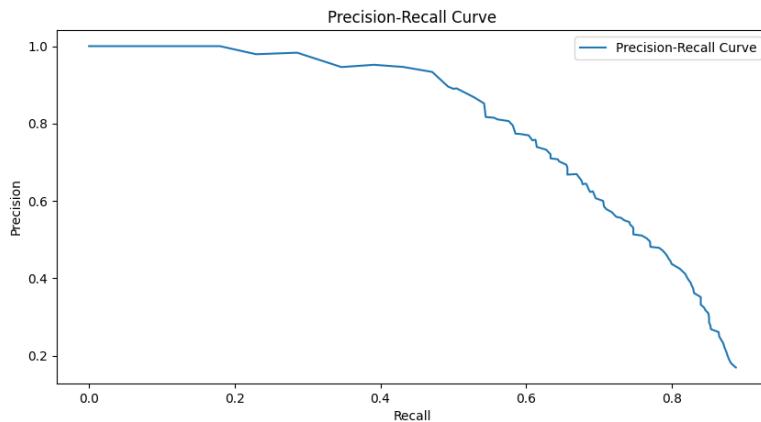


Figure s12. recall\_over\_confidence, fasterrcnn, pre-trained=False, epochs=50, data=keskvaljak

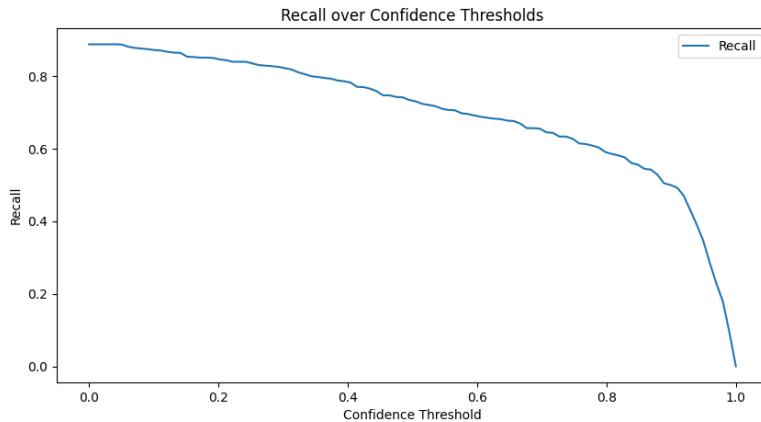


Figure s13. f1\_over\_confidence, fasterrcnn, pre-trained=False, epochs=50, data=kielce\_university\_of\_technology

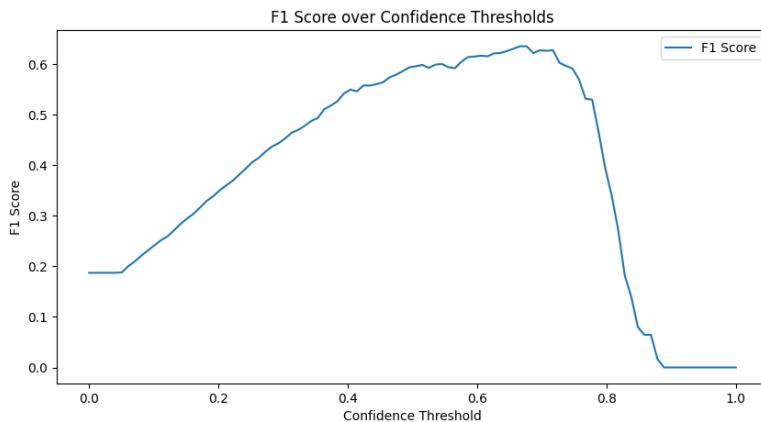


Figure s14. precision\_over\_confidence, fasterrcnn, pre-trained=False, epochs=50, data=kielce\_university\_of\_technology

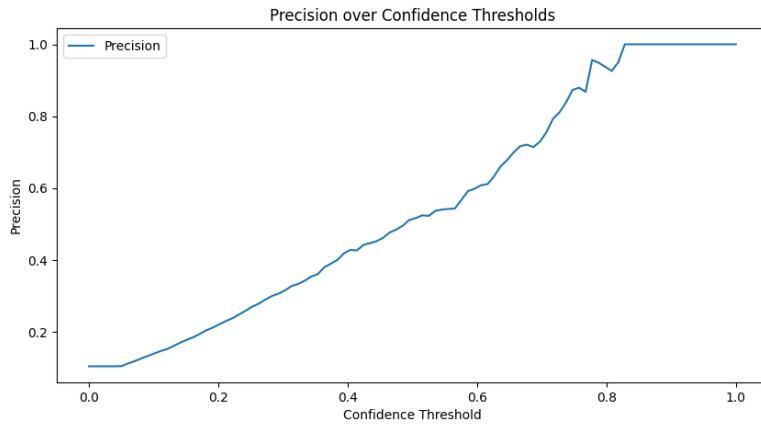


Figure s15. precision\_over\_recall, fasterrcnn, pre-trained=False, epochs=50, data=kielce\_university\_of\_technology

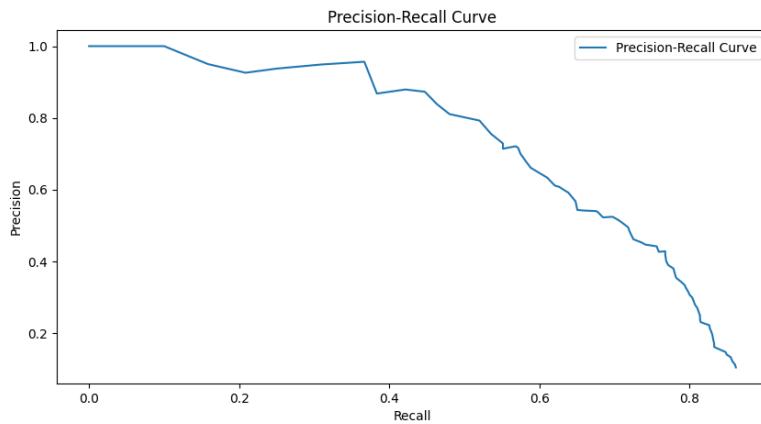


Figure s16. recall\_over\_confidence, fasterrcnn, pre-trained=False, epochs=50, data=kielce\_university\_of\_technology

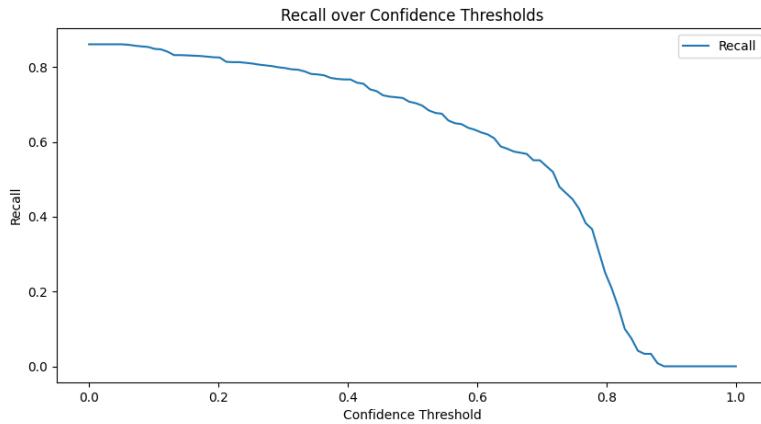


Figure s17. f1\_over\_confidence, fasterrcnn, pre-trained=False, epochs=50, data=toggenburg\_alpaca\_ranch

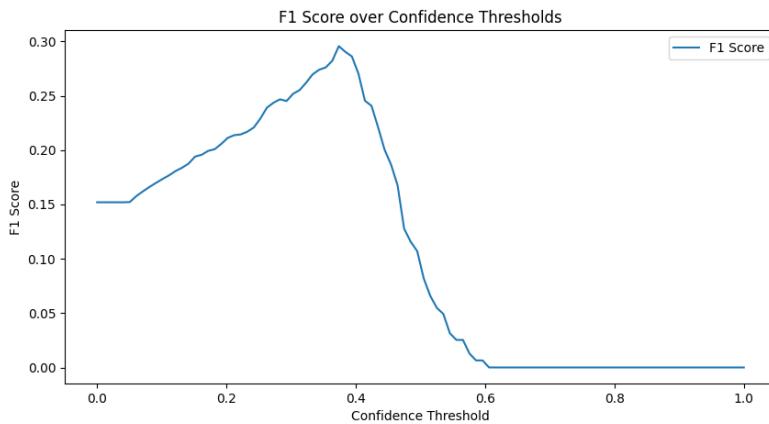


Figure s18. precision\_over\_confidence, fasterrcnn, pre-trained=False, epochs=50, data=toggenburg\_alpaca\_ranch

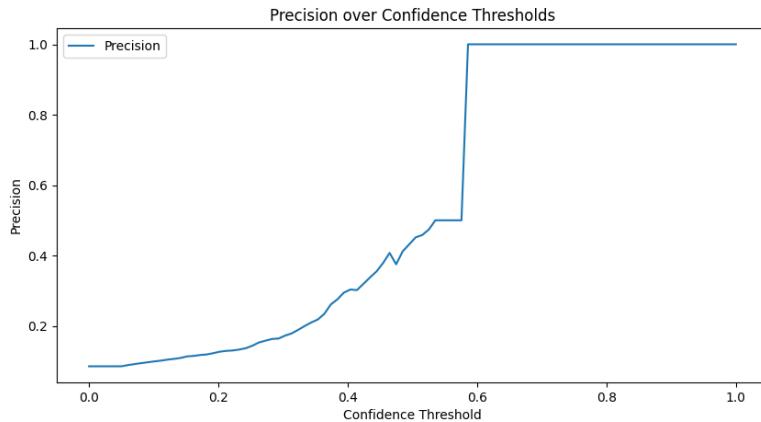


Figure s19. precision\_over\_recall, fasterrcnn, pre-trained=False, epochs=50, data=toggenburg\_alpaca\_ranch

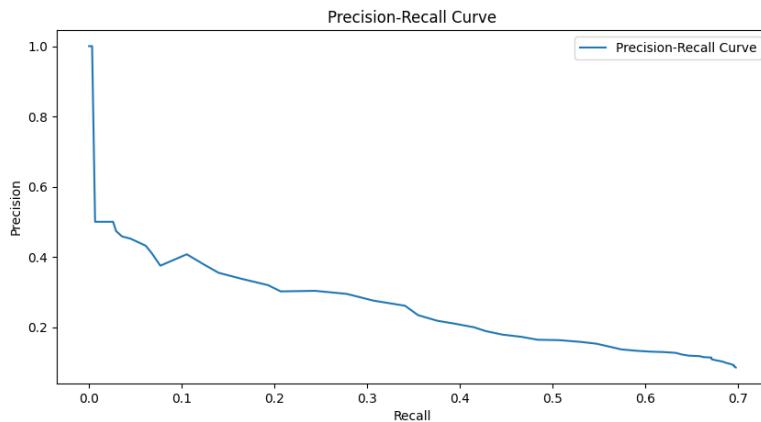


Figure s20. recall\_over\_confidence, fasterrcnn, pre-trained=False, epochs=50, data=toggenburg\_alpaca\_ranch

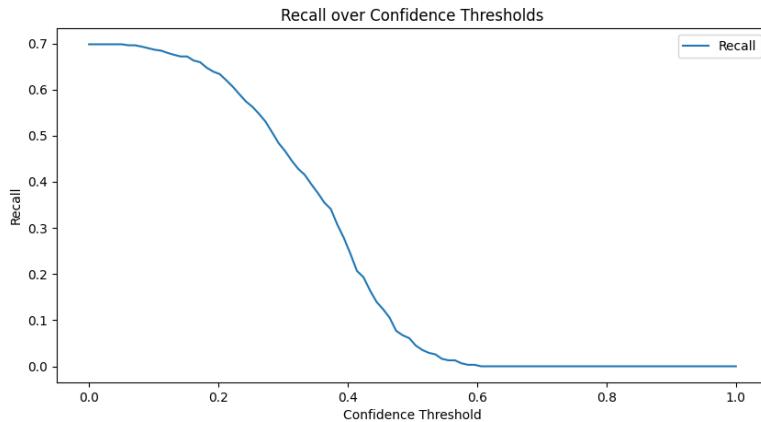


Figure s21. f1\_over\_confidence, fasterrcnn, pre-trained=False, epochs=100, data=duomo

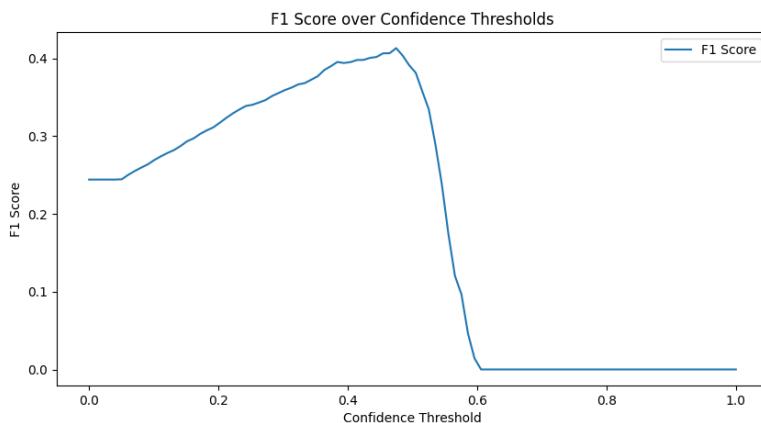


Figure s22. precision\_over\_confidence, fasterrcnn, pre-trained=False, epochs=100, data=duomo

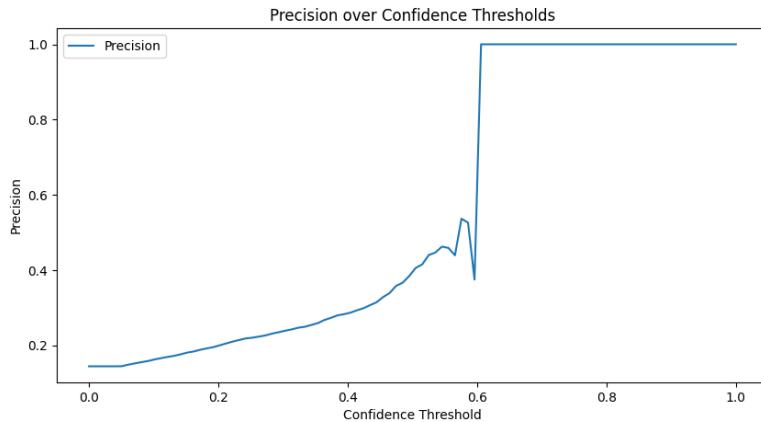


Figure s23. recall\_over\_confidence, fasterrcnn, pre-trained=False, epochs=100, data=duomo

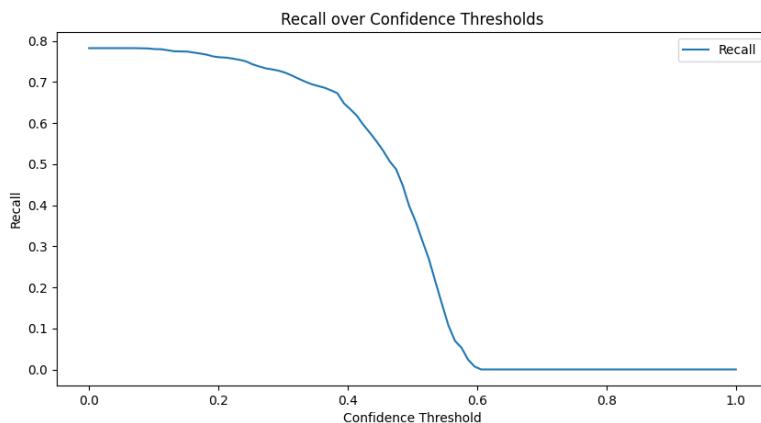


Figure s24. f1\_over\_confidence, fasterrcnn, pre-trained=False, epochs=100, data=hadji\_dimitar\_square

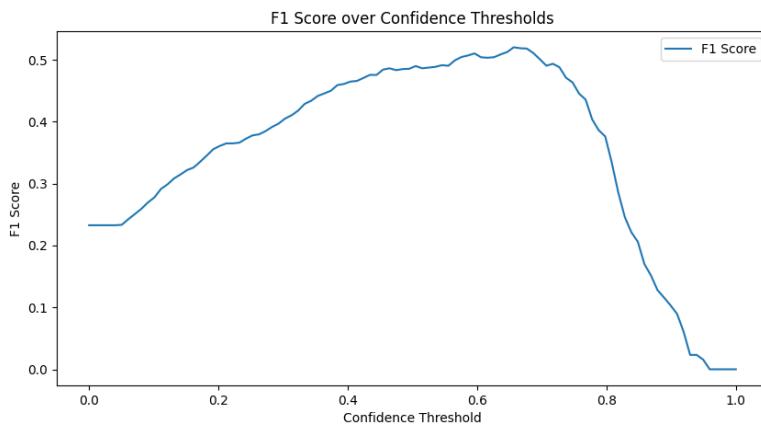


Figure s25. precision\_over\_confidence, fasterrcnn, pre-trained=False, epochs=100, data=hadji\_dimitar\_square

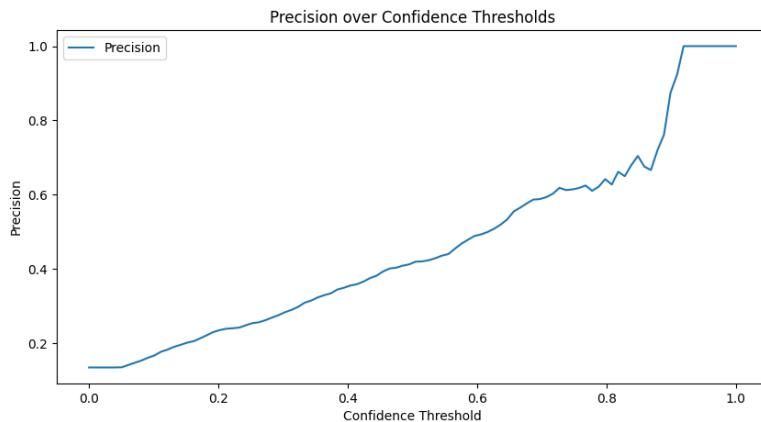


Figure s26. precision\_over\_recall, fasterrcnn, pre-trained=False, epochs=100, data=hadji\_dimitar\_square

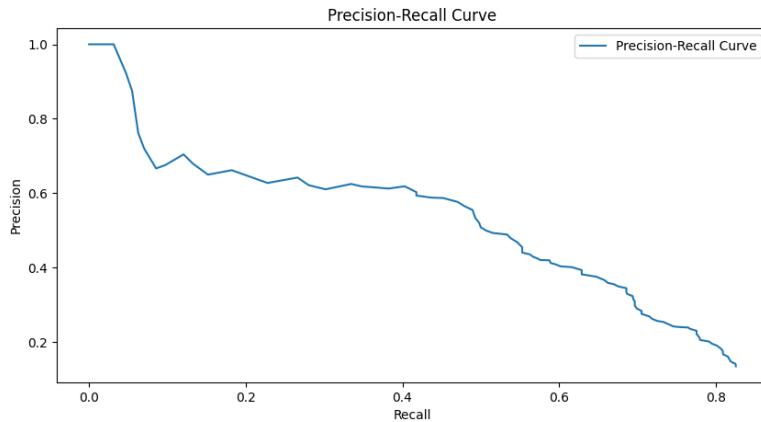


Figure s27. recall\_over\_confidence, fasterrcnn, pre-trained=False, epochs=100, data=hadji\_dimitar\_square

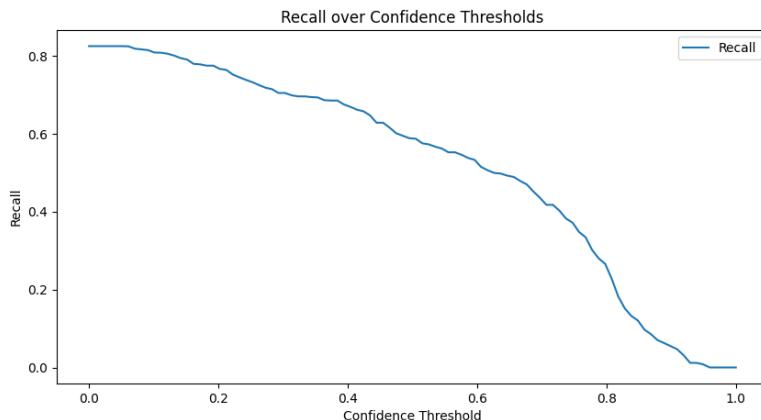


Figure s28. f1\_over\_confidence, fasterrcnn, pre-trained=False, epochs=100, data=keskvaljak

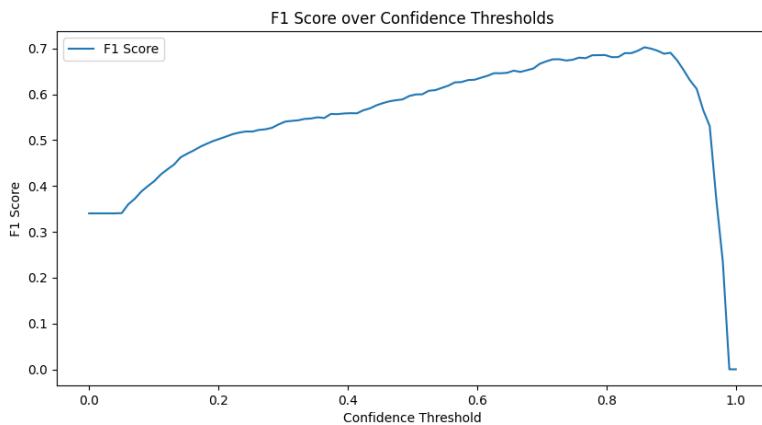


Figure s29. precision\_over\_confidence, fasterrcnn, pre-trained=False, epochs=100, data=keskvaljak

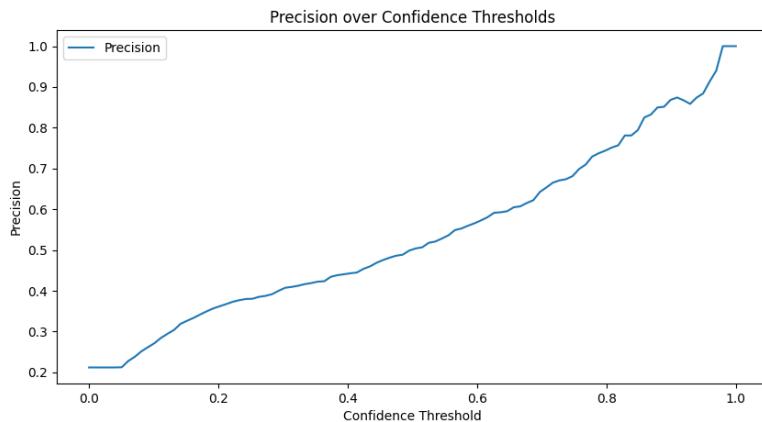


Figure s30. precision\_over\_recall, fasterrcnn, pre-trained=False, epochs=100, data=keskvaljak

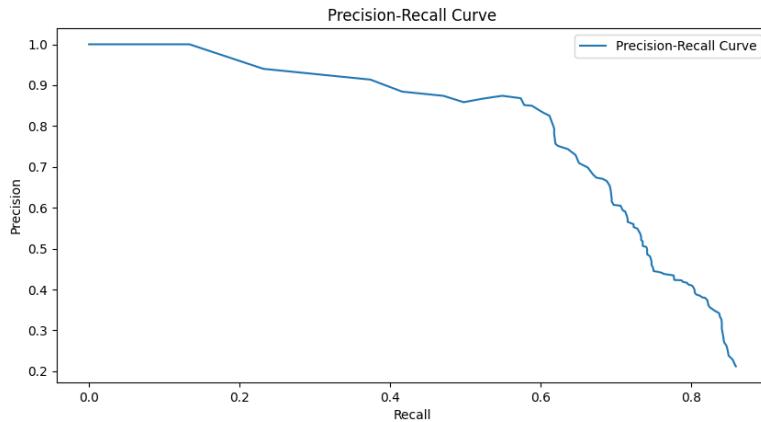


Figure s31. recall\_over\_confidence, fasterrcnn, pre-trained=False, epochs=100, data=keskvaljak

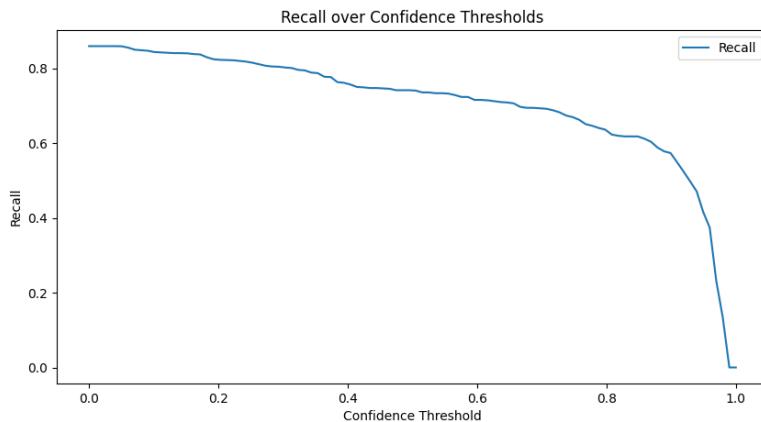


Figure s32. f1\_over\_confidence, fasterrcnn, pre-trained=False, epochs=100, data=kielce\_university\_of\_technology

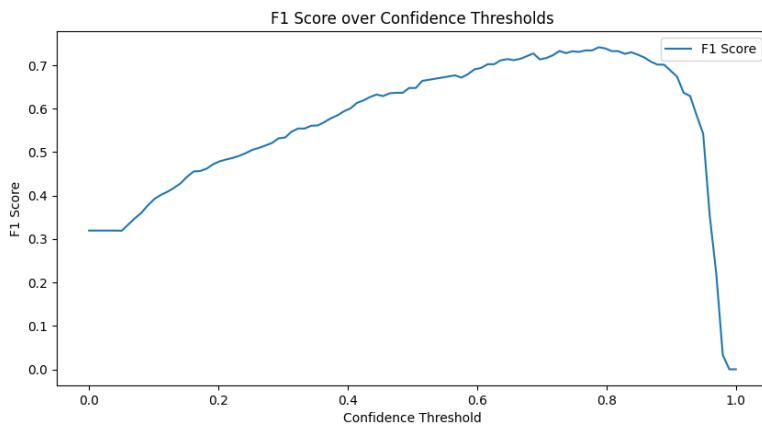


Figure s33. precision\_over\_confidence, fasterrcnn, pre-trained=False, epochs=100, data=kielce\_university\_of\_technology

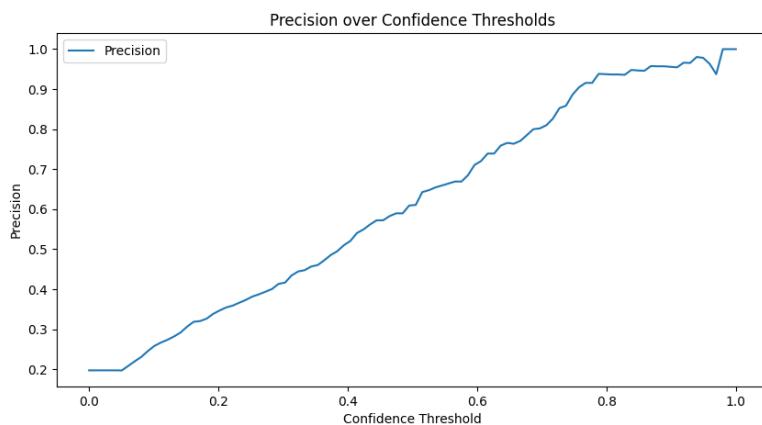


Figure s34. precision\_over\_recall, fasterrcnn, pre-trained=False, epochs=100, data=kielce\_university\_of\_technology

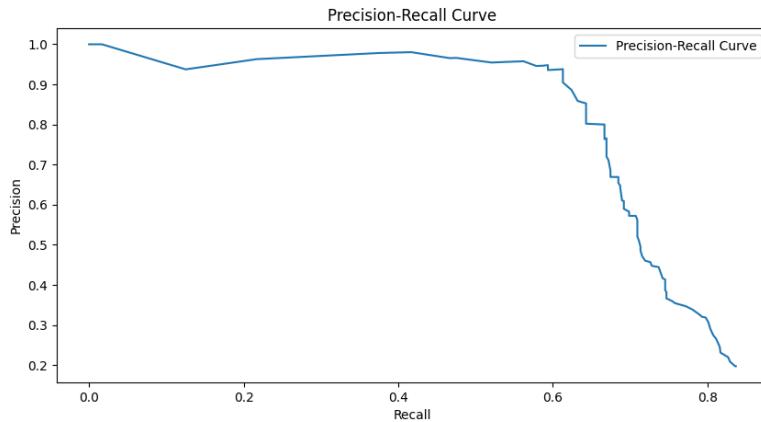


Figure s35. recall\_over\_confidence, fasterrcnn, pre-trained=False, epochs=100, data=kielce\_university\_of\_technology

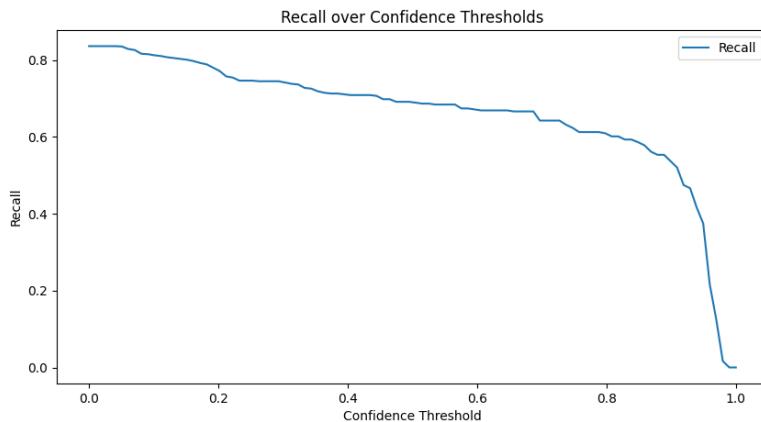


Figure s36. f1\_over\_confidence, fasterrcnn, pre-trained=False, epochs=100, data=toggenburg\_alpaca\_ranch

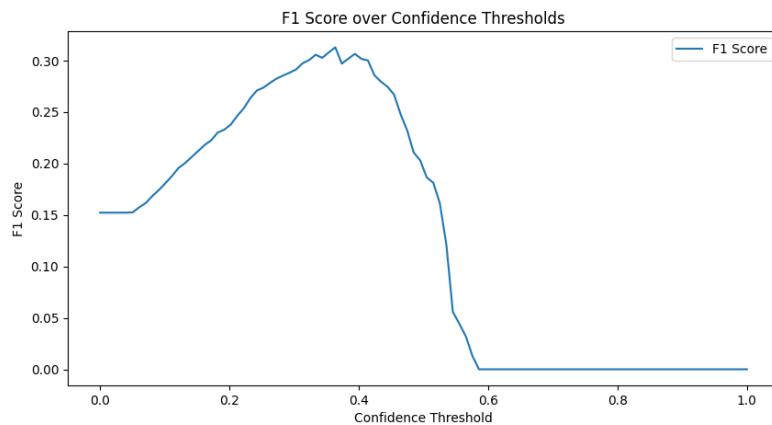


Figure s37. precision\_over\_confidence, fasterrcnn, pre-trained=False, epochs=100, data=toggenburg\_alpaca\_ranch

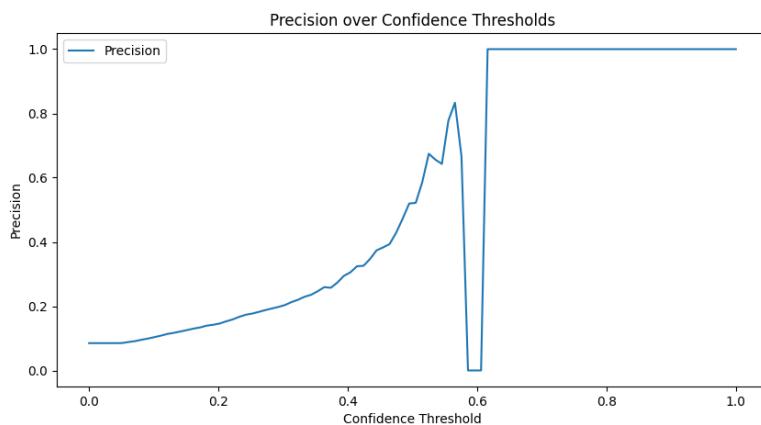


Figure s38. precision\_over\_recall, fasterrcnn, pre-trained=False, epochs=100, data=toggenburg\_alpaca\_ranch

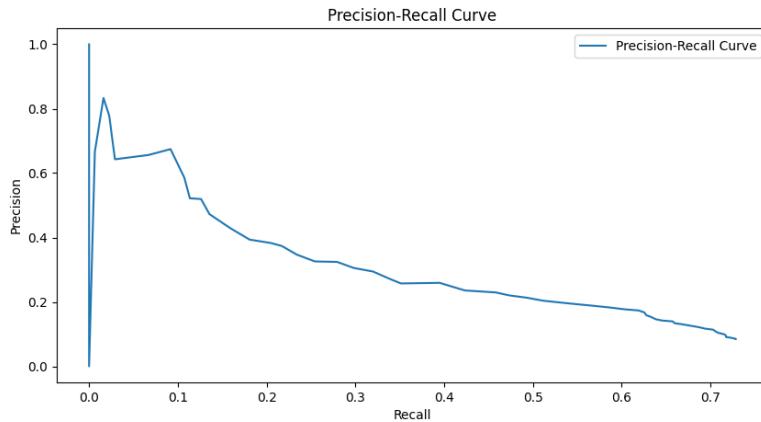


Figure s39. recall\_over\_confidence, fasterrcnn, pre-trained=False, epochs=100, data=toggenburg\_alpaca\_ranch

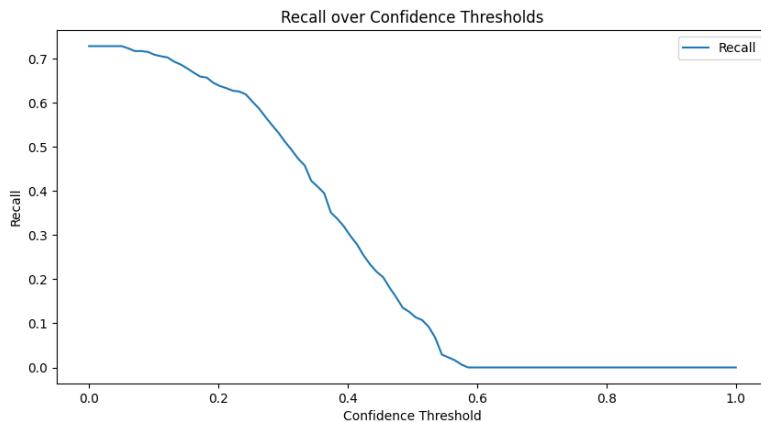


Figure s40. f1\_over\_confidence, fasterrcnn, pre-trained=False, epochs=150, data=duomo

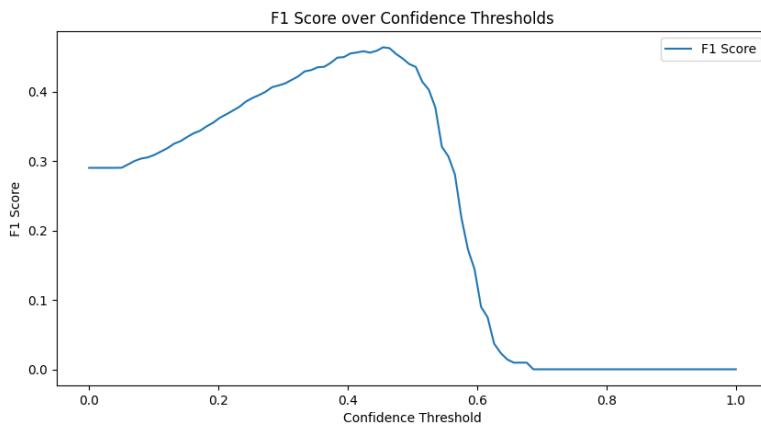


Figure s41. precision\_over\_confidence, fasterrcnn, pre-trained=False, epochs=150, data=duomo

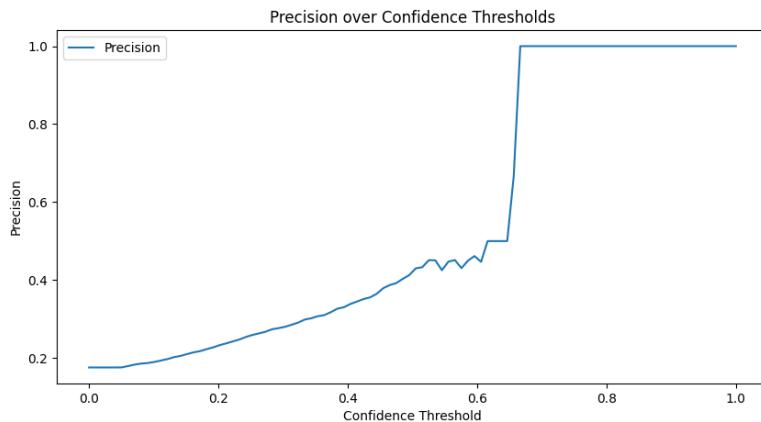


Figure s42. precision\_over\_recall, fasterrcnn, pre-trained=False, epochs=150, data=duomo

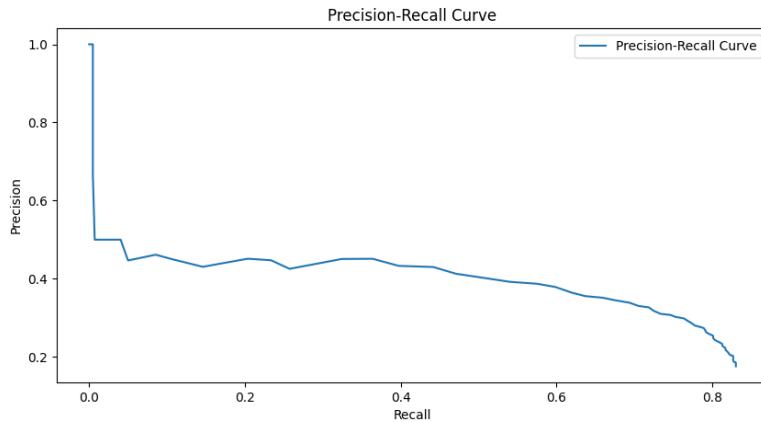


Figure s43. recall\_over\_confidence, fasterrcnn, pre-trained=False, epochs=150, data=duomo

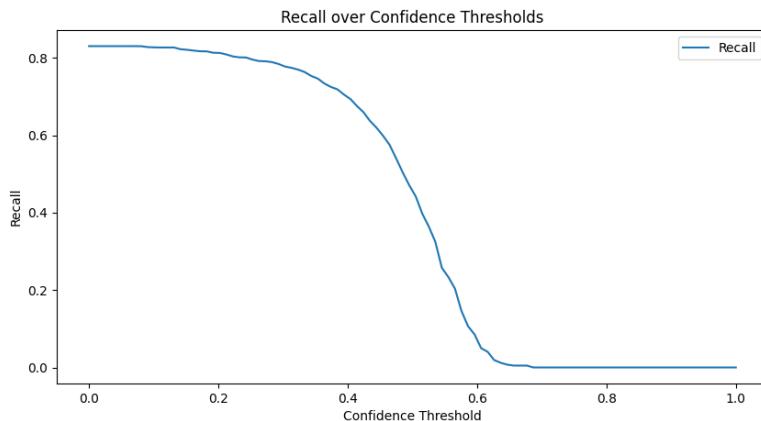


Figure s44. f1\_over\_confidence, fasterrcnn, pre-trained=False, epochs=150, data=hadji\_dimitar\_square

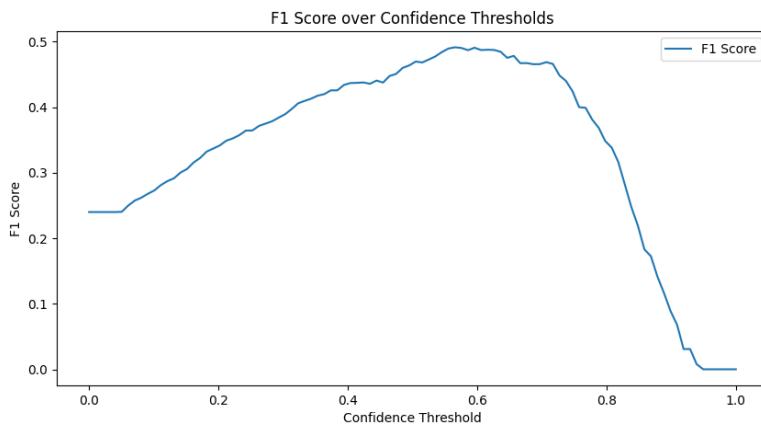


Figure s45. precision\_over\_confidence, fasterrcnn, pre-trained=False, epochs=150, data=hadji\_dimitar\_square

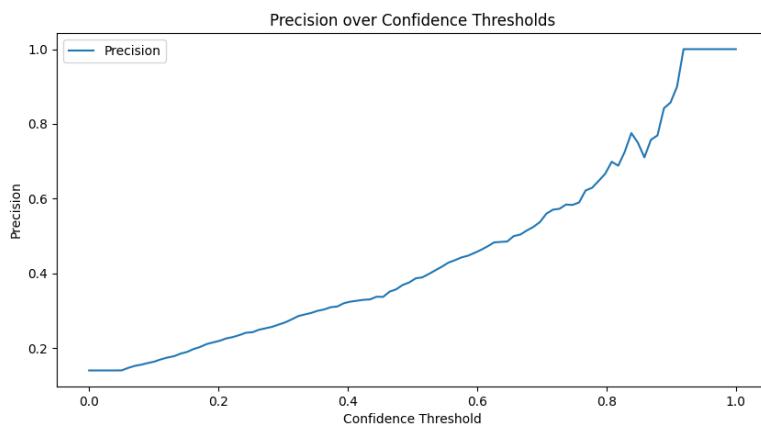


Figure s46. precision\_over\_recall, fasterrcnn, pre-trained=False, epochs=150, data=hadji\_dimitar\_square

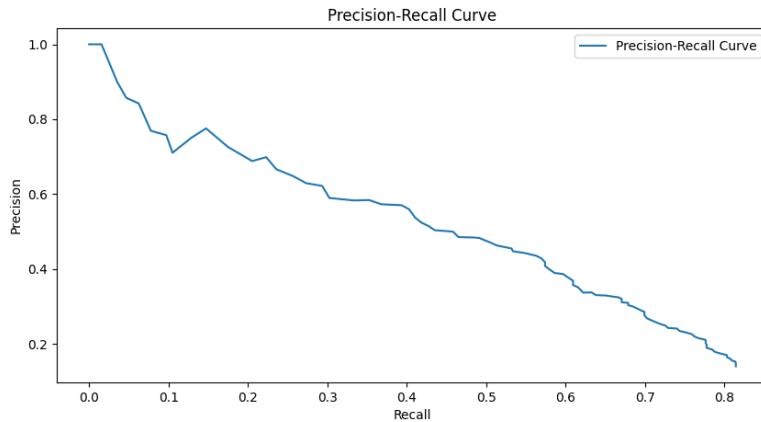


Figure s47. recall\_over\_confidence, fasterrcnn, pre-trained=False, epochs=150, data=hadjidimitar\_square

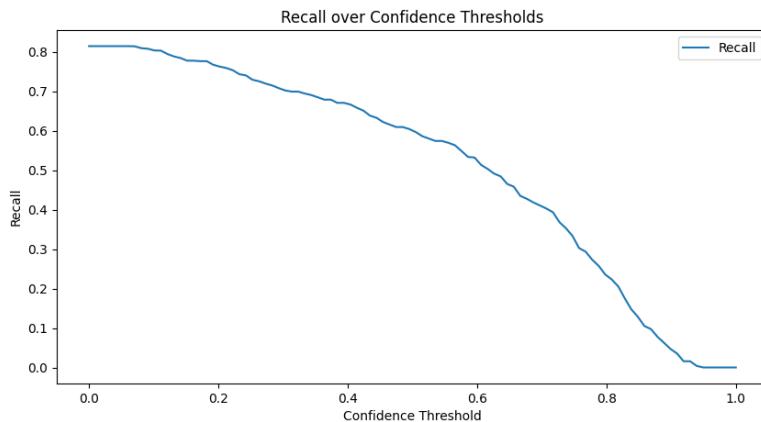


Figure s48. f1\_over\_confidence, fasterrcnn, pre-trained=False, epochs=150, data=keskvaljak

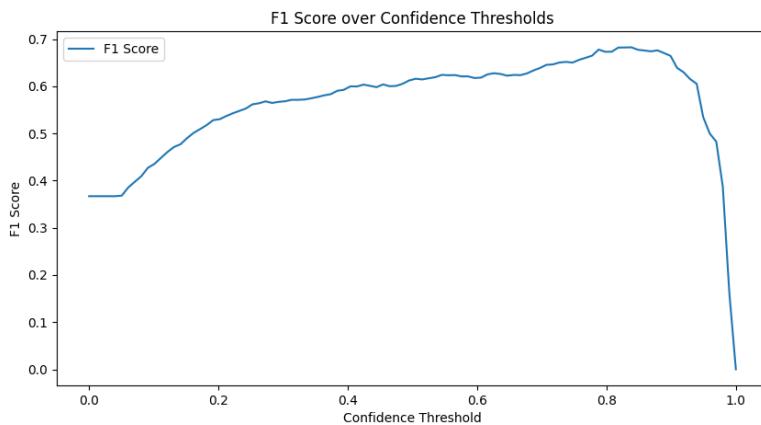


Figure s49. precision\_over\_confidence, fasterrcnn, pre-trained=False, epochs=150, data=keskvaljak

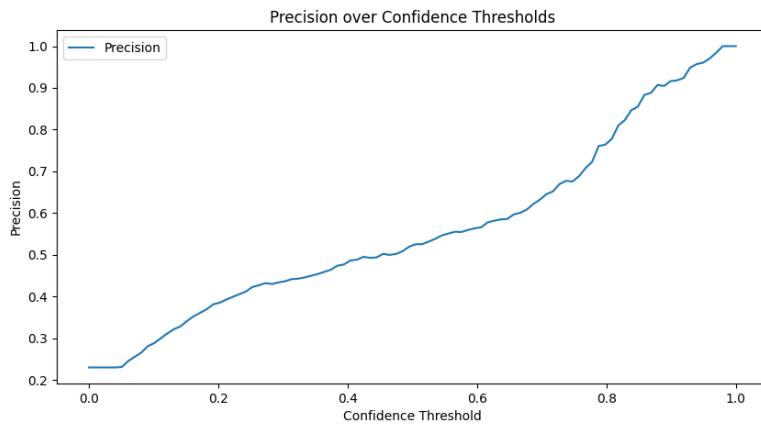


Figure s50. precision\_over\_recall, fasterrcnn, pre-trained=False, epochs=150, data=keskvaljak

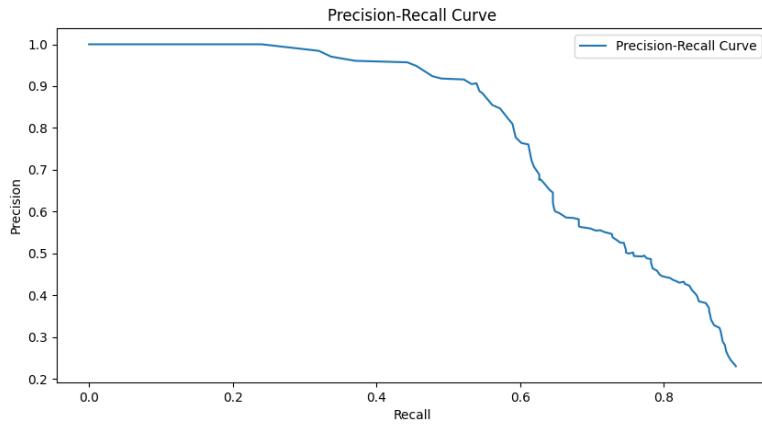


Figure s51. recall\_over\_confidence, fasterrcnn, pre-trained=False, epochs=150, data=keskvaljak

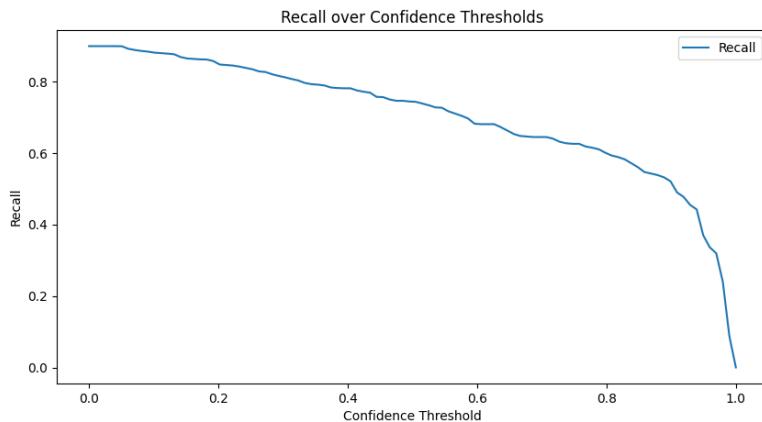


Figure s52. f1\_over\_confidence, fasterrcnn, pre-trained=False, epochs=150, data=kielce\_university\_of\_technology

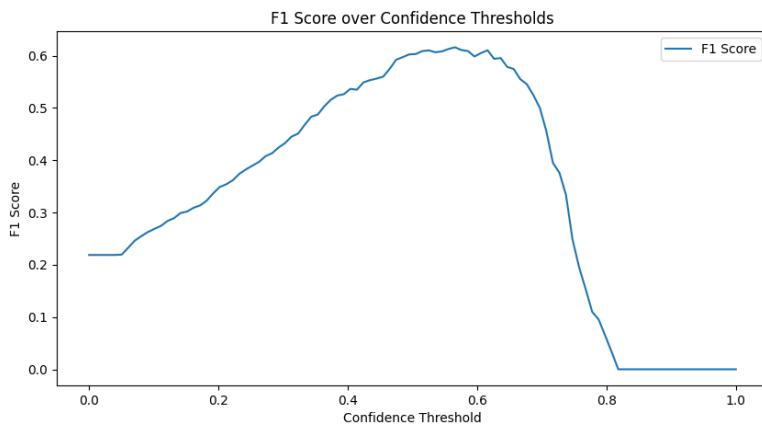


Figure s53. precision\_over\_confidence, fasterrcnn, pre-trained=False, epochs=150, data=kielce\_university\_of\_technology

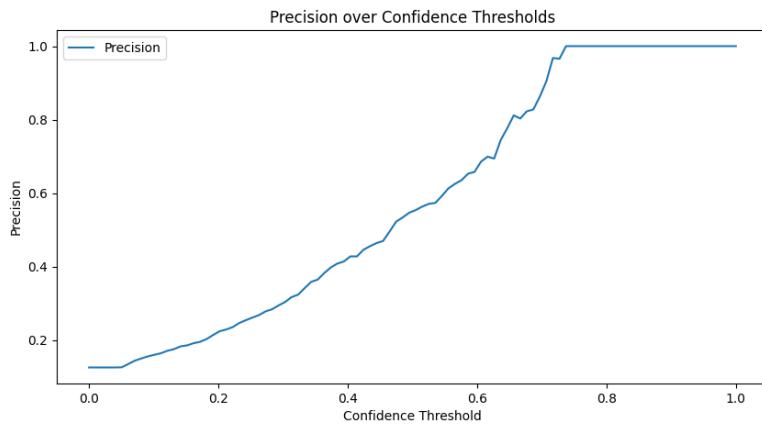


Figure s54. precision\_over\_recall, fasterrcnn, pre-trained=False, epochs=150, data=kielce\_university\_of\_technology

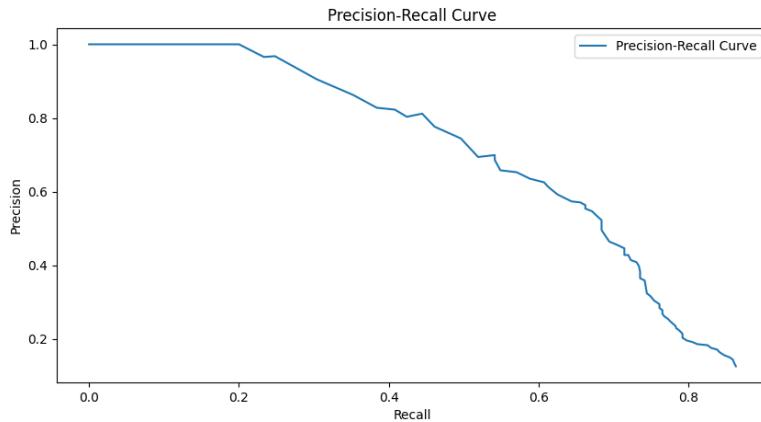


Figure s55. recall\_over\_confidence, fasterrcnn, pre-trained=False, epochs=150, data=kielce\_university\_of\_technology

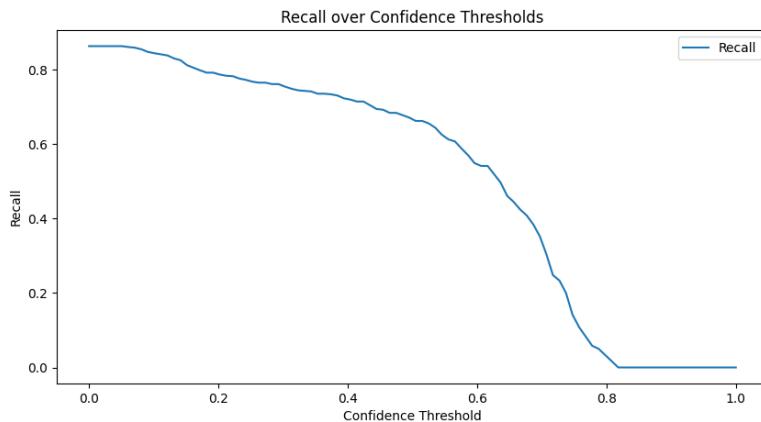


Figure s56. over\_confidence, fasterrcnn, pre-trained=False, epochs=150, data=toggenburg\_alpaca\_ranch

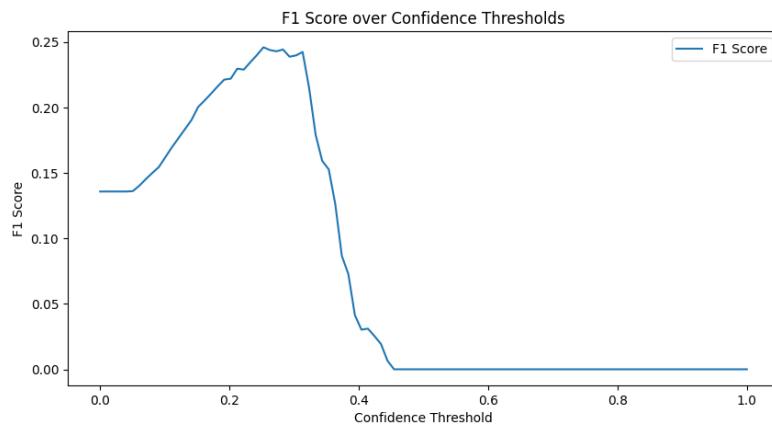


Figure s57. precision\_over\_confidence, fasterrcnn, pre-trained=False, epochs=150, data=toggenburg\_alpaca\_ranch

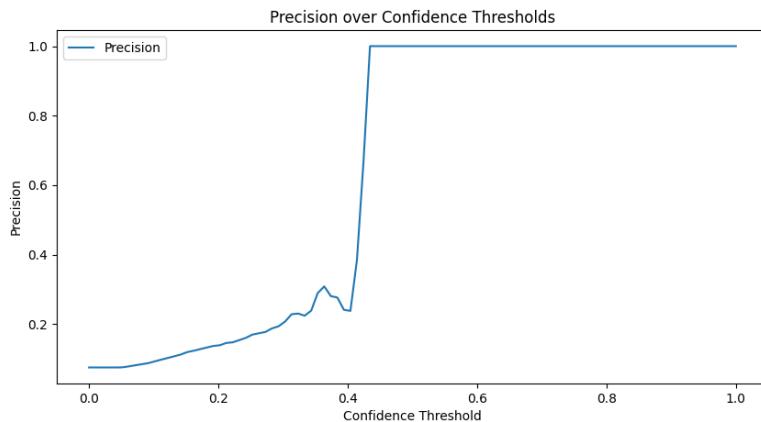


Figure s58. precision\_over\_recall, fasterrcnn, pre-trained=False, epochs=150, data=toggenburg\_alpaca\_ranch

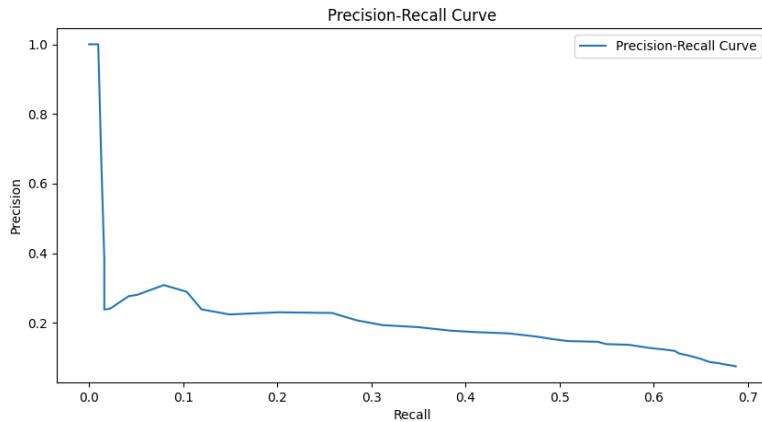


Figure s59. recall\_over\_confidence, fasterrcnn, pre-trained=False, epochs=150, data=toggenburg\_alpaca\_ranch

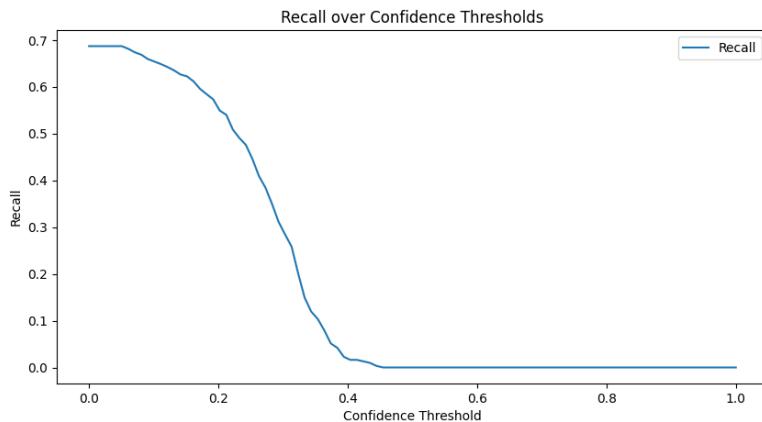


Figure s60. confidence, fasterrcnn, pre-trained=True, epochs=0, data=duomo

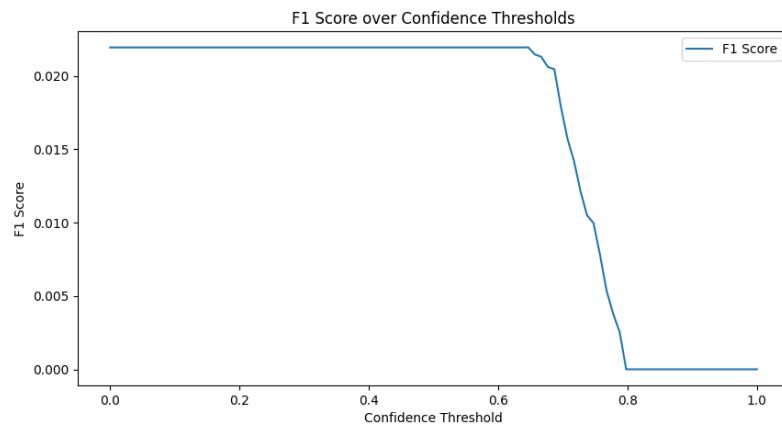


Figure s61. precision\_over\_confidence, fasterrcnn, pre-trained=True, epochs=0, data=duomo

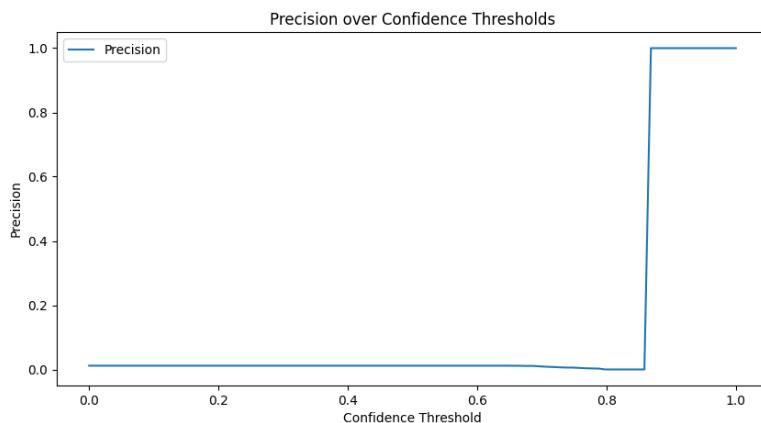


Figure s62. precision\_over\_recall, fasterrcnn, pre-trained=True, epochs=0, data=duomo

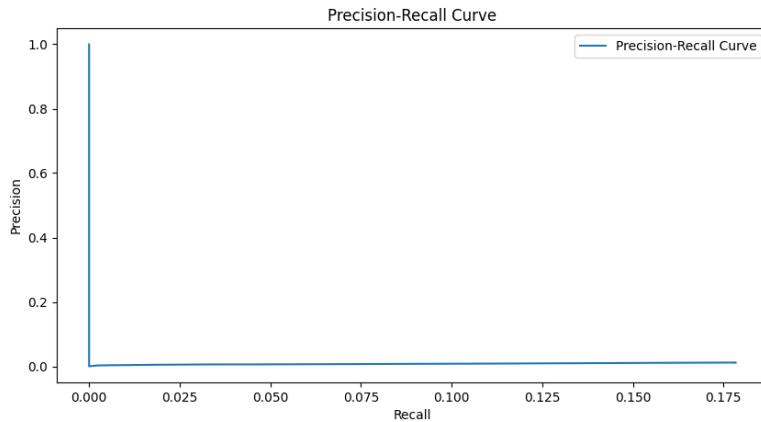


Figure s63. recall\_over\_confidence, fasterrcnn, pre-trained=True, epochs=0, data=duomo

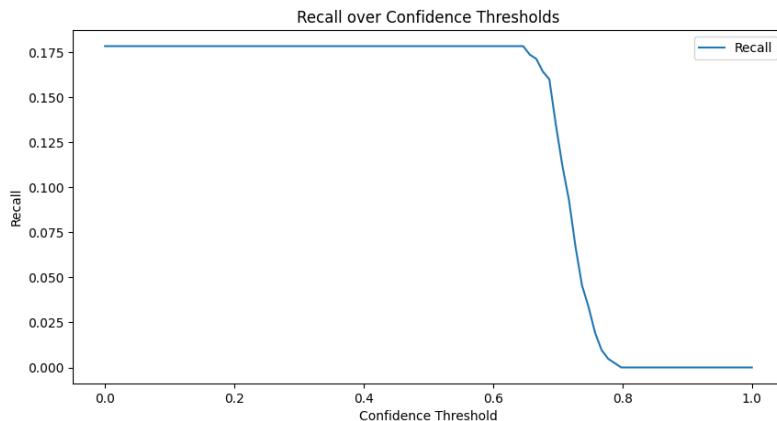


Figure s64. f1\_over\_confidence, fasterrcnn, pre-trained=True, epochs=0, data=hadji\_dimitar\_square

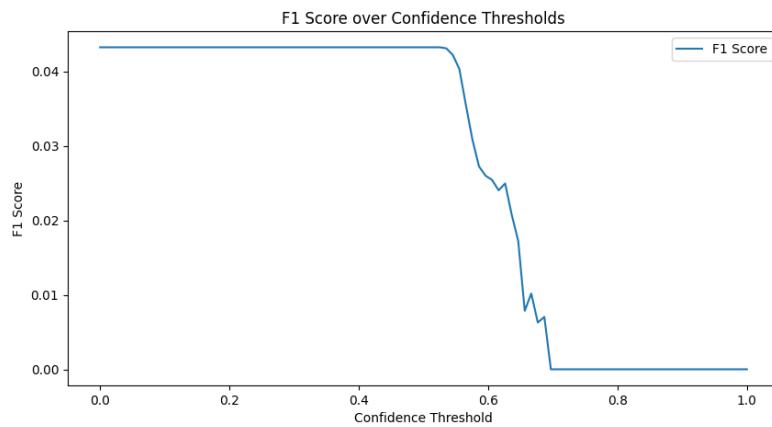


Figure s65. precision\_over\_confidence, fasterrcnn, pre-trained=True, epochs=0, data=hadji\_dimitar\_square

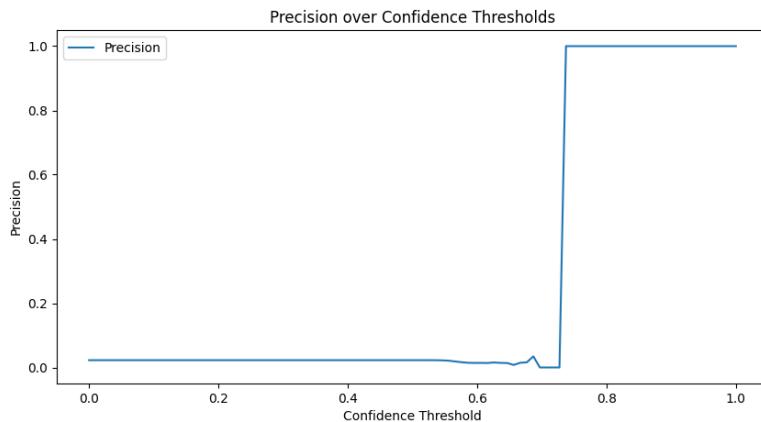


Figure s66. precision\_over\_recall, fasterrcnn, pre-trained=True, epochs=0, data=hadji\_dimitar\_square

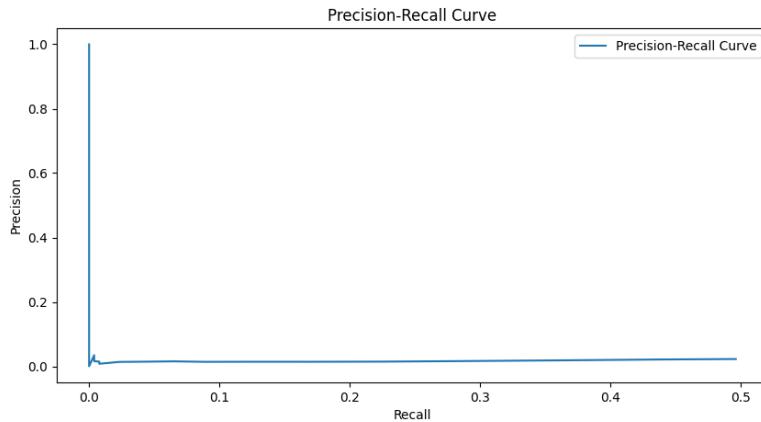


Figure s67. recall\_over\_confidence, fasterrcnn, pre-trained=True, epochs=0, data=hadjidimitar\_square

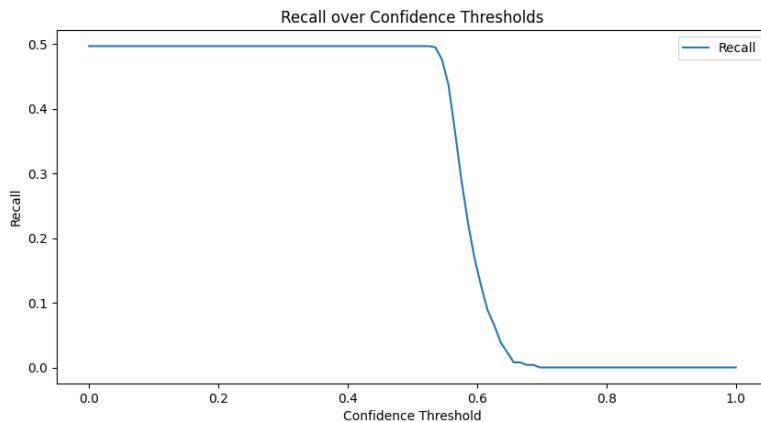


Figure s68. f1\_over\_confidence, fasterrcnn, pre-trained=True, epochs=0, data=keskvaljak

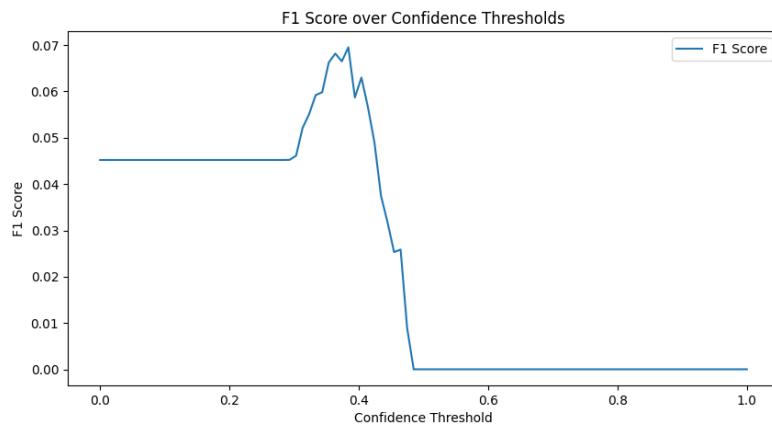


Figure s69. precision\_over\_confidence, fasterrcnn, pre-trained=True, epochs=0, data=keskvaljak

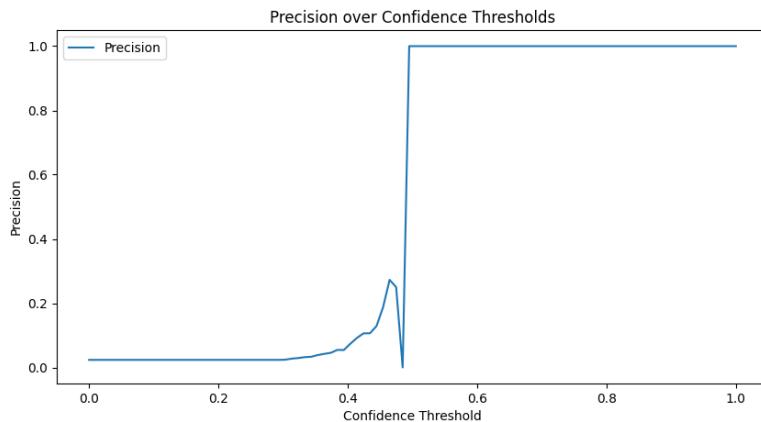


Figure s70. precision\_over\_recall, fasterrcnn, pre-trained=True, epochs=0, data=keskvaljak

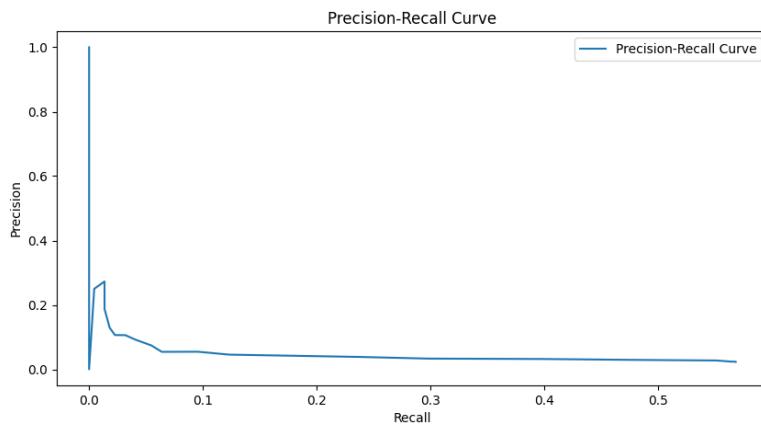


Figure s71. recall\_over\_confidence, fasterrcnn, pre-trained=True, epochs=0, data=keskvaljak

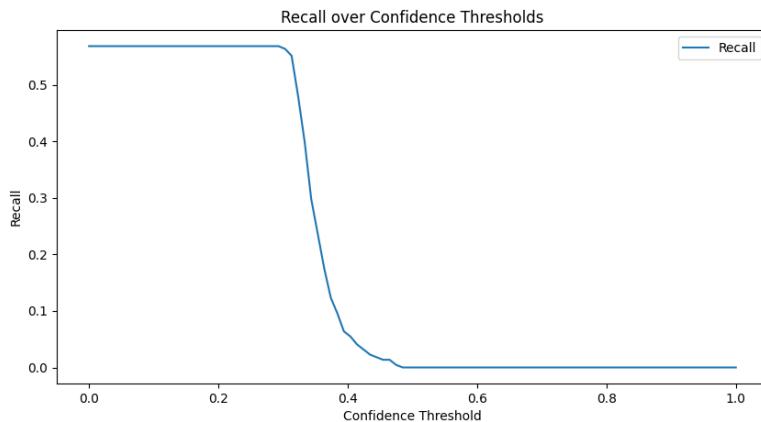


Figure s72. f1\_over\_confidence, fasterrcnn, pre-trained=True, epochs=0, data=kielce\_university\_of\_technology

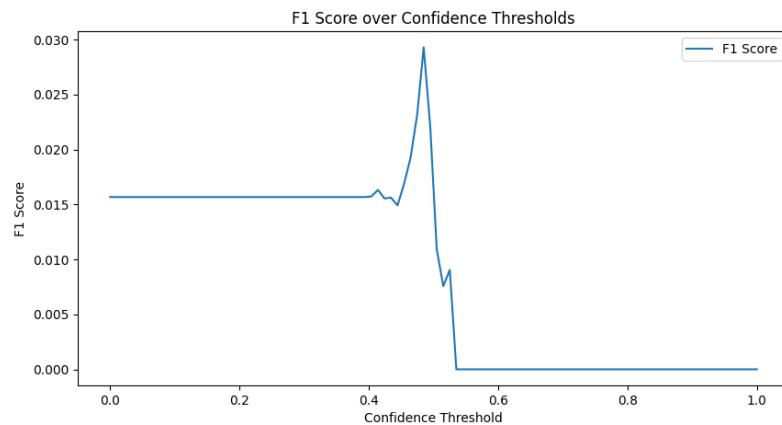


Figure s73. precision\_over\_confidence, fasterrcnn, pre-trained=True, epochs=0, data=kielce\_university\_of\_technology

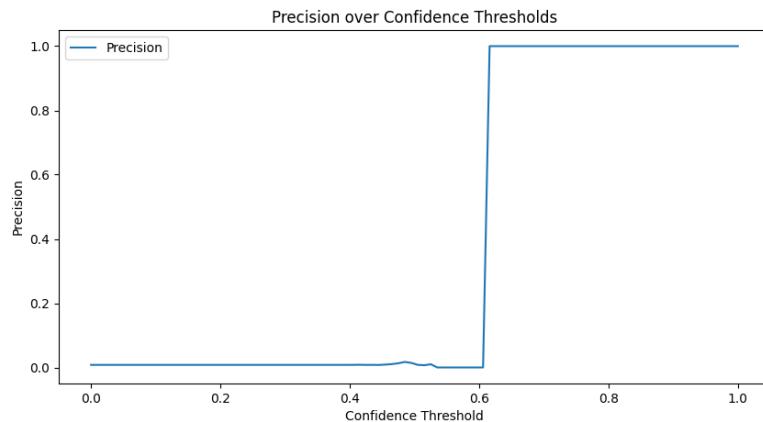


Figure s74. precision\_over\_recall, fasterrcnn, pre-trained=True, epochs=0, data=kielce\_university\_of\_technology

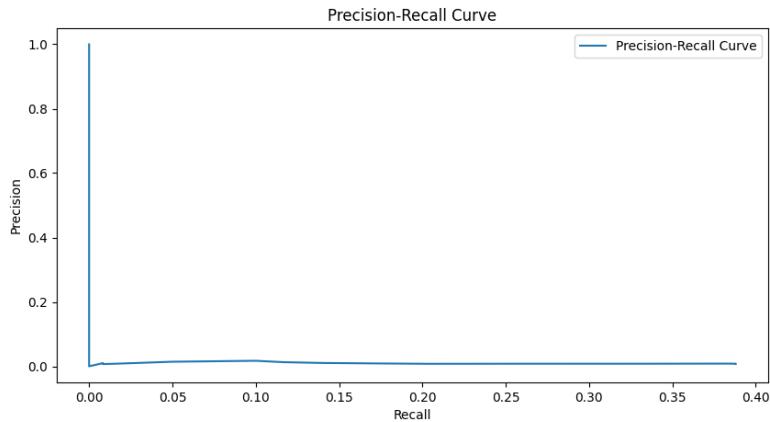


Figure s75. recall\_over\_confidence, fasterrcnn, pre-trained=True, epochs=0, data=kielce\_university\_of\_technology

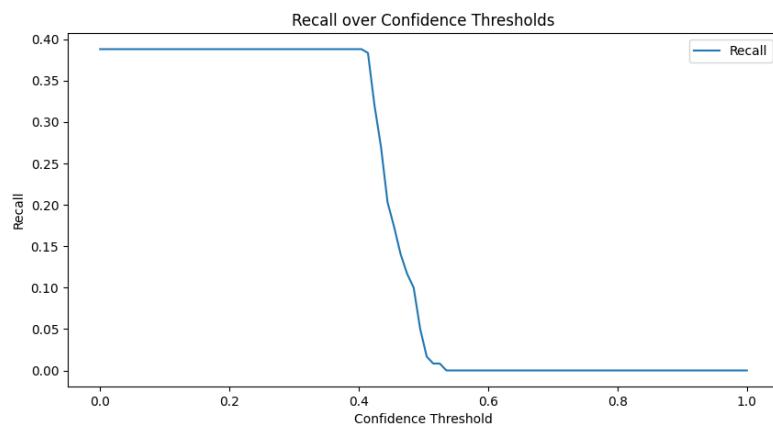


Figure s76. f1\_over\_confidence, fasterrcnn, pre-trained=True, epochs=0, data=toggenburg\_alpaca\_ranch

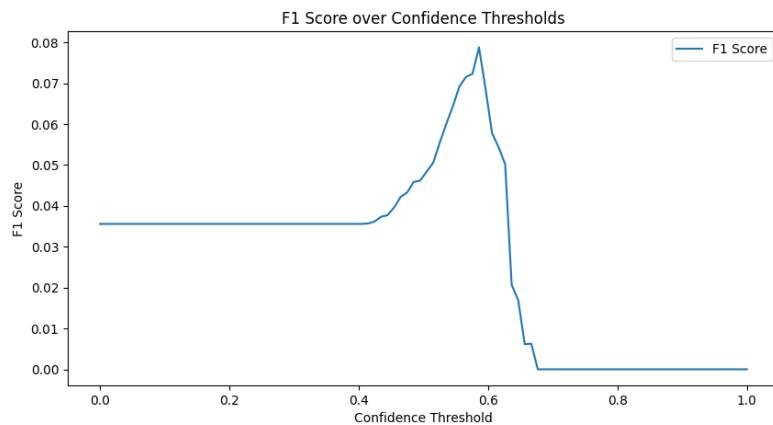


Figure s77. precision\_over\_confidence, fasterrcnn, pre-trained=True, epochs=0, data=toggenburg\_alpaca\_ranch

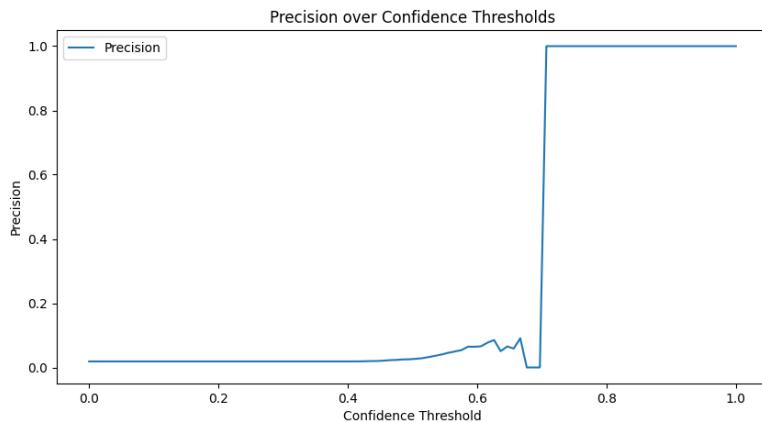


Figure s78. precision\_over\_recall, fasterrcnn, pre-trained=True, epochs=0, data=toggenburg\_alpaca\_ranch

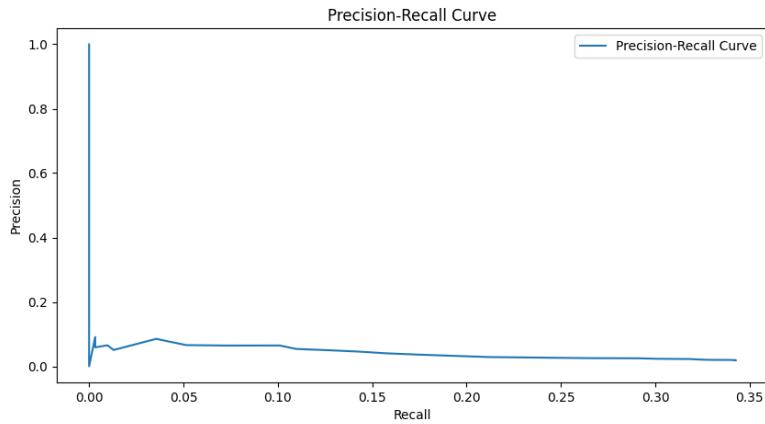


Figure s79. recall\_over\_confidence, fasterrcnn, pre-trained=True, epochs=0, data=toggenburg\_alpaca\_ranch

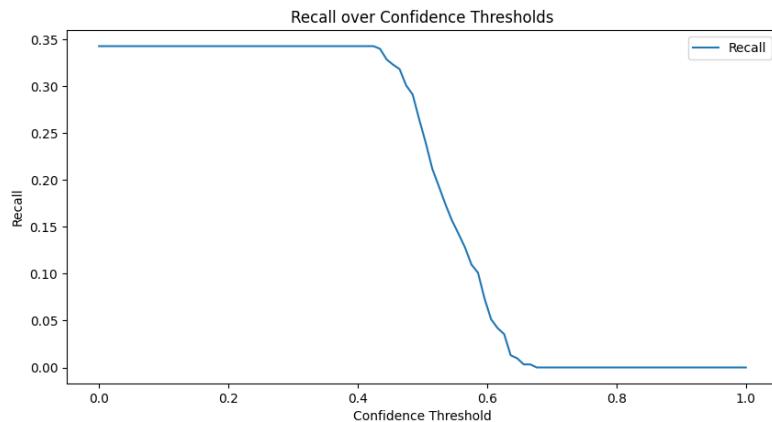


Figure s80. f1\_over\_confidence, fasterrcnn, pre-trained=True, epochs=50, data=duomo

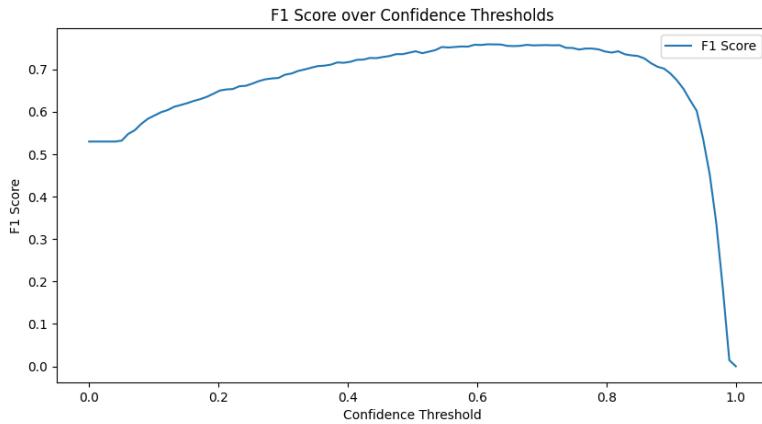


Figure s81. precision\_over\_confidence, fasterrcnn, pre-trained=True, epochs=50, data=duomo

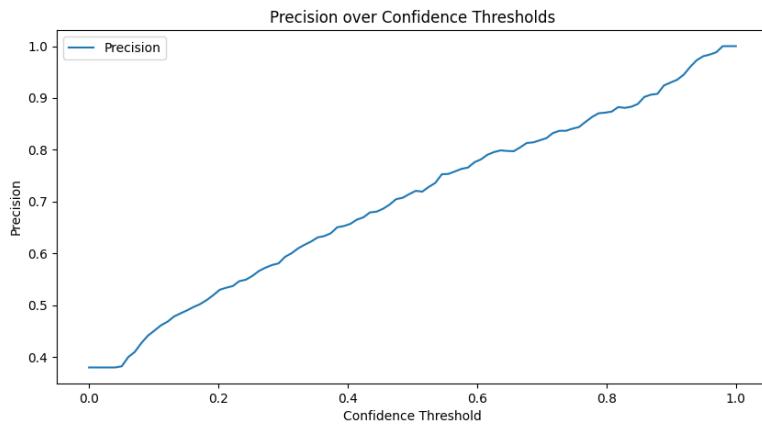


Figure s82. precision\_over\_recall, fasterrcnn, pre-trained=True, epochs=50, data=duomo

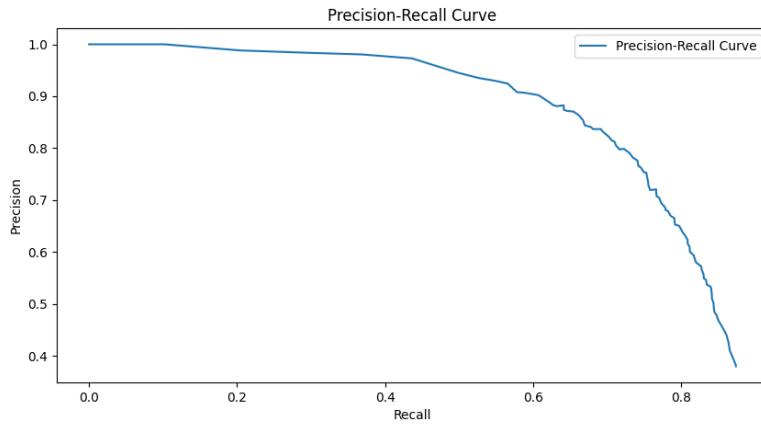


Figure s83. recall\_over\_confidence, fasterrcnn, pre-trained=True, epochs=50, data=duomo

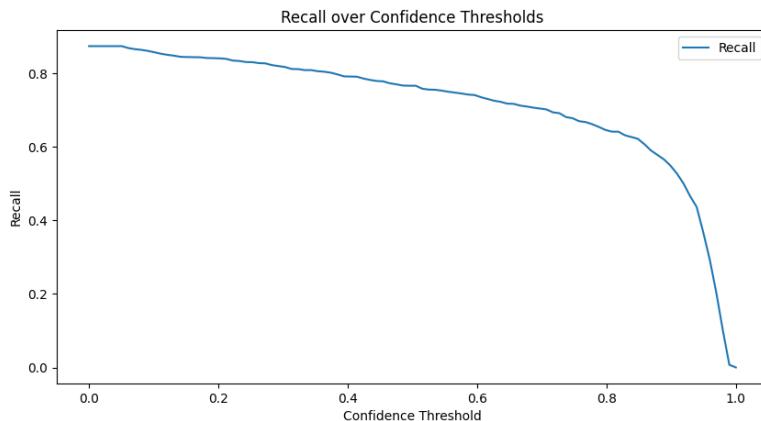


Figure s84. f1\_over\_confidence, fasterrcnn, pre-trained=True, epochs=50, data=hadji\_dimitar\_square

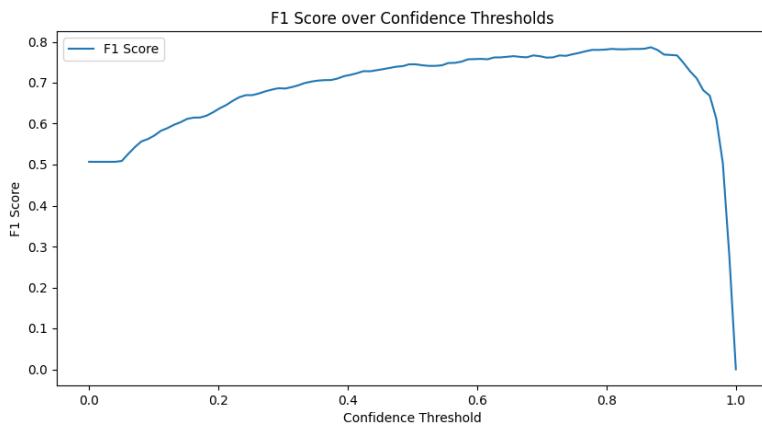


Figure s85. precision\_over\_confidence, fasterrcnn, pre-trained=True, epochs=50, data=hadji\_dimitar\_square

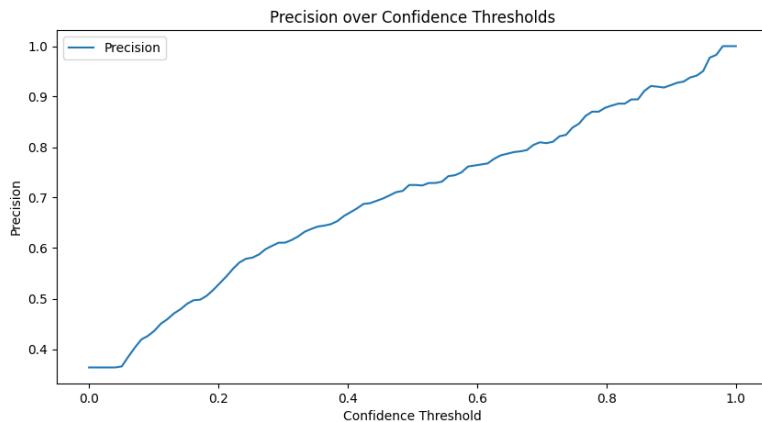


Figure s86. precision\_over\_recall, fasterrcnn, pre-trained=True, epochs=50, data=hadji\_dimitar\_square

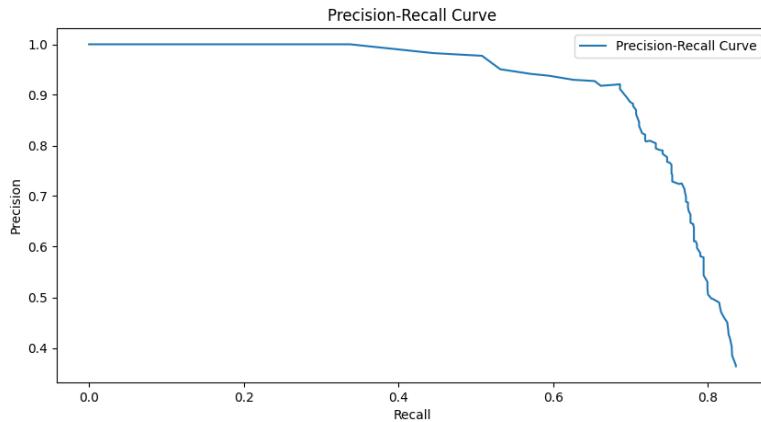


Figure s87. recall\_over\_confidence, fasterrcnn, pre-trained=True, epochs=50, data=hadjidimitar\_square

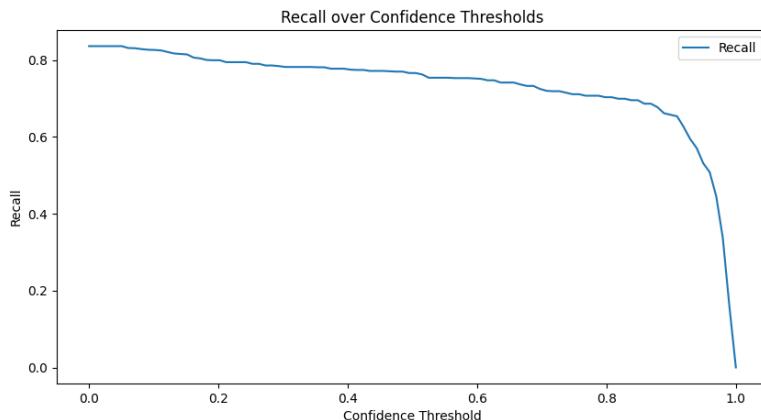


Figure s88. f1\_over\_confidence, fasterrcnn, pre-trained=True, epochs=50, data=keskvaljak

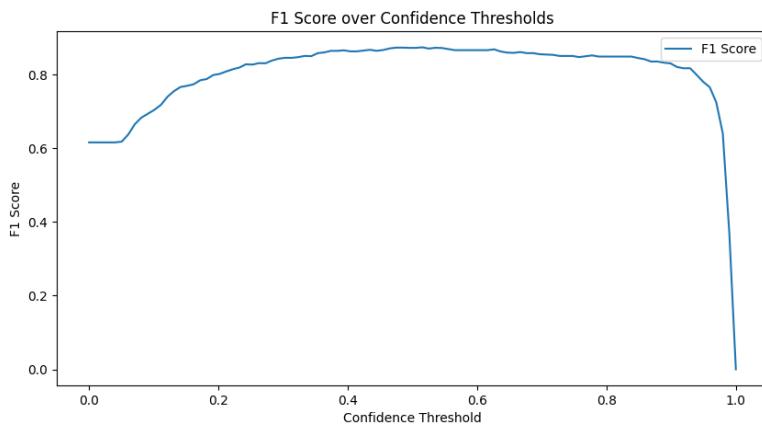


Figure s89. precision\_over\_confidence, fasterrcnn, pre-trained=True, epochs=50, data=keskvaljak

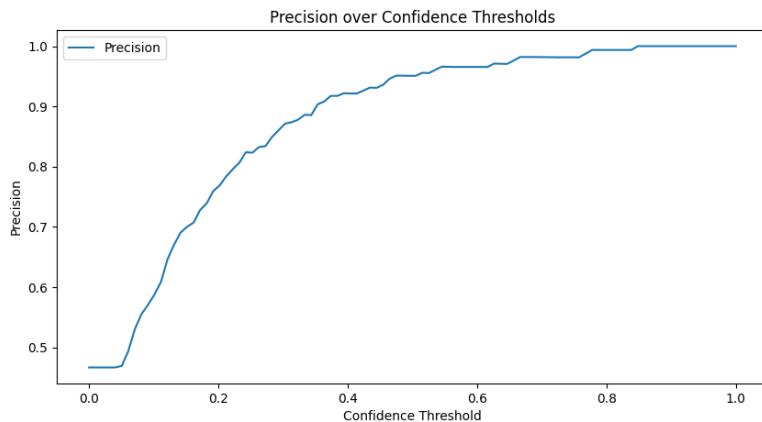


Figure s90. precision\_over\_recall, fasterrcnn, pre-trained=True, epochs=50, data=keskvaljak

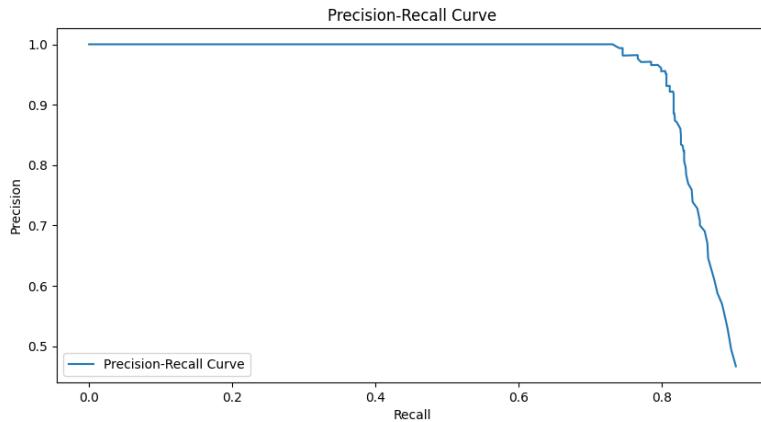


Figure s91. recall\_over\_confidence, fasterrcnn, pre-trained=True, epochs=50, data=keskvaljak

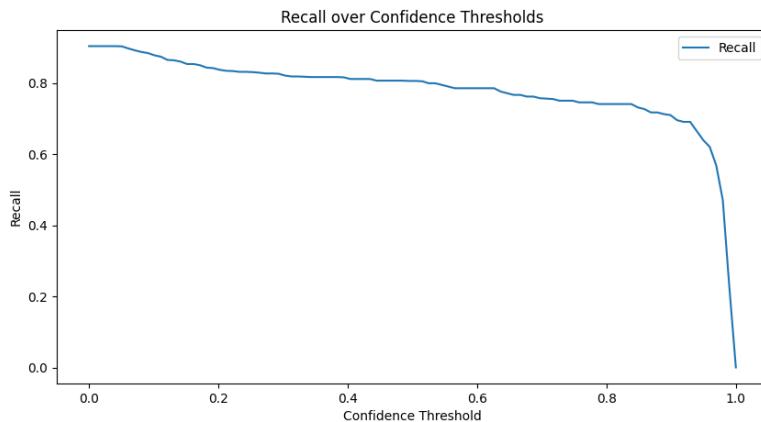


Figure s92. f1\_over\_confidence, fasterrcnn, pre-trained=True, epochs=50, data=kielce\_university\_of\_technology

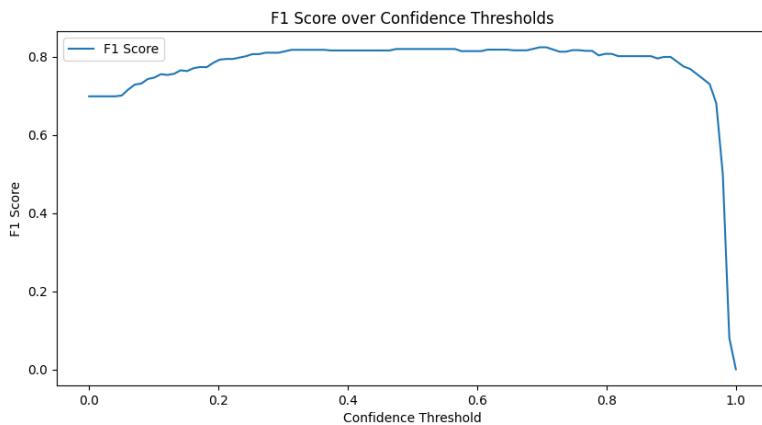


Figure s93. precision\_over\_confidence, fasterrcnn, pre-trained=True, epochs=50, data=kielce\_university\_of\_technology

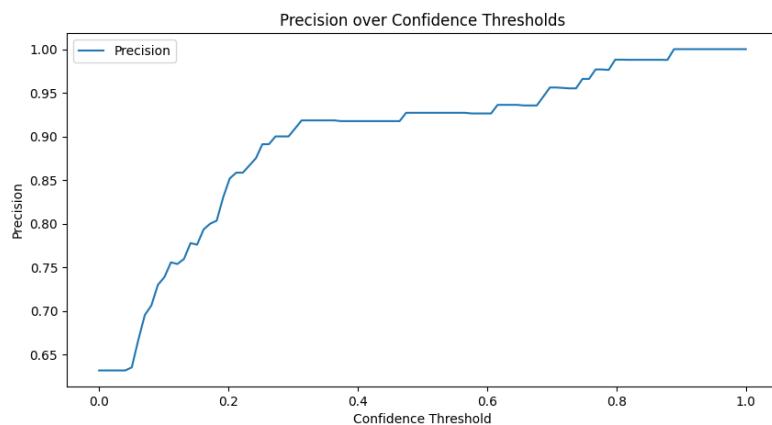


Figure s94. precision\_over\_recall, fasterrcnn, pre-trained=True, epochs=50, data=kielce\_university\_of\_technology

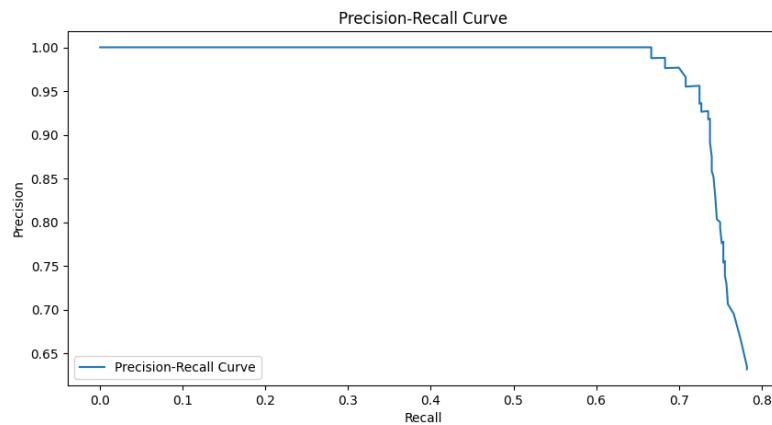


Figure s95. recall\_over\_confidence, fasterrcnn, pre-trained=True, epochs=50, data=kielce\_university\_of\_technology

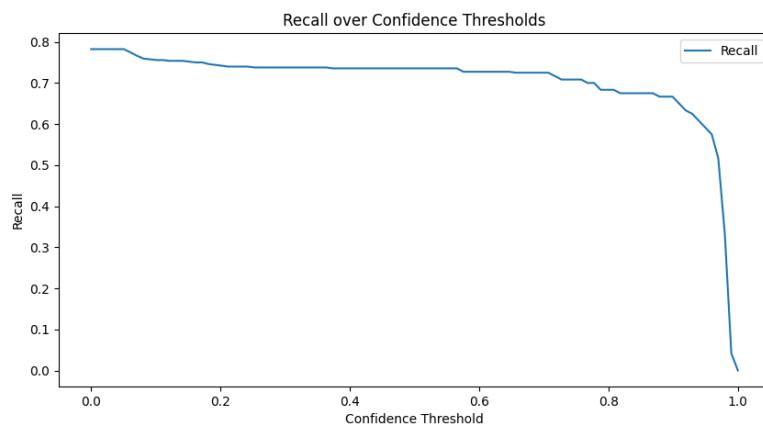


Figure s96. f1\_over\_confidence, fasterrcnn, pre-trained=True, epochs=50, data=toggenburg\_alpaca\_ranch

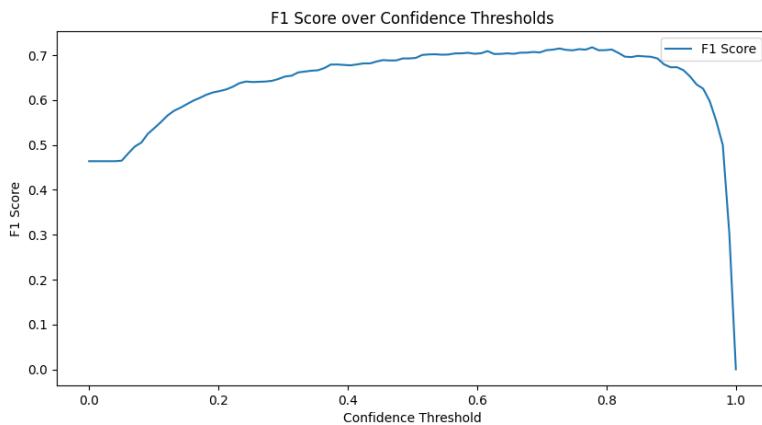


Figure s97. precision\_over\_confidence, fasterrcnn, pre-trained=True, epochs=50, data=toggenburg\_alpaca\_ranch

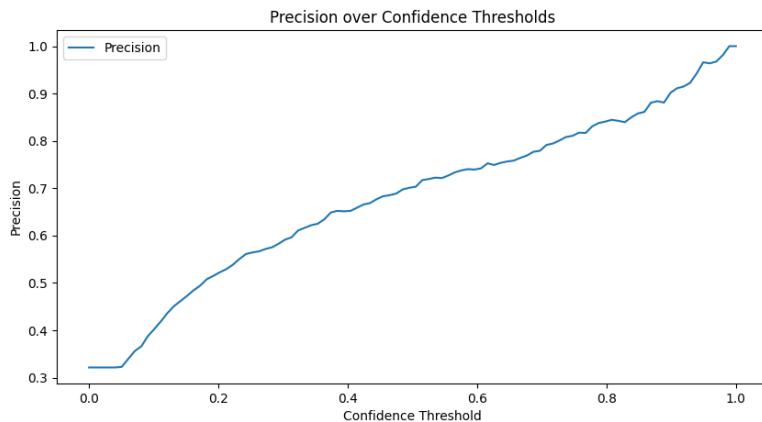


Figure s98. precision\_over\_recall, fasterrcnn, pre-trained=True, epochs=50, data=toggenburg\_alpaca\_ranch

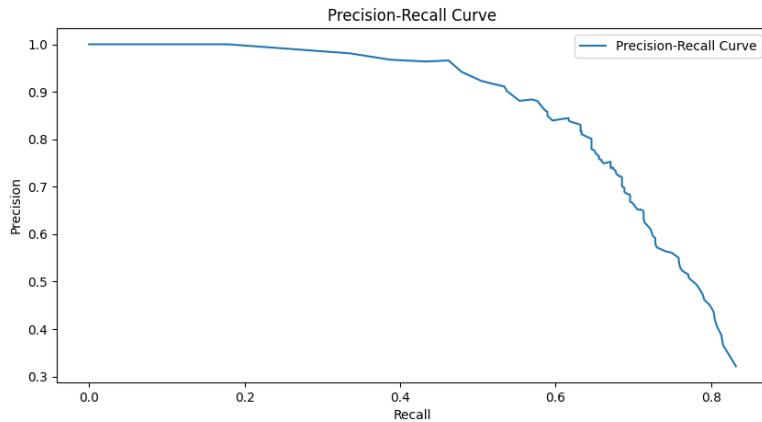


Figure s99. recall\_over\_confidence, fasterrcnn, pre-trained=True, epochs=50, data=toggenburg\_alpaca\_ranch

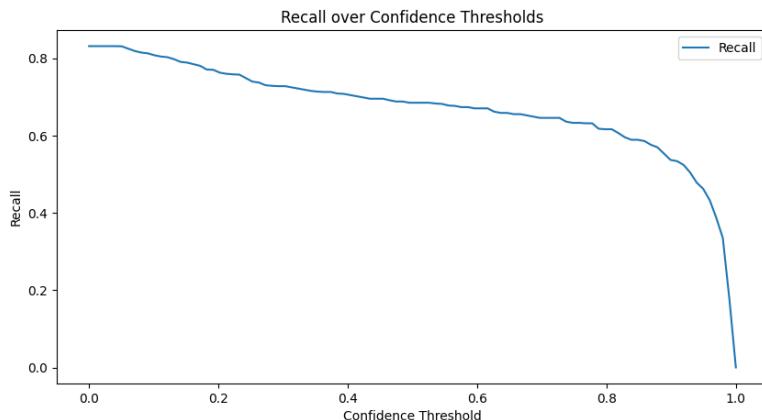


Figure s100. f1\_over\_confidence, fasterrcnn, pre-trained=True, epochs=100, data=duomo

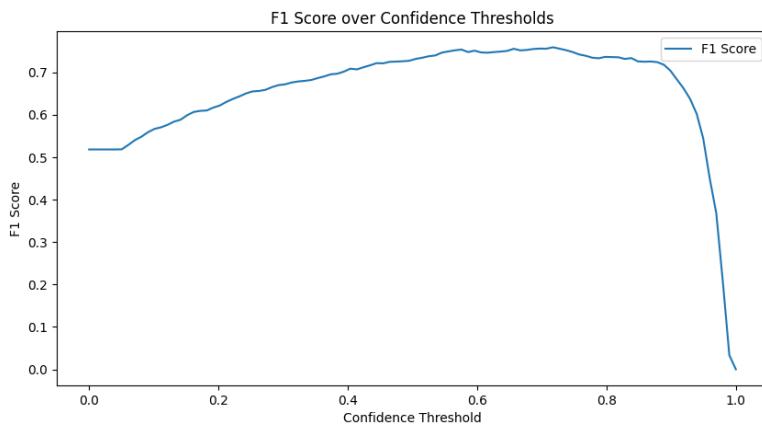


Figure s101. precision\_over\_confidence, fasterrcnn, pre-trained=True, epochs=100, data=duomo

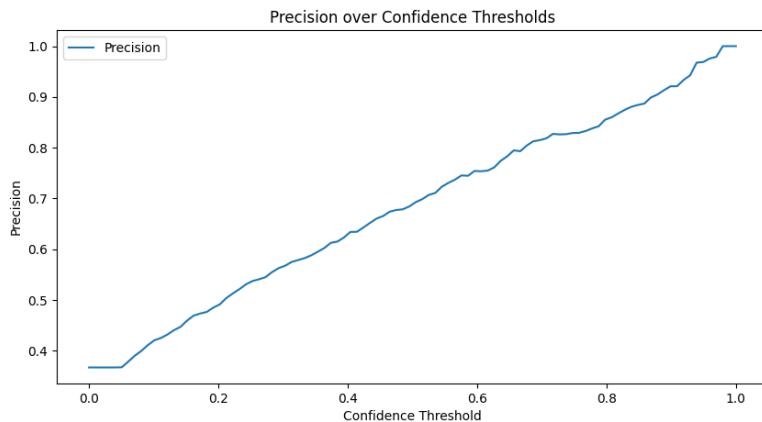


Figure s102. precision\_over\_recall, fasterrcnn, pre-trained=True, epochs=100, data=duomo

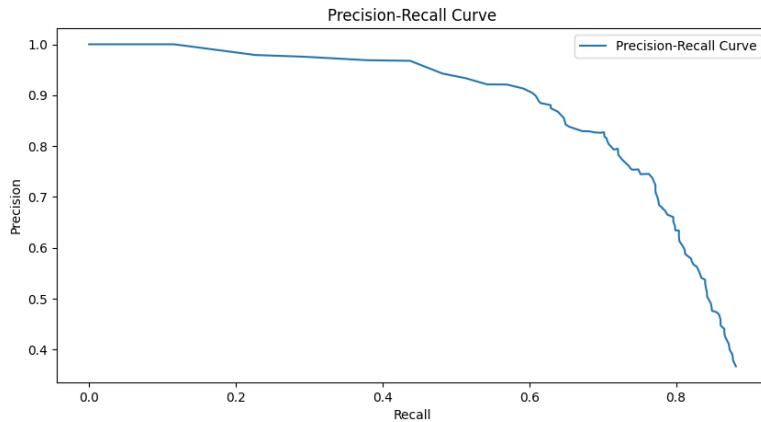


Figure s103. recall\_over\_confidence, fasterrcnn, pre-trained=True, epochs=100, data=duomo

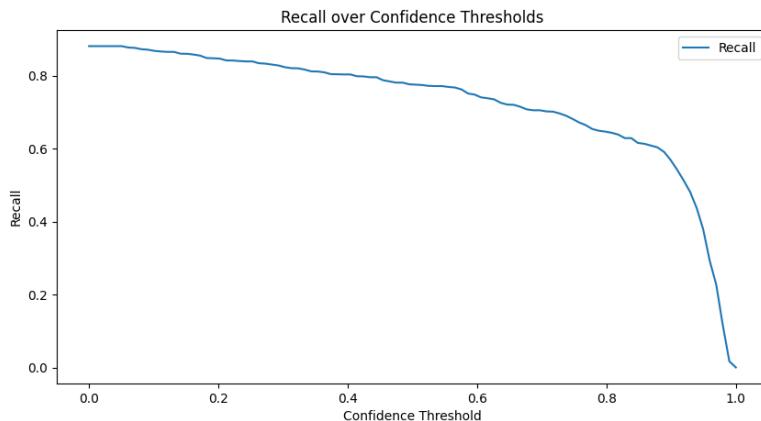


Figure s104. f1\_over\_confidence, fasterrcnn, pre-trained=True, epochs=100, data=hadji\_dimitar\_square

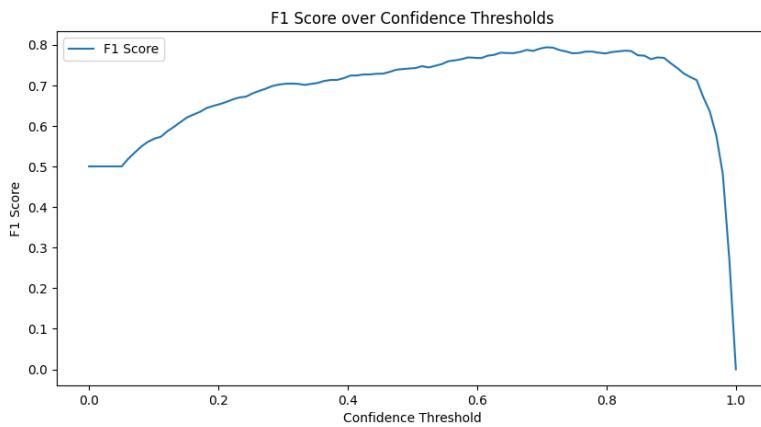


Figure s105. precision\_over\_confidence, fasterrcnn, pre-trained=True, epochs=100, data=hadji\_dimitar\_square

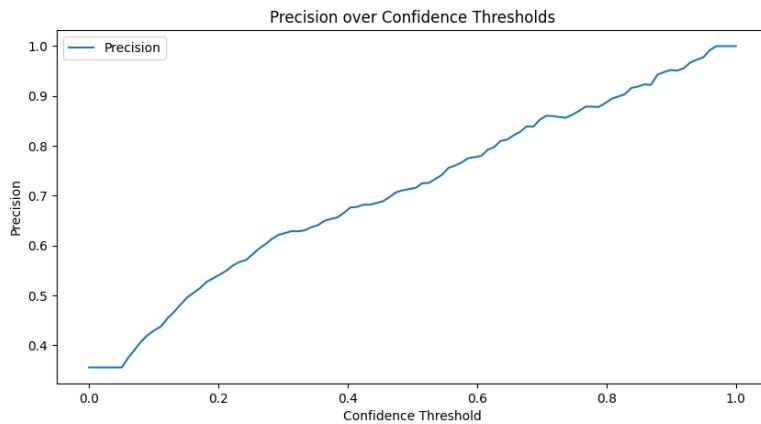


Figure s106. precision\_over\_recall, fasterrcnn, pre-trained=True, epochs=100, data=hadji\_dimitar\_square

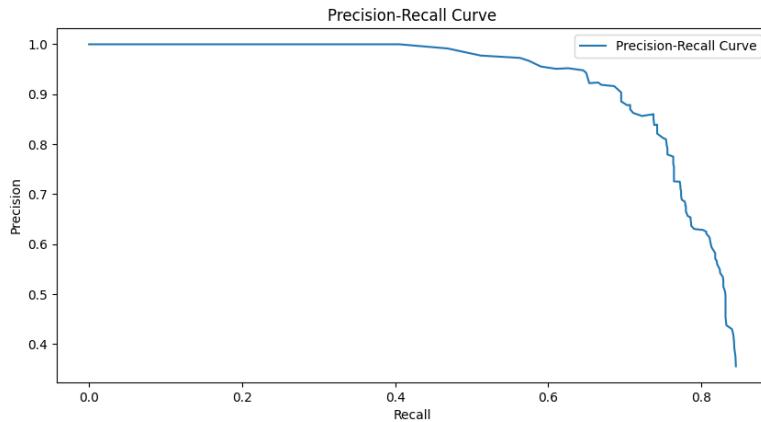


Figure s107. recall\_over\_confidence, fasterrcnn, pre-trained=True, epochs=100, data=hadjidimitar\_square

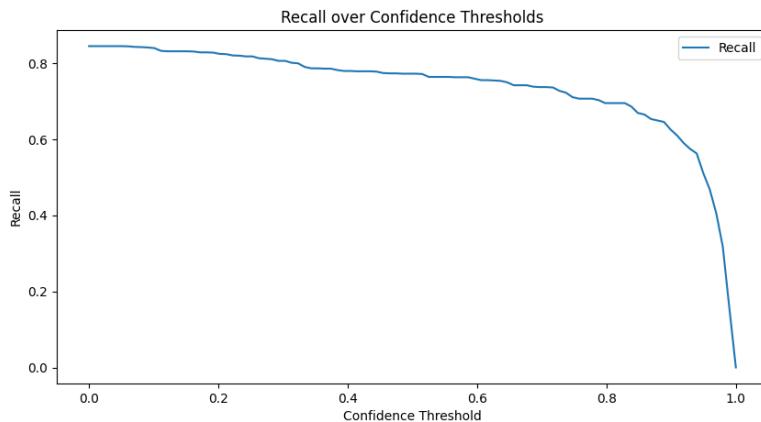


Figure s108. f1\_over\_confidence, fasterrcnn, pre-trained=True, epochs=100, data=keskvaljak

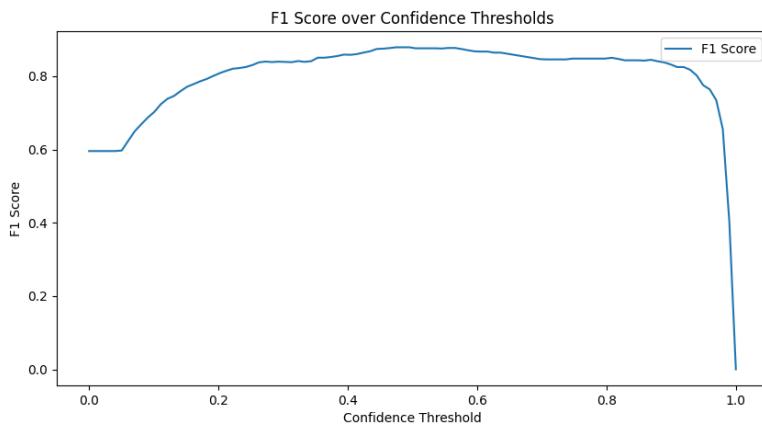


Figure s109. precision\_over\_confidence, fasterrcnn, pre-trained=True, epochs=100, data=keskvaljak

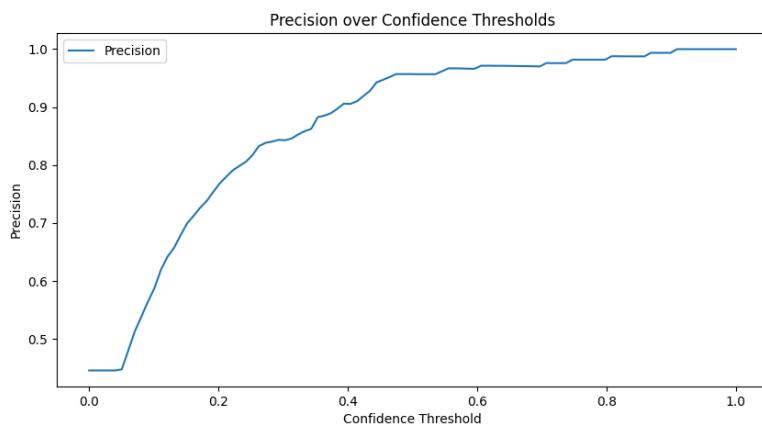


Figure s110. precision\_over\_recall, fasterrcnn, pre-trained=True, epochs=100, data=keskvaljak

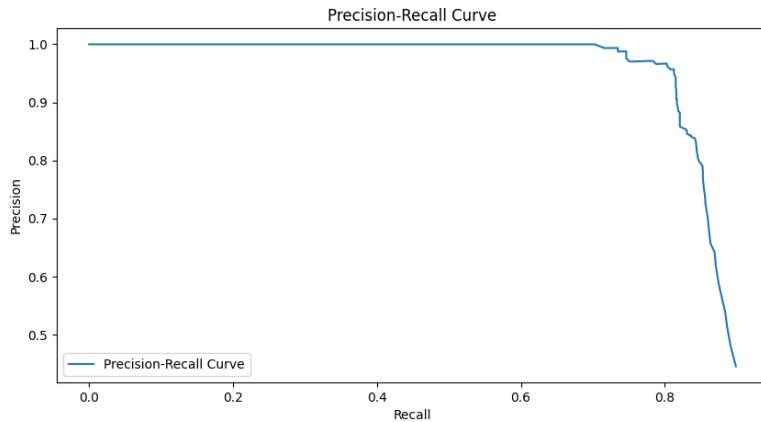


Figure s111. recall\_over\_confidence, fasterrcnn, pre-trained=True, epochs=100, data=keskvaljak

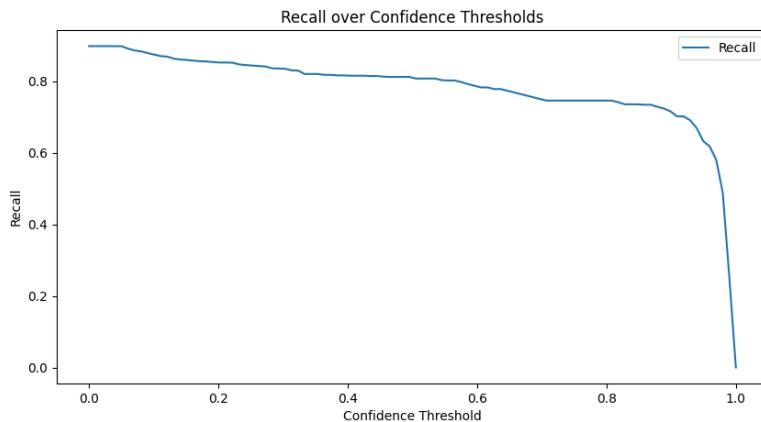


Figure s112. f1\_over\_confidence, fasterrcnn, pre-trained=True, epochs=100, data=kielce\_university\_of\_technology

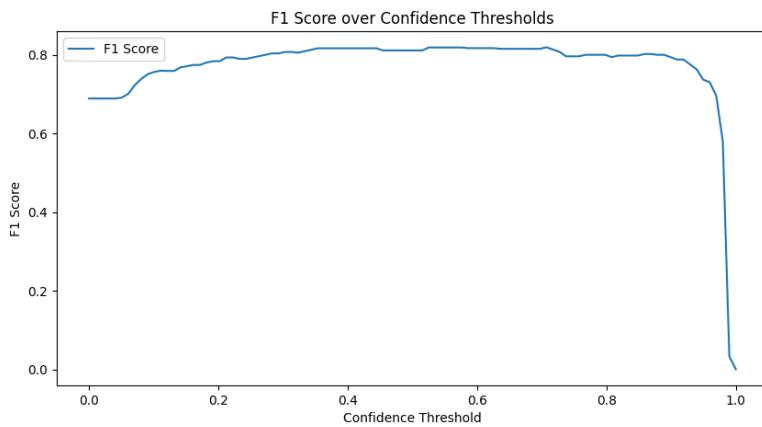


Figure s113. precision\_over\_confidence, fasterrcnn, pre-trained=True, epochs=100, data=kielce\_university\_of\_technology

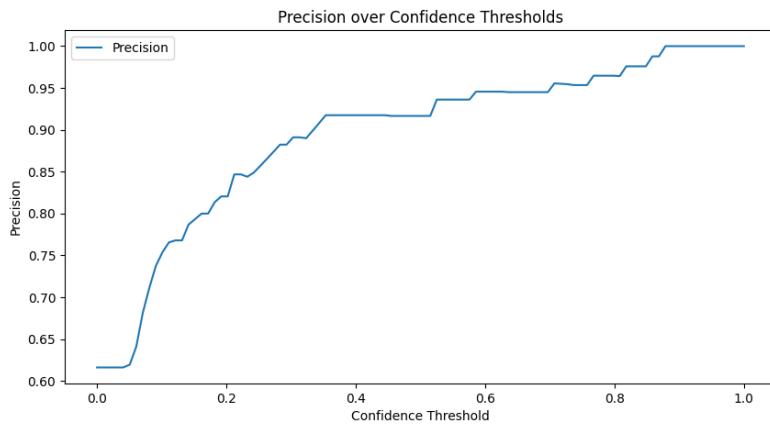


Figure s114. precision\_over\_recall, fasterrcnn, pre-trained=True, epochs=100, data=kielce\_university\_of\_technology

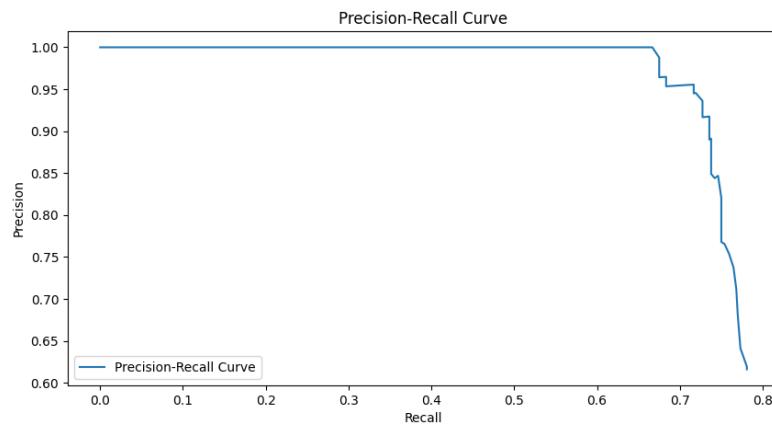


Figure s115. recall\_over\_confidence, fasterrcnn, pre-trained=True, epochs=100, data=kielce\_university\_of\_technology

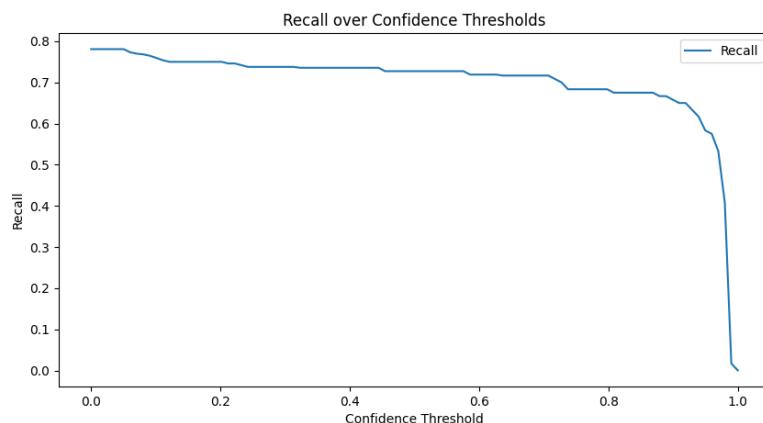


Figure s116. f1\_over\_confidence, fasterrcnn, pre-trained=True, epochs=100, data=toggenburg\_alpaca\_ranch

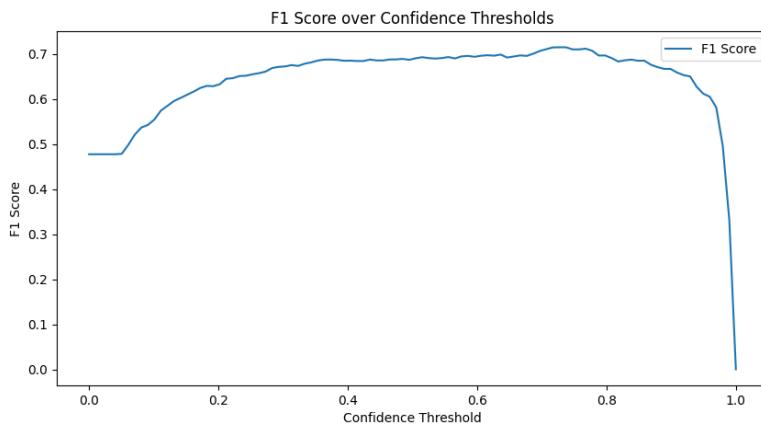


Figure s117. precision\_over\_confidence, fasterrcnn, pre-trained=True, epochs=100, data=toggenburg\_alpaca\_ranch

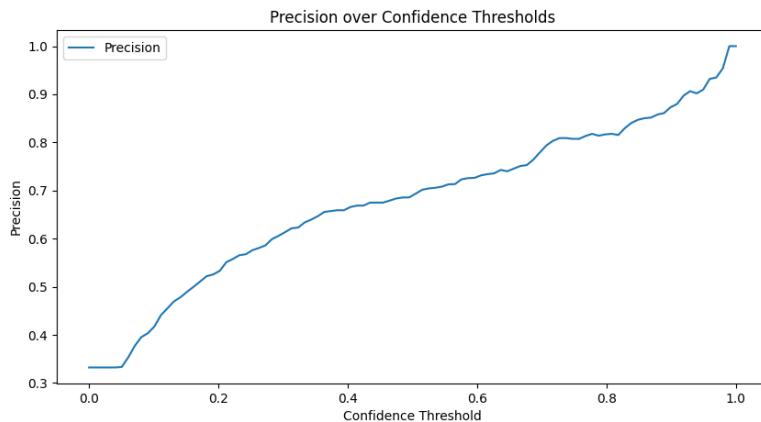


Figure s118. precision\_over\_recall, fasterrcnn, pre-trained=True, epochs=100, data=toggenburg\_alpaca\_ranch

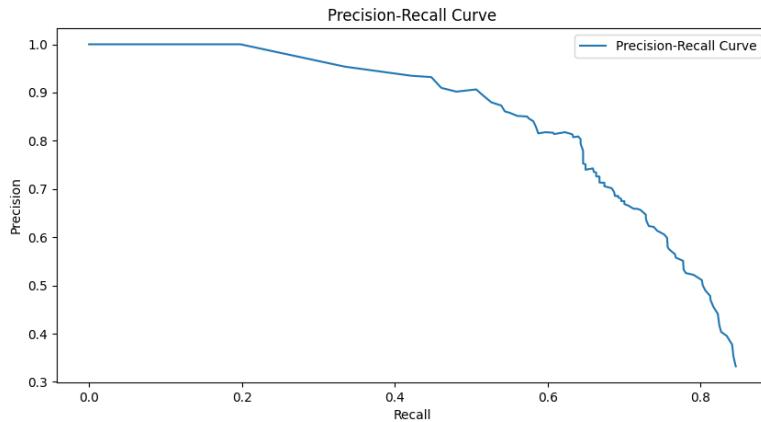


Figure s119. recall\_over\_confidence, fasterrcnn, pre-trained=True, epochs=100, data=toggenburg\_alpaca\_ranch

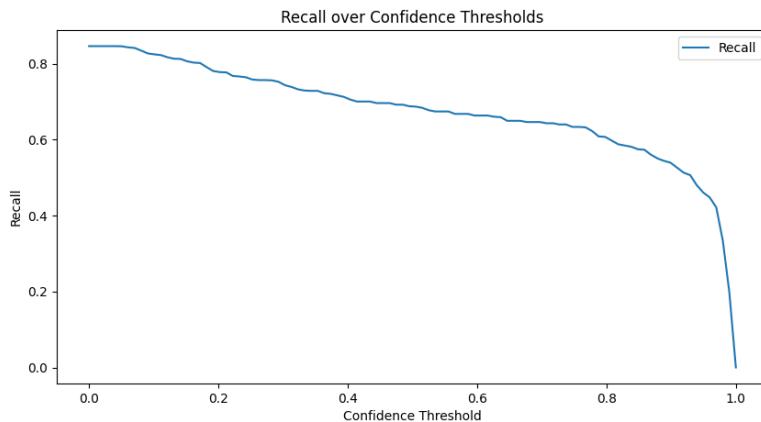


Figure s120. f1\_over\_confidence, fasterrcnn, pre-trained=True, epochs=150, data=duomo

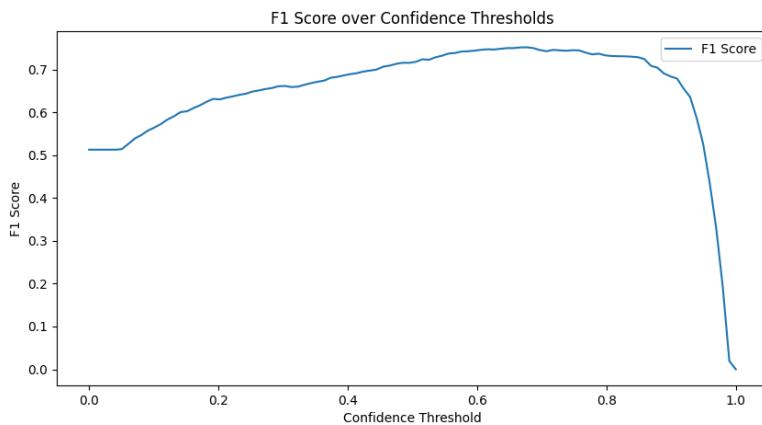


Figure s121. precision\_over\_confidence, fasterrcnn, pre-trained=True, epochs=150, data=duomo

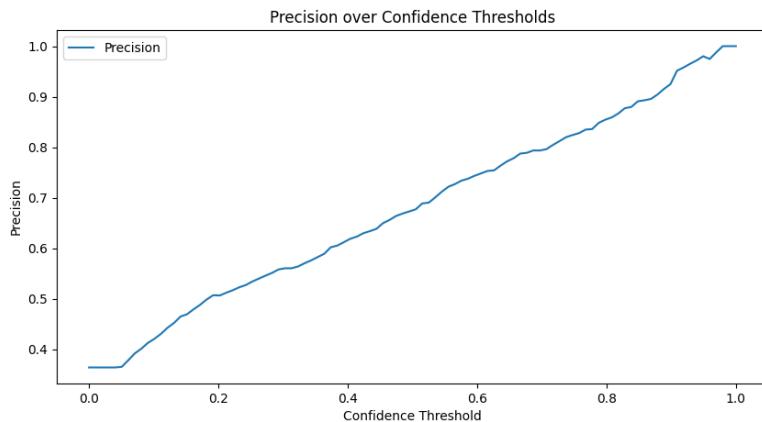


Figure s122. precision\_over\_recall, fasterrcnn, pre-trained=True, epochs=150, data=duomo

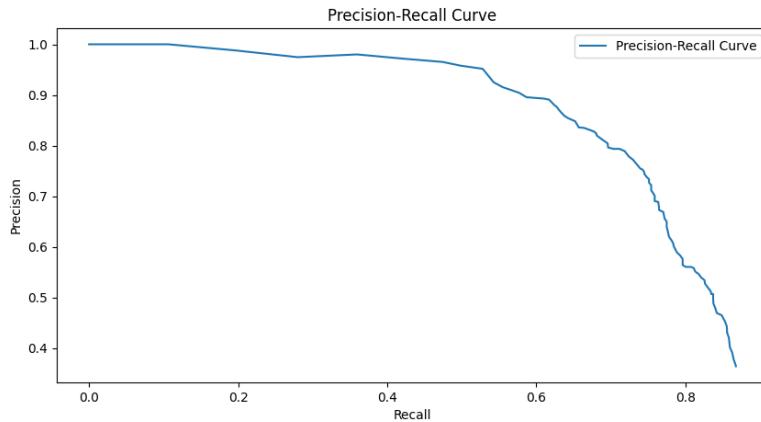


Figure s123. recall\_over\_confidence, fasterrcnn, pre-trained=True, epochs=150, data=duomo

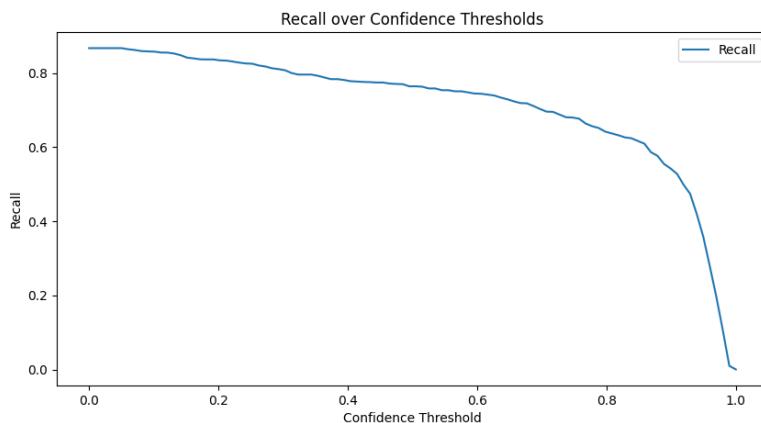


Figure s124. f1\_over\_confidence, fasterrcnn, pre-trained=True, epochs=150, data=hadji\_dimitar\_square

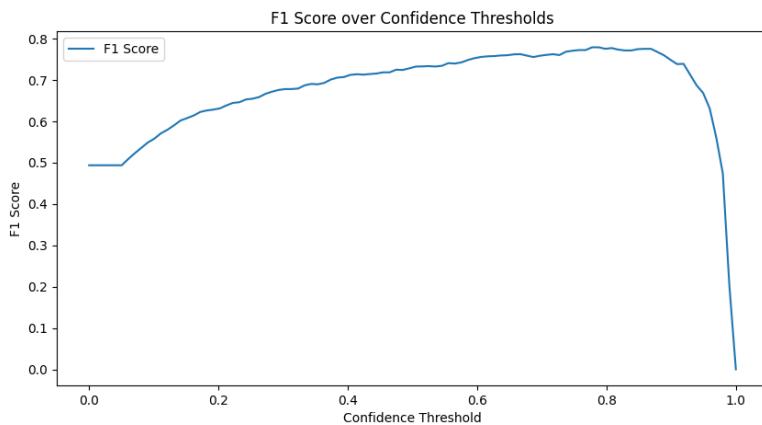


Figure s125. precision\_over\_confidence, fasterrcnn, pre-trained=True, epochs=150, data=hadji\_dimitar\_square

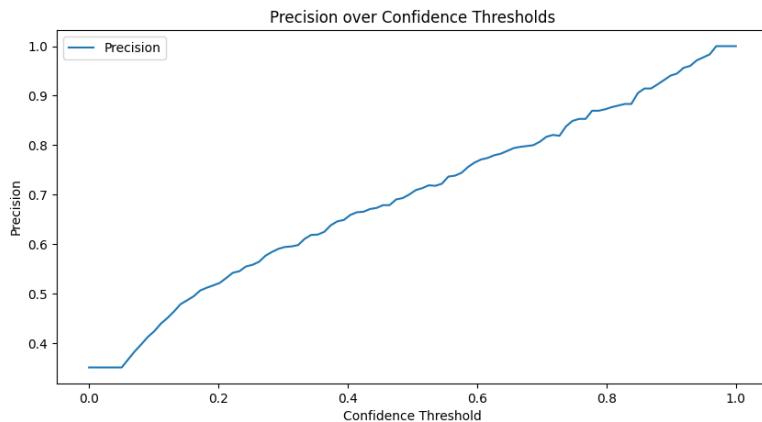


Figure s126. precision\_over\_recall, fasterrcnn, pre-trained=True, epochs=150, data=hadji\_dimitar\_square

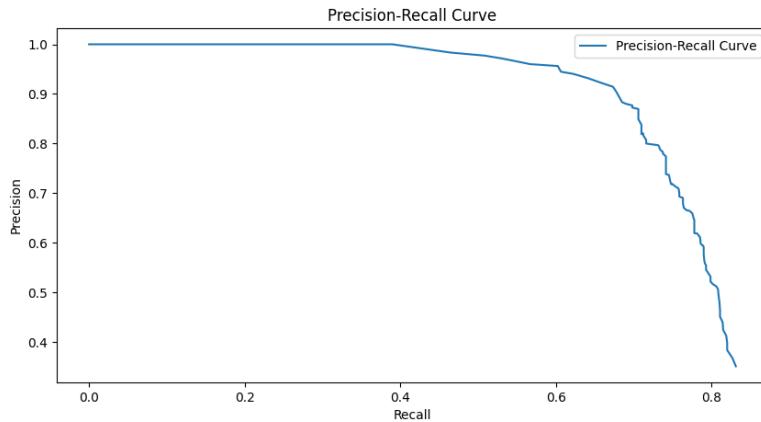


Figure s127. recall\_over\_confidence, fasterrcnn, pre-trained=True, epochs=150, data=hadjidimitar\_square

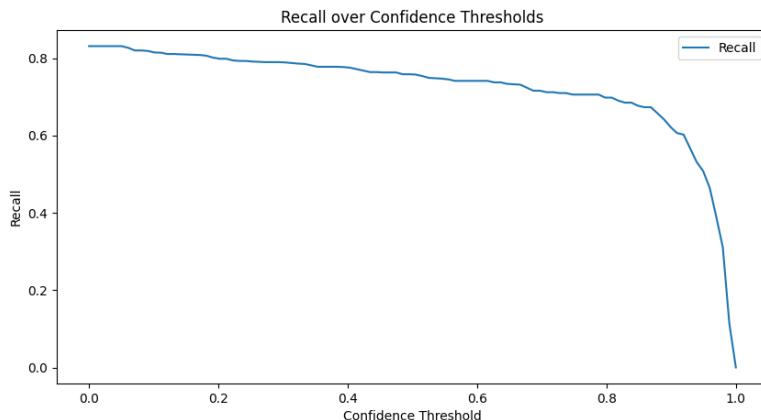


Figure s128. f1\_over\_confidence, fasterrcnn, pre-trained=True, epochs=150, data=keskvaljak

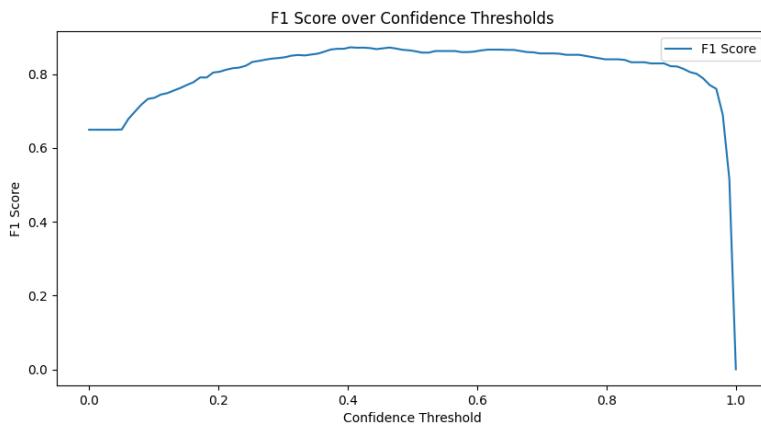


Figure s129. precision\_over\_confidence, fasterrcnn, pre-trained=True, epochs=150, data=keskvaljak

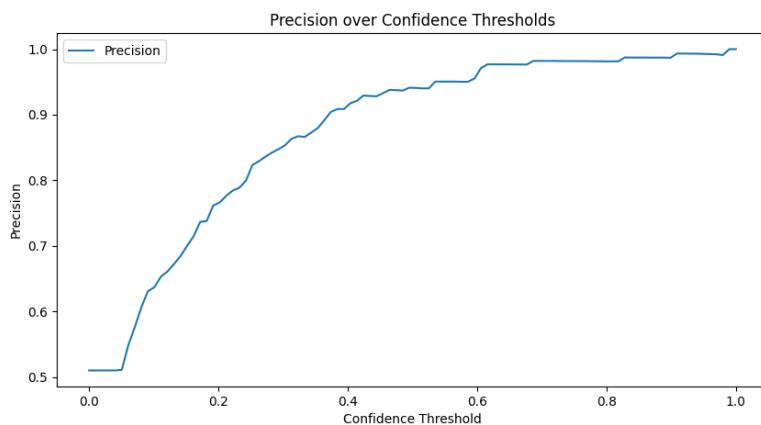


Figure s130. precision\_over\_recall, fasterrcnn, pre-trained=True, epochs=150, data=keskvaljak

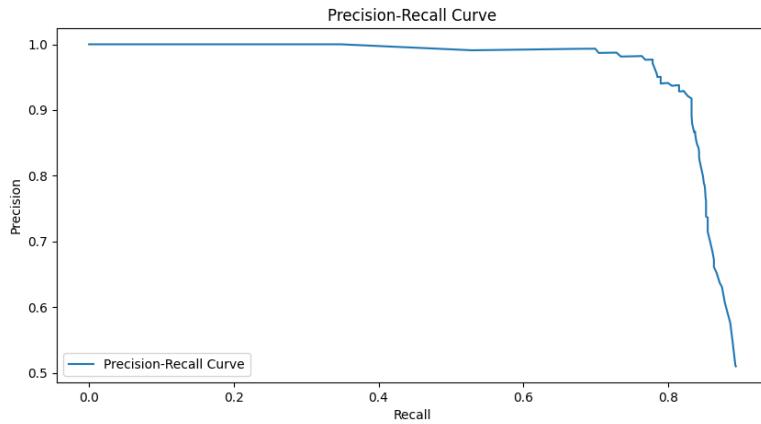


Figure s131. recall\_over\_confidence, fasterrcnn, pre-trained=True, epochs=150, data=keskvaljak

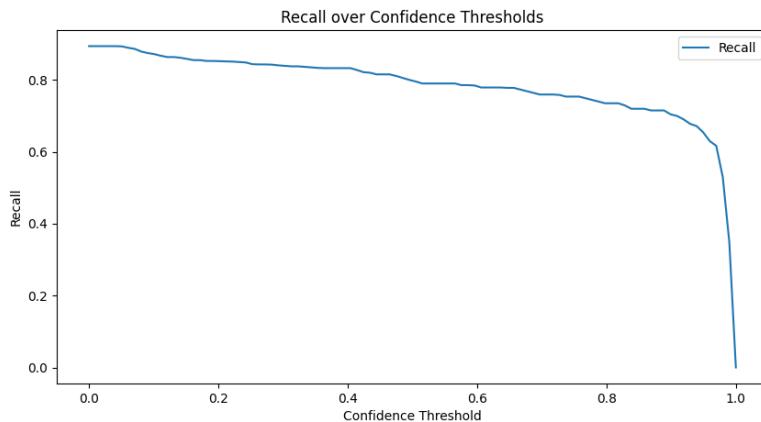


Figure s132. f1\_over\_confidence, fasterrcnn, pre-trained=True, epochs=150, data=kielce\_university\_of\_technology

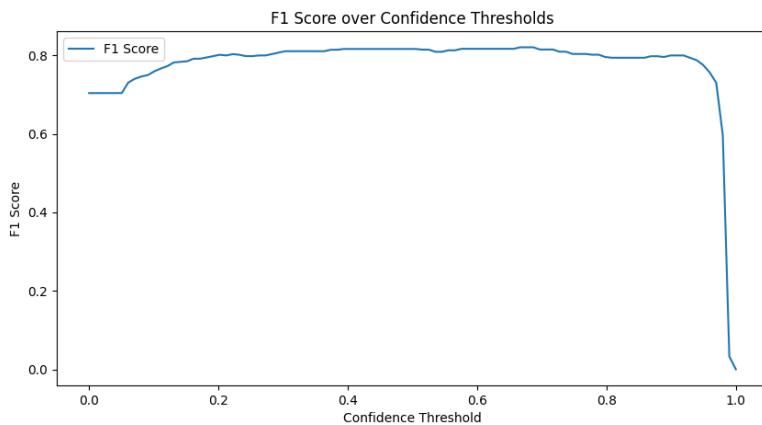


Figure s133. precision\_over\_confidence, fasterrcnn, pre-trained=True, epochs=150, data=kielce\_university\_of\_technology

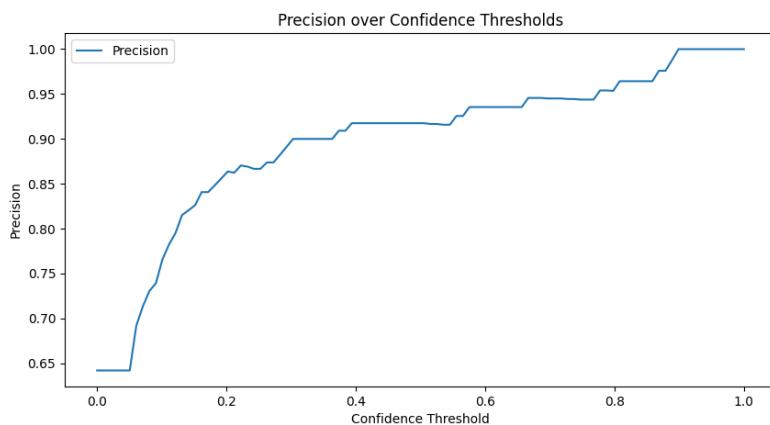


Figure s134. precision\_over\_recall, fasterrcnn, pre-trained=True, epochs=150, data=kielce\_university\_of\_technology

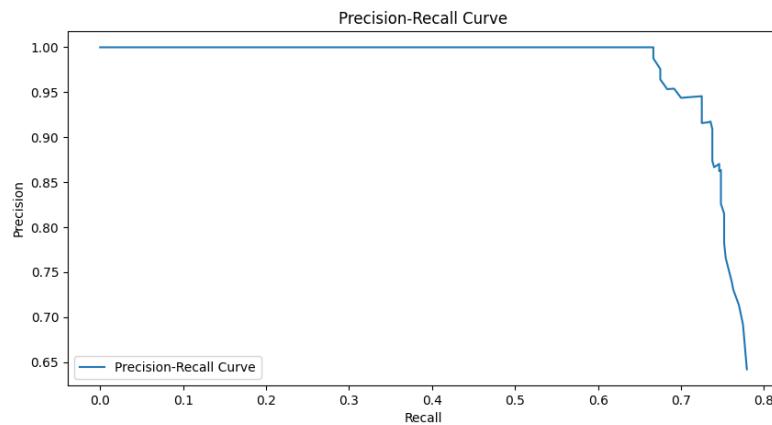


Figure s135. recall\_over\_confidence, fasterrcnn, pre-trained=True, epochs=150, data=kielce\_university\_of\_technology

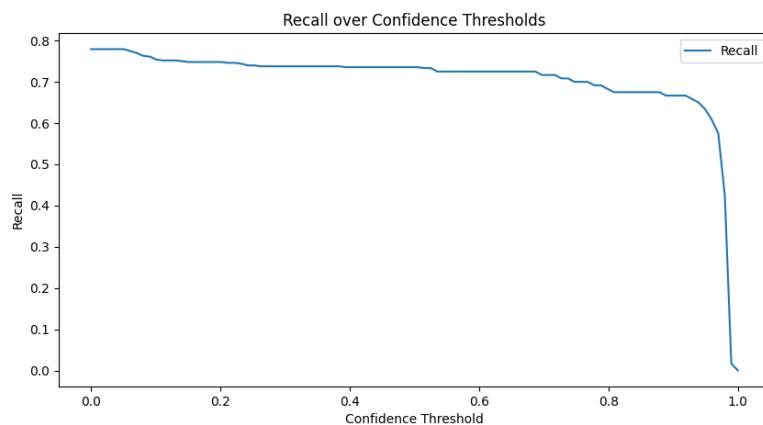


Figure s136. f1\_over\_confidence, fasterrcnn, pre-trained=True, epochs=150, data=toggenburg\_alpaca\_ranch

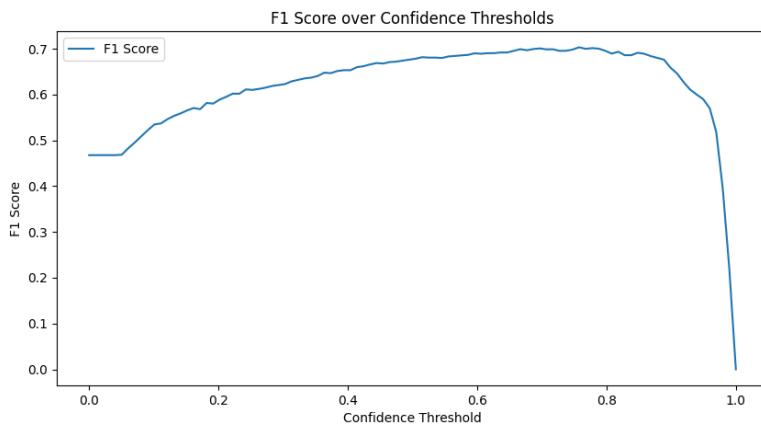


Figure s137. precision\_over\_confidence, fasterrcnn, pre-trained=True, epochs=150, data=toggenburg\_alpaca\_ranch

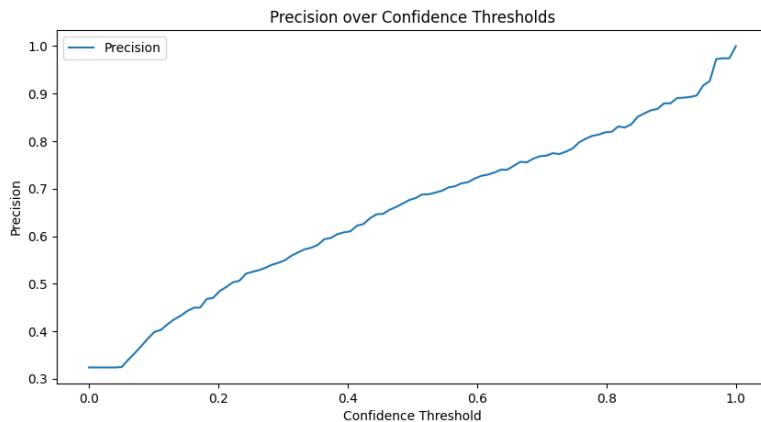


Figure s138. precision\_over\_recall, fasterrcnn, pre-trained=True, epochs=150, data=toggenburg\_alpaca\_ranch

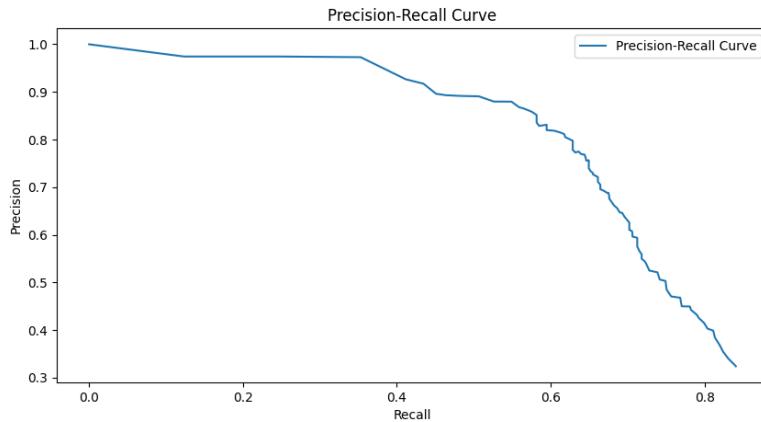


Figure s139. recall\_over\_confidence, fasterrcnn, pre-trained=True, epochs=150, data=toggenburg\_alpaca\_ranch

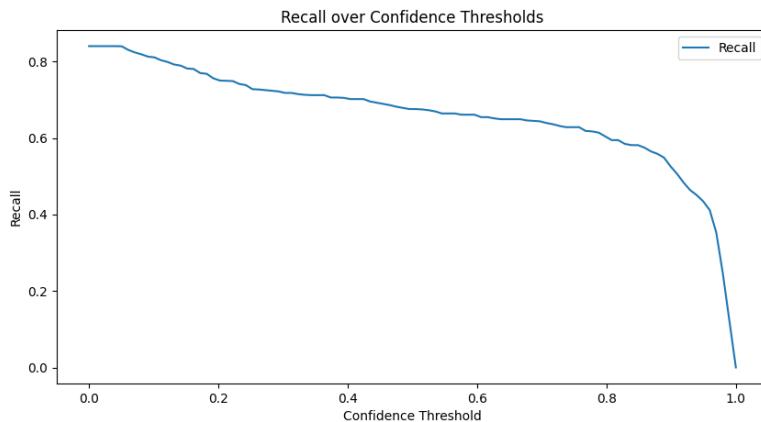


Figure s140. f1\_over\_confidence, maskrcnn, pre-trained=False, epochs=50, data=duomo

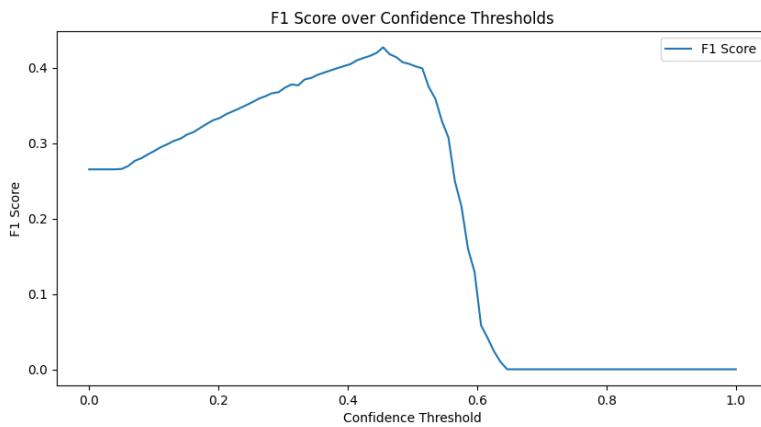


Figure s141. precision\_over\_confidence, maskrcnn, pre-trained=False, epochs=50, data=duomo

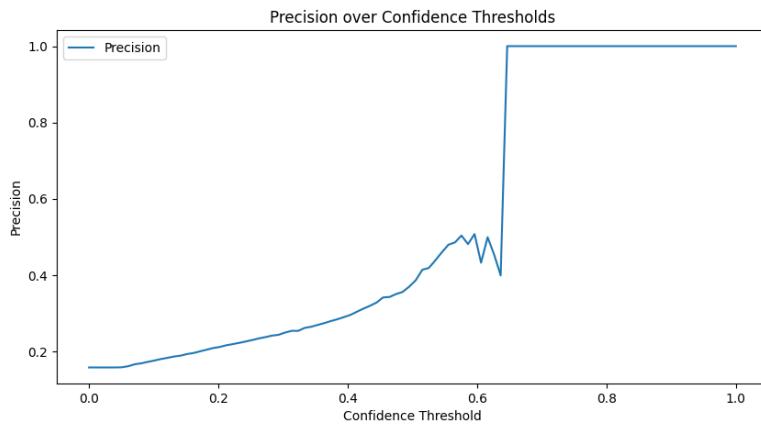


Figure s142. precision\_over\_recall, maskrcnn, pre-trained=False, epochs=50, data=duomo

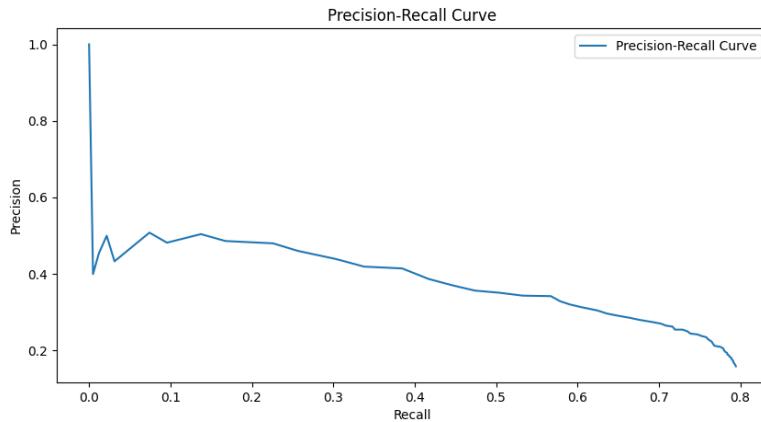


Figure s143. recall\_over\_confidence, maskrcnn, pre-trained=False, epochs=50, data=duomo

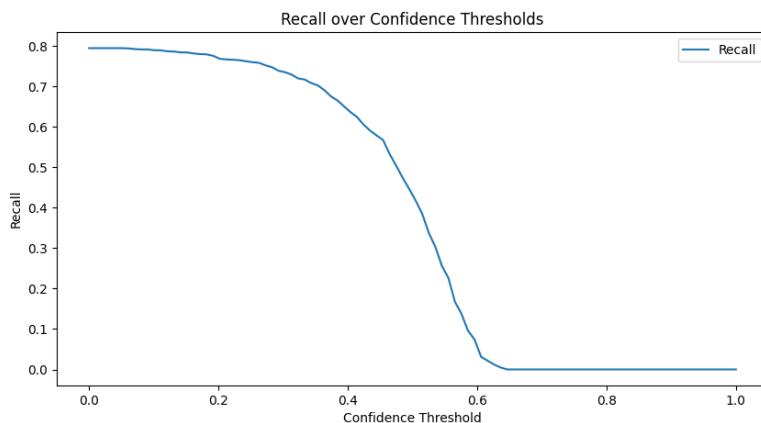


Figure s144. f1\_over\_confidence, maskrcnn, pre-trained=False, epochs=50, data=hadji\_dimitar\_square

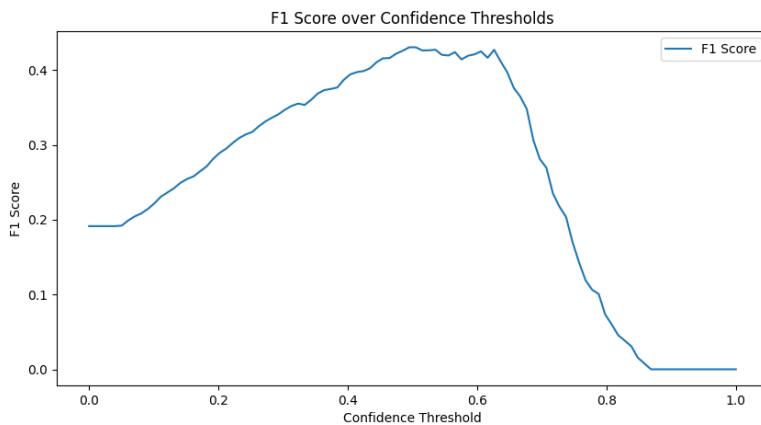


Figure s145. precision\_over\_confidence, maskrcnn, pre-trained=False, epochs=50, data=hadji\_dimitar\_square

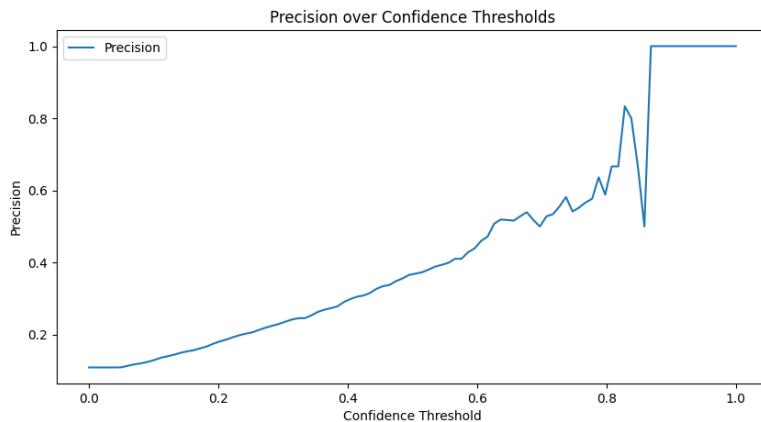


Figure s146. precision\_over\_recall, maskrcnn, pre-trained=False, epochs=50, data=hadji\_dimitar\_square

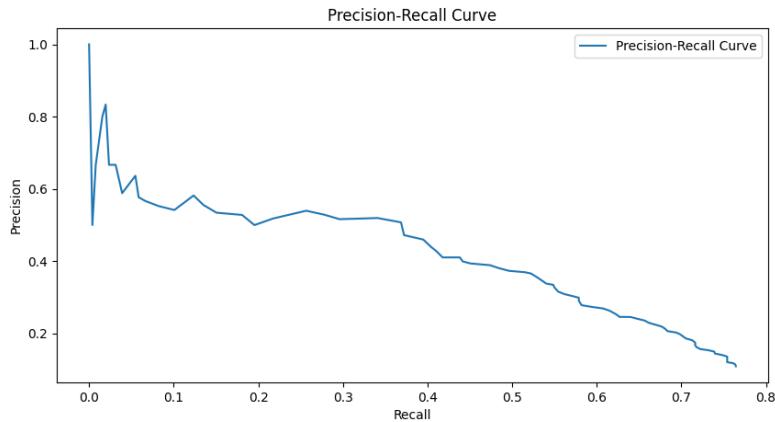


Figure s147. recall\_over\_confidence, maskrcnn, pre-trained=False, epochs=50, data=hadjidimitar\_square

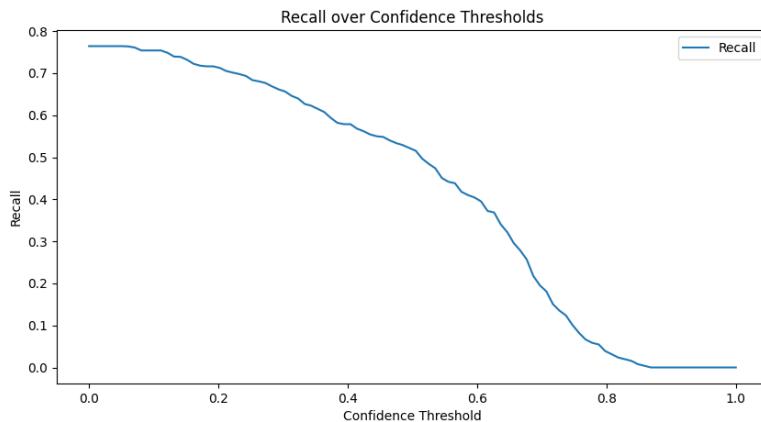


Figure s148. f1\_over\_confidence, maskrcnn, pre-trained=False, epochs=50, data=keskvaljak

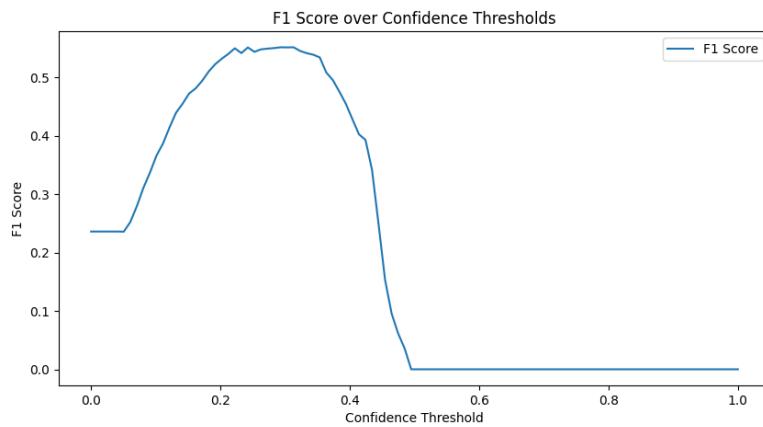


Figure s149. precision\_over\_confidence, maskrcnn, pre-trained=False, epochs=50, data=keskvaljak

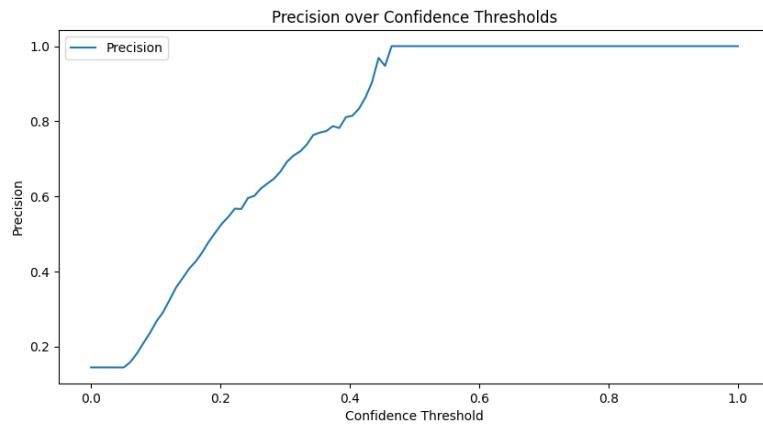


Figure s150. precision\_over\_recall, maskrcnn, pre-trained=False, epochs=50, data=keskvaljak

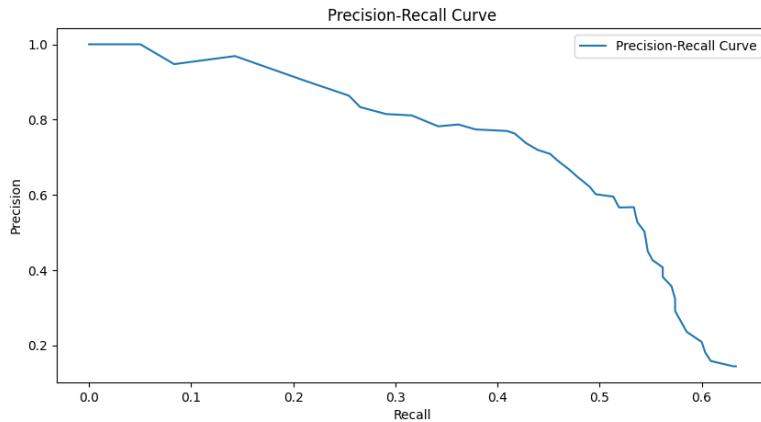


Figure s151. recall\_over\_confidence, maskrcnn, pre-trained=False, epochs=50, data=keskvaljak

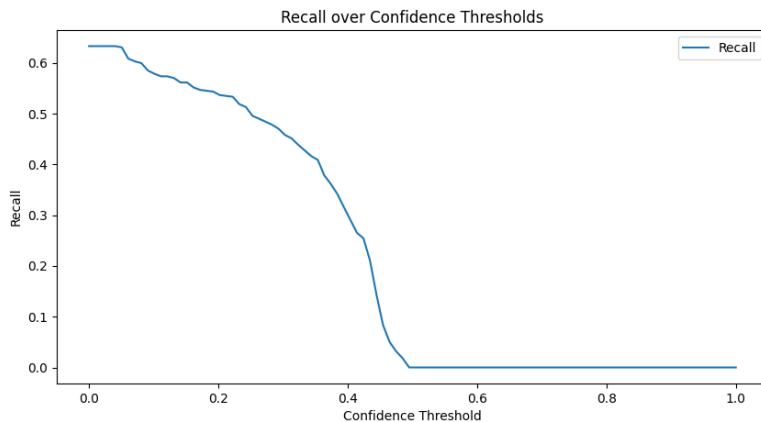


Figure s152. f1\_over\_confidence, maskrcnn, pre-trained=False, epochs=50, data=kielce\_university\_of\_technology

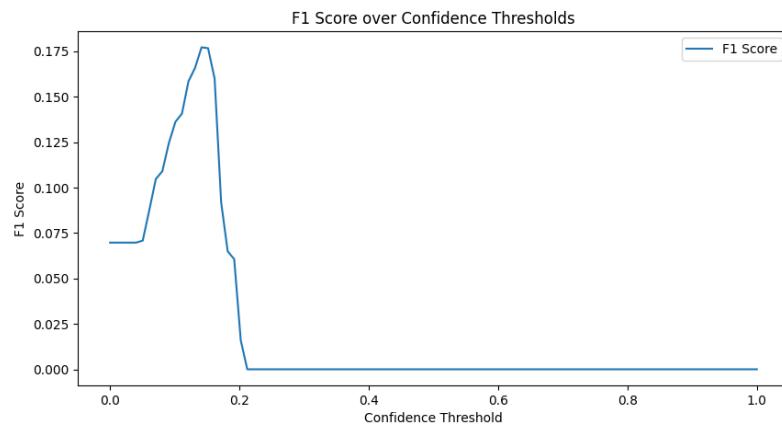


Figure s153. precision\_over\_confidence, maskrcnn, pre-trained=False, epochs=50, data=kielce\_university\_of\_technology

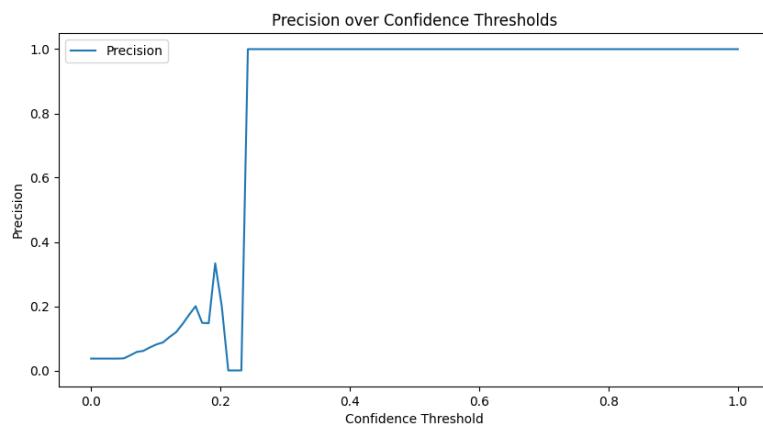


Figure s154. precision\_over\_recall, maskrcnn, pre-trained=False, epochs=50, data=kielce\_university\_of\_technology

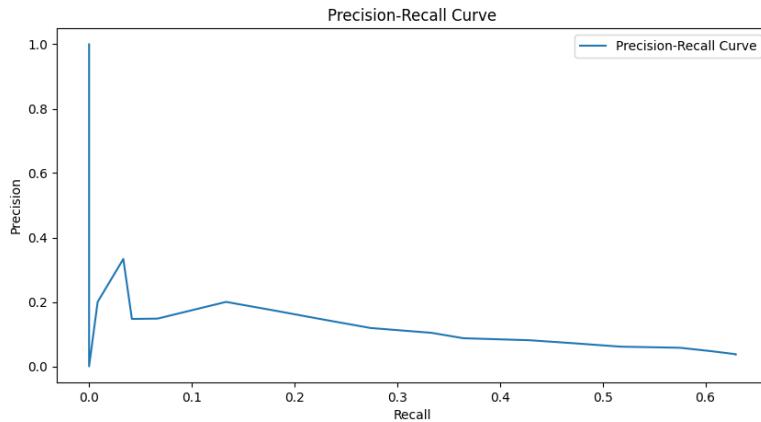


Figure s155. recall\_over\_confidence, maskrcnn, pre-trained=False, epochs=50, data=kielce\_university\_of\_technology

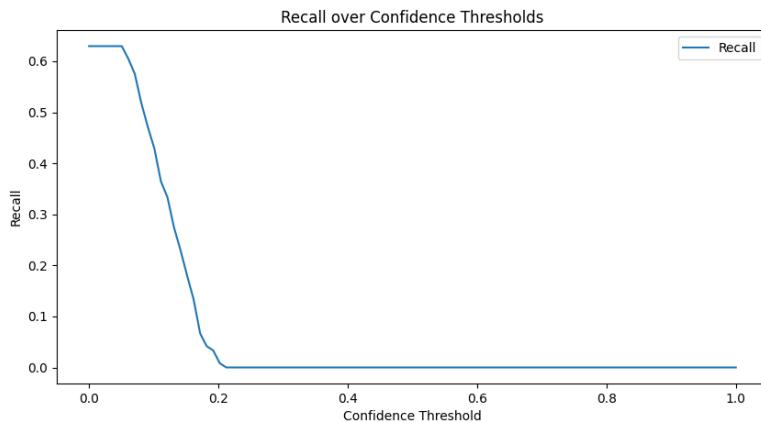


Figure s156. f1\_over\_confidence, maskrcnn, pre-trained=False, epochs=50, data=toggenburg\_alpaca\_ranch

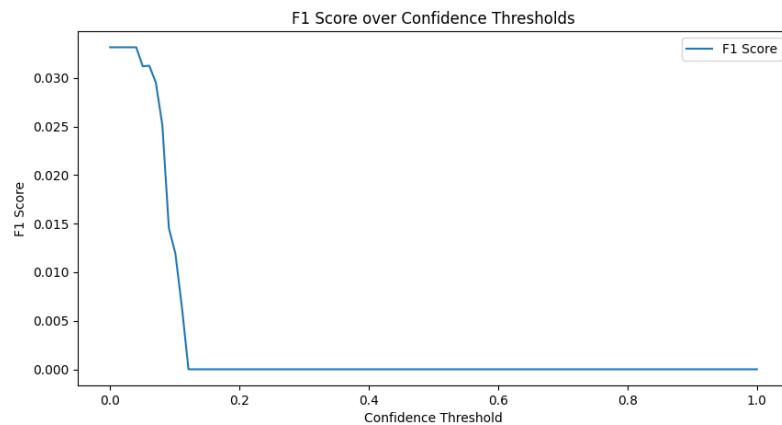


Figure s157. precision\_over\_confidence, maskrcnn, pre-trained=False, epochs=50, data=toggenburg\_alpaca\_ranch

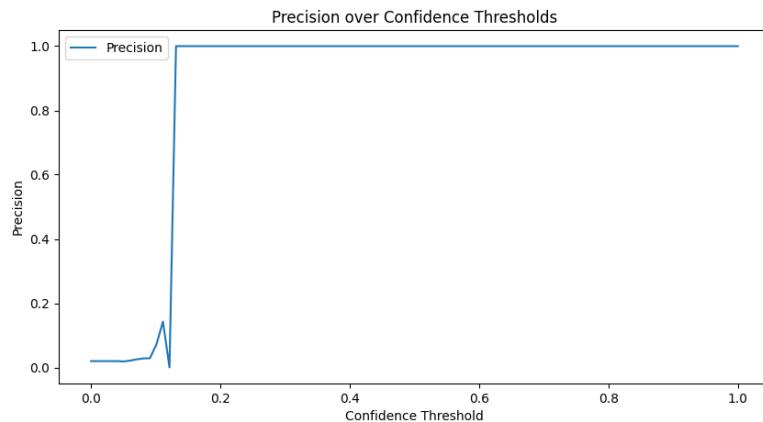


Figure s158. precision\_over\_recall, maskrcnn, pre-trained=False, epochs=50, data=toggenburg\_alpaca\_ranch

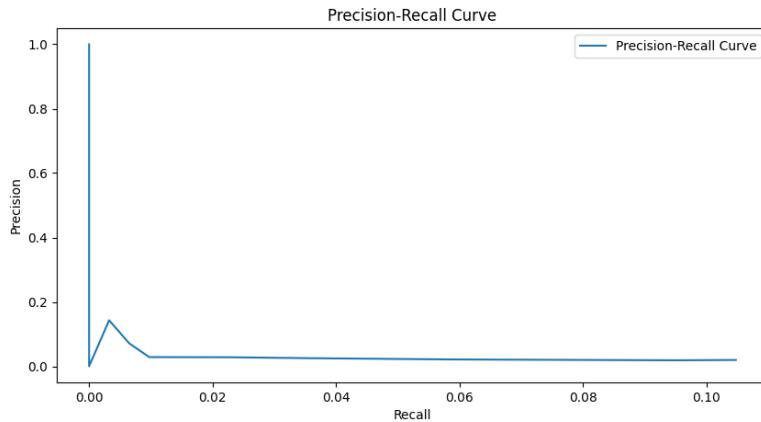


Figure s159. recall\_over\_confidence, maskrcnn, pre-trained=False, epochs=50, data=toggenburg\_alpaca\_ranch

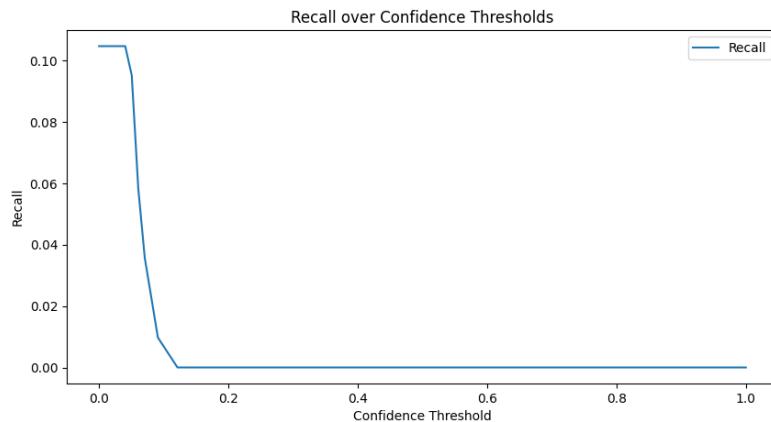


Figure s160. f1\_over\_confidence, maskrcnn, pre-trained=False, epochs=100, data=duomo

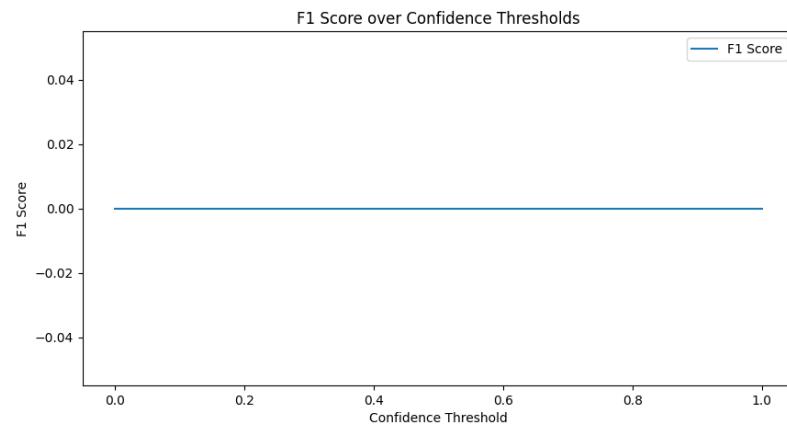


Figure s161. precision\_over\_confidence, maskrcnn, pre-trained=False, epochs=100, data=duomo

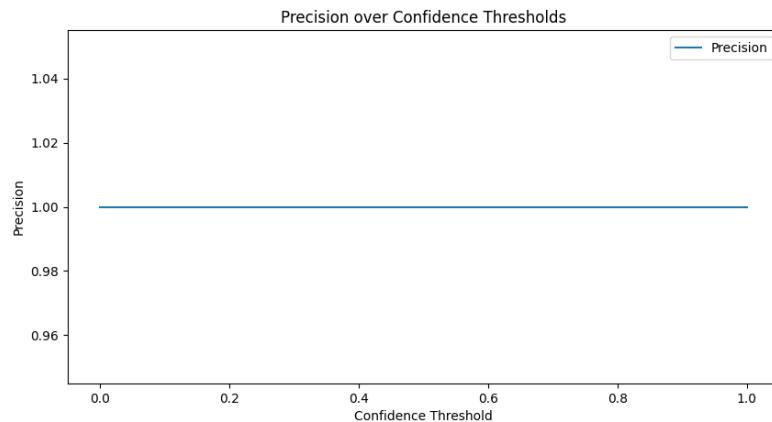


Figure s162. precision\_over\_recall, maskrcnn, pre-trained=False, epochs=100, data=duomo

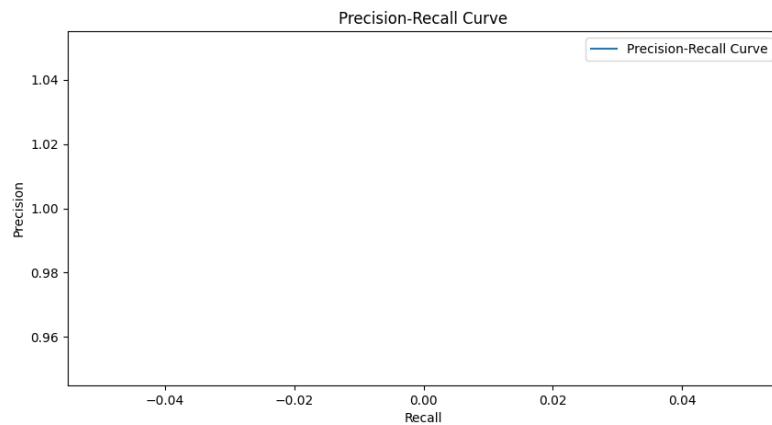


Figure s163. recall\_over\_confidence, maskrcnn, pre-trained=False, epochs=100, data=duomo

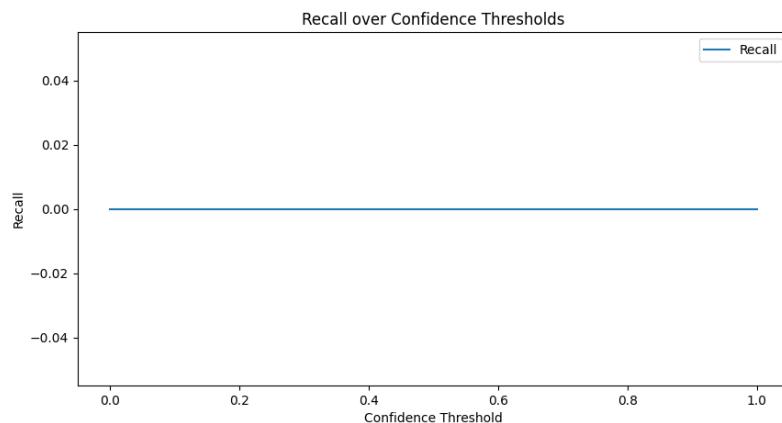


Figure s164. f1\_over\_confidence, maskrcnn, pre-trained=False, epochs=100, data=hadji\_dimitar\_square

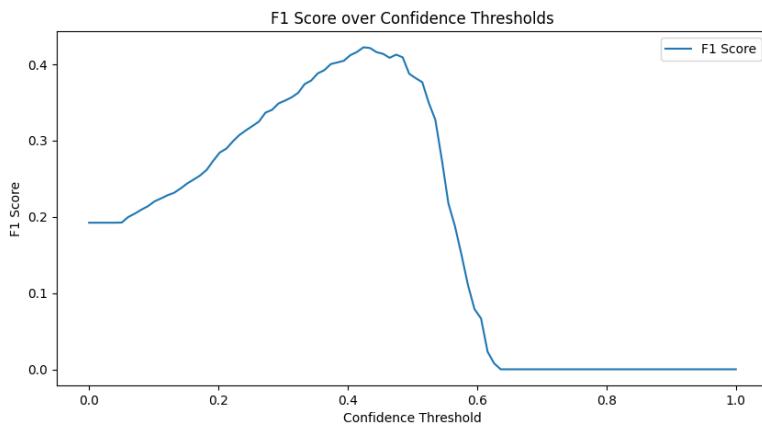


Figure s165. precision\_over\_confidence, maskrcnn, pre-trained=False, epochs=100, data=hadji\_dimitar\_square

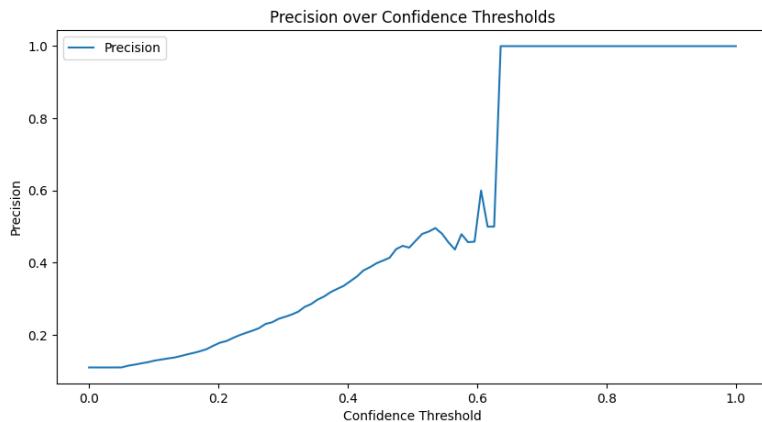


Figure s166. precision\_over\_recall, maskrcnn, pre-trained=False, epochs=100, data=hadji\_dimitar\_square

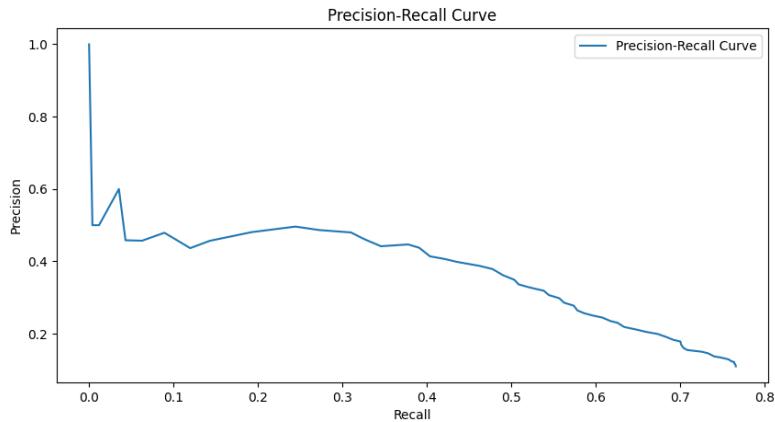


Figure s167. recall\_over\_confidence, maskrcnn, pre-trained=False, epochs=100, data=hadji\_dimitar\_square

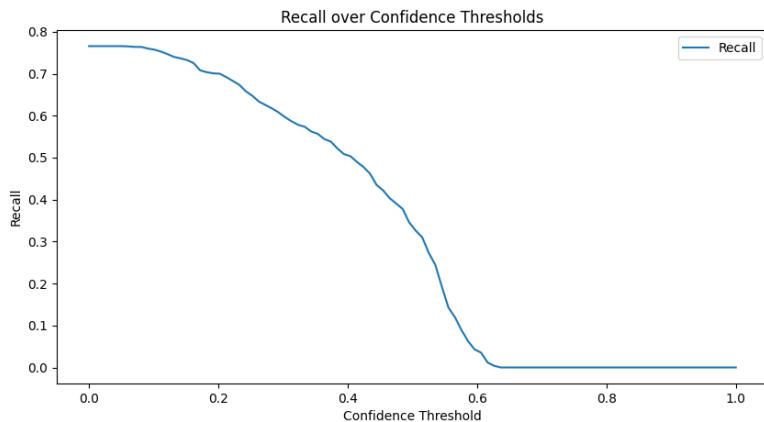


Figure s168. f1\_over\_confidence, maskrcnn, pre-trained=False, epochs=100, data=keskvaljak

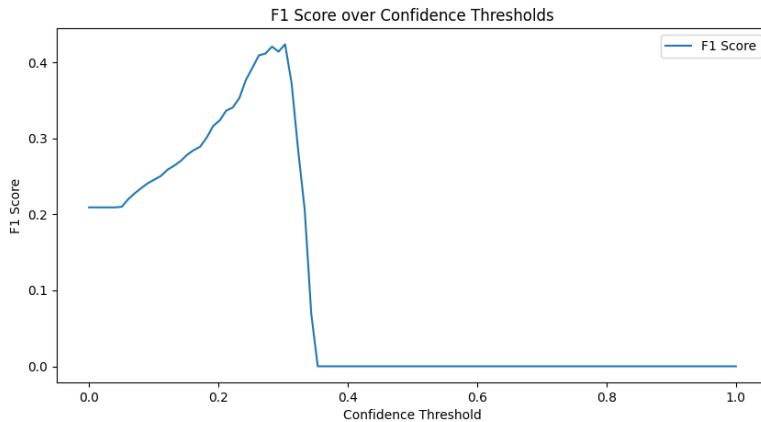


Figure s169. precision\_over\_confidence, maskrcnn, pre-trained=False, epochs=100, data=keskvaljak

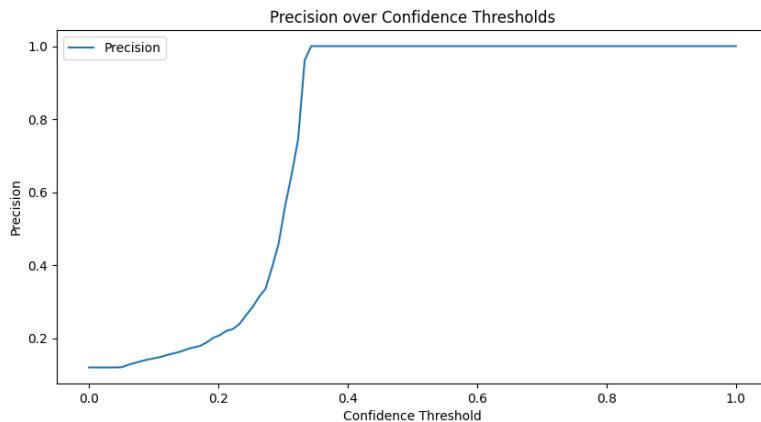


Figure s170. precision\_over\_recall, maskrcnn, pre-trained=False, epochs=100, data=keskvaljak

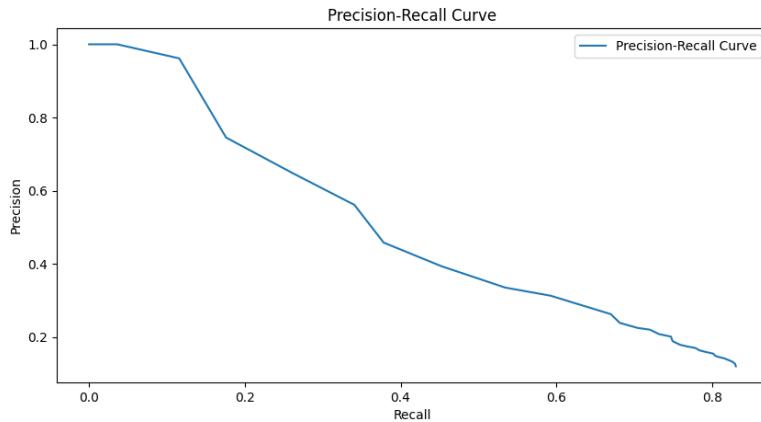


Figure s171. recall\_over\_confidence, maskrcnn, pre-trained=False, epochs=100, data=keskvaljak

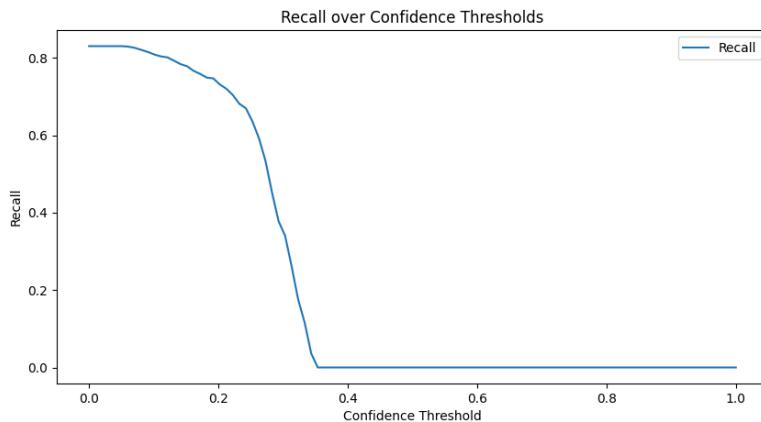


Figure s172. f1\_over\_confidence, maskrcnn, pre-trained=False, epochs=100, data=kielce\_university\_of\_technology

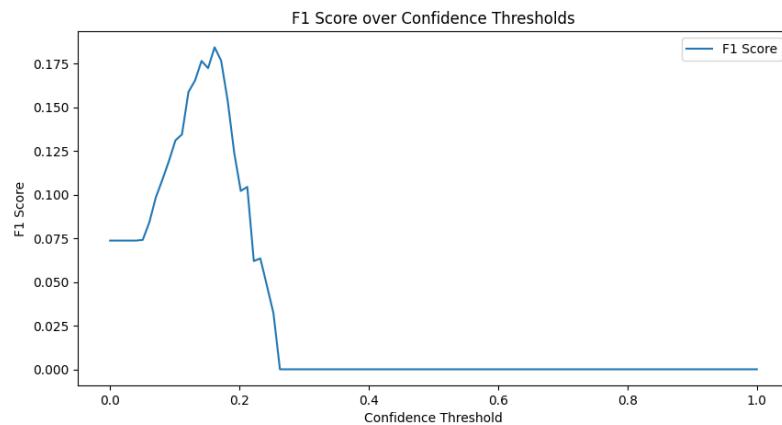


Figure s173. precision\_over\_confidence, maskrcnn, pre-trained=False, epochs=100, data=kielce\_university\_of\_technology

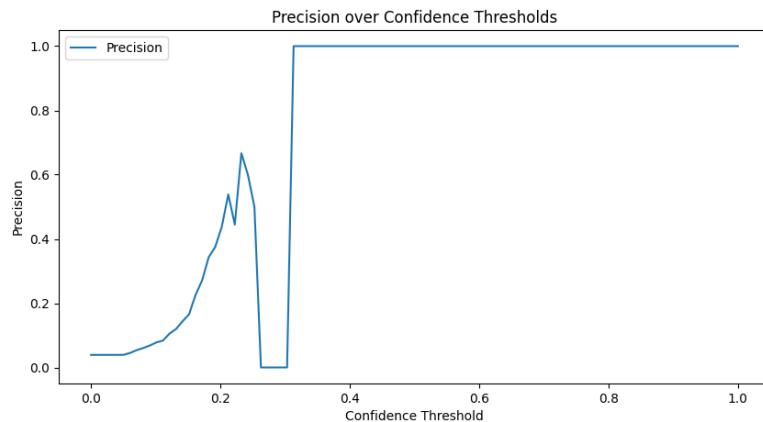


Figure s174. precision\_over\_recall, maskrcnn, pre-trained=False, epochs=100, data=kielce\_university\_of\_technology

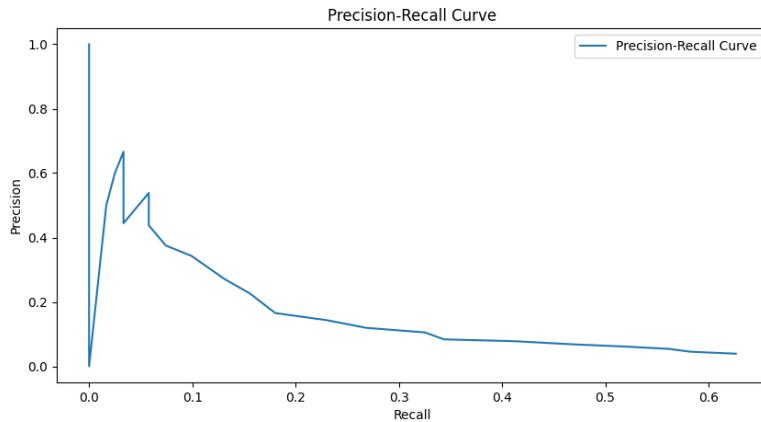


Figure s175. recall\_over\_confidence, maskrcnn, pre-trained=False, epochs=100, data=kielce\_university\_of\_technology

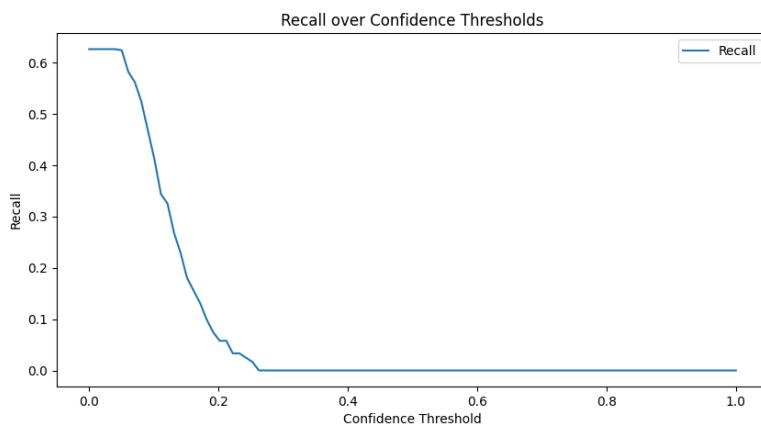


Figure s176. f1\_over\_confidence, maskrcnn, pre-trained=False, epochs=100, data=toggenburg\_alpaca\_ranch

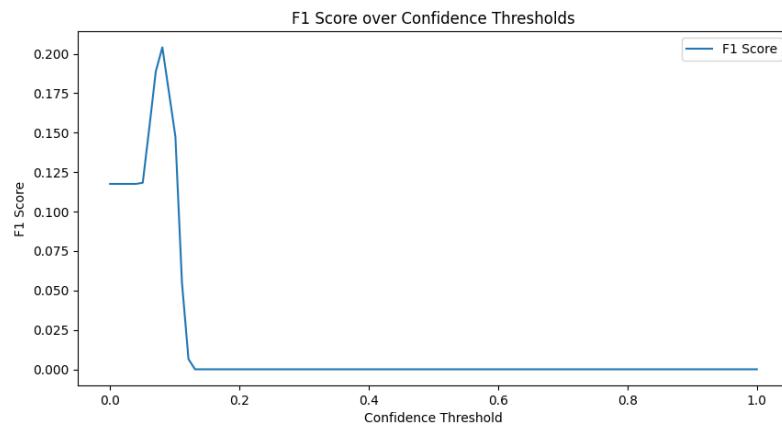


Figure s177. precision\_over\_confidence, maskrcnn, pre-trained=False, epochs=100, data=toggenburg\_alpaca\_ranch

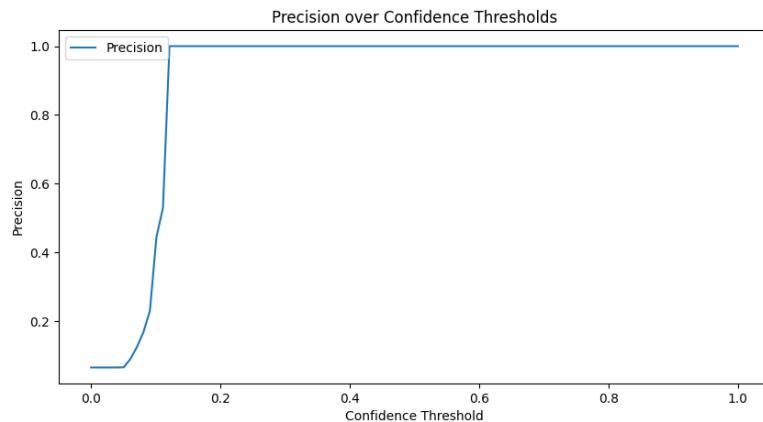


Figure s178. precision\_over\_recall, maskrcnn, pre-trained=False, epochs=100, data=toggenburg\_alpaca\_ranch

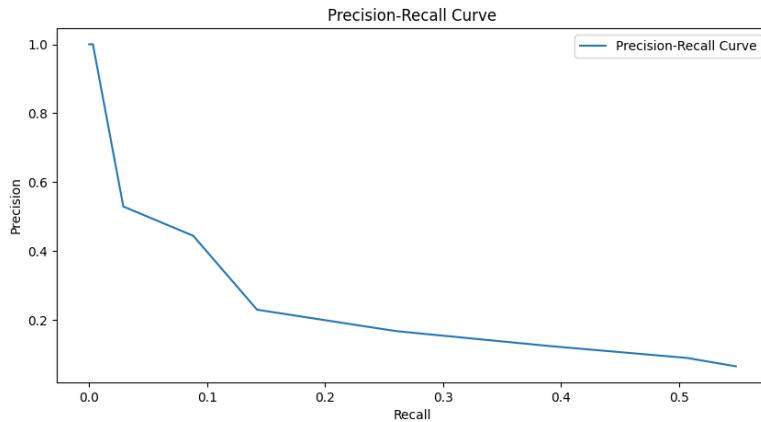


Figure s179. recall\_over\_confidence, maskrcnn, pre-trained=False, epochs=100, data=toggenburg\_alpaca\_ranch

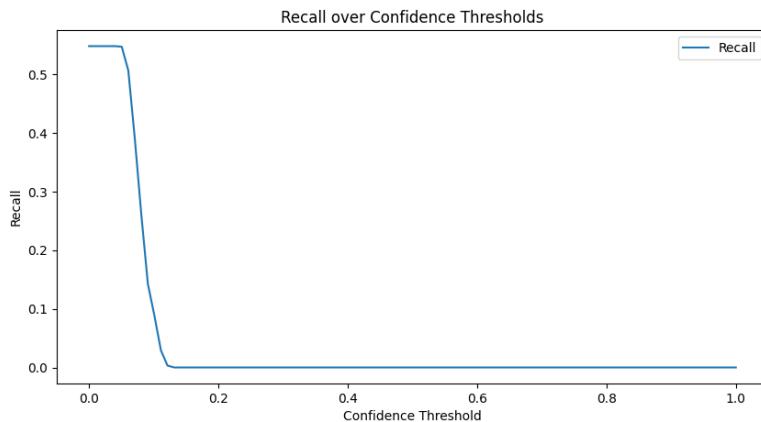


Figure s180. f1\_over\_confidence, maskrcnn, pre-trained=False, epochs=150, data=duomo

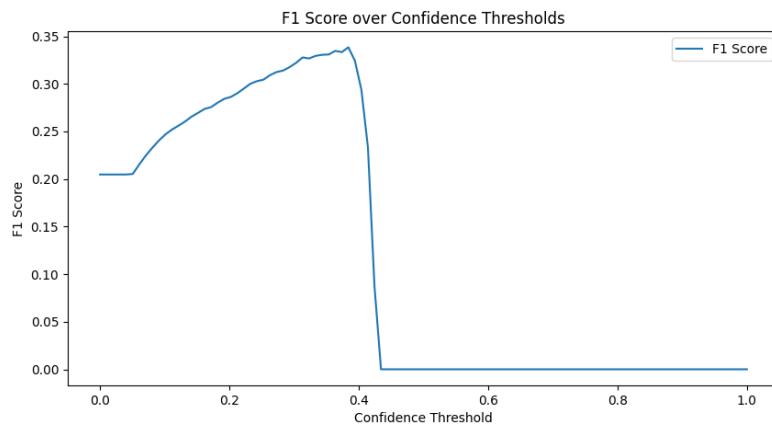


Figure s181. precision\_over\_confidence, maskrcnn, pre-trained=False, epochs=150, data=duomo

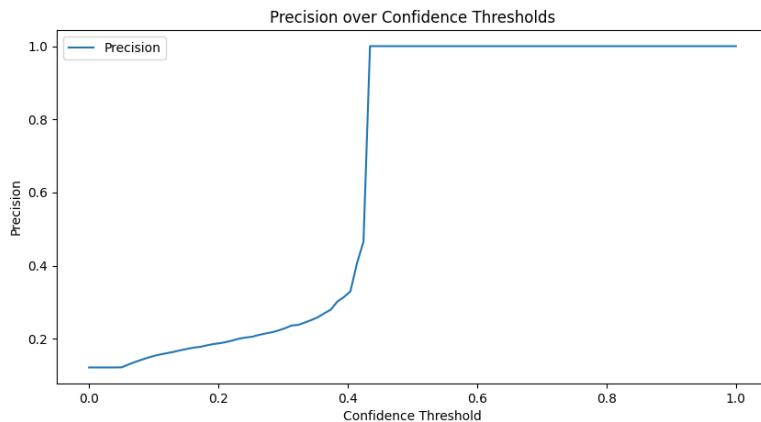


Figure s182. precision\_over\_recall, maskrcnn, pre-trained=False, epochs=150, data=duomo

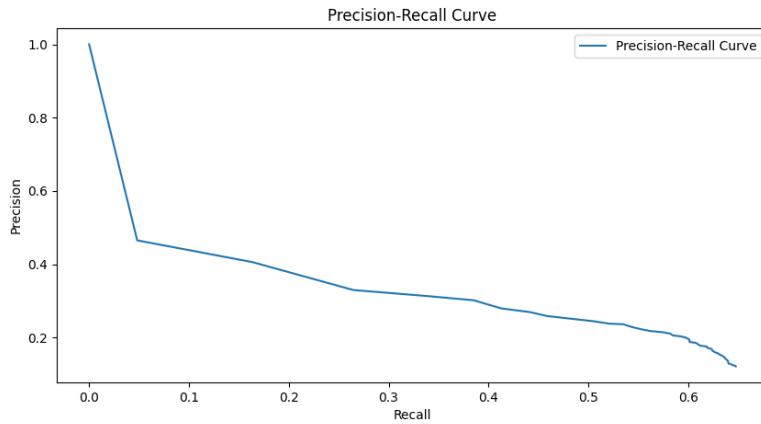


Figure s183. recall\_over\_confidence, maskrcnn, pre-trained=False, epochs=150, data=duomo

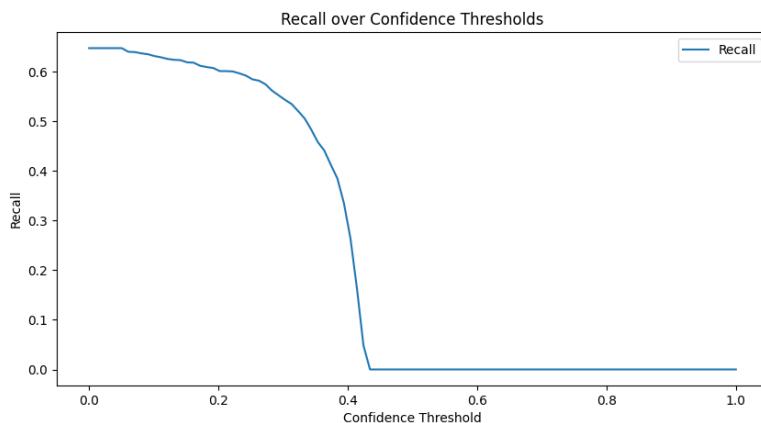


Figure s184. f1\_over\_confidence, maskrcnn, pre-trained=False, epochs=150, data=hadji\_dimitar\_square

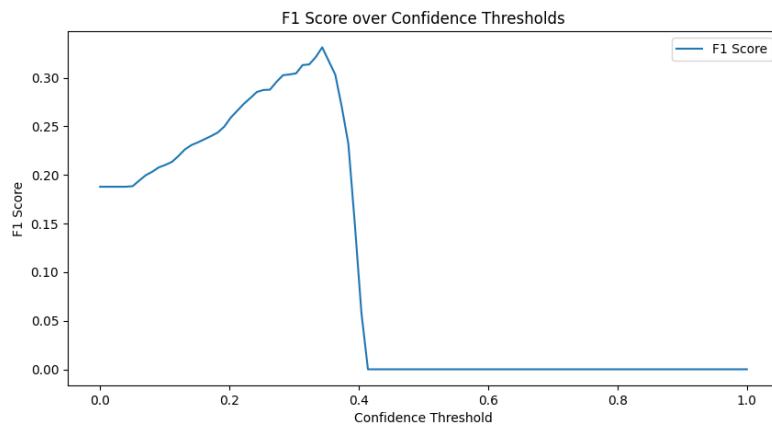


Figure s185. precision\_over\_confidence, maskrcnn, pre-trained=False, epochs=150, data=hadji\_dimitar\_square

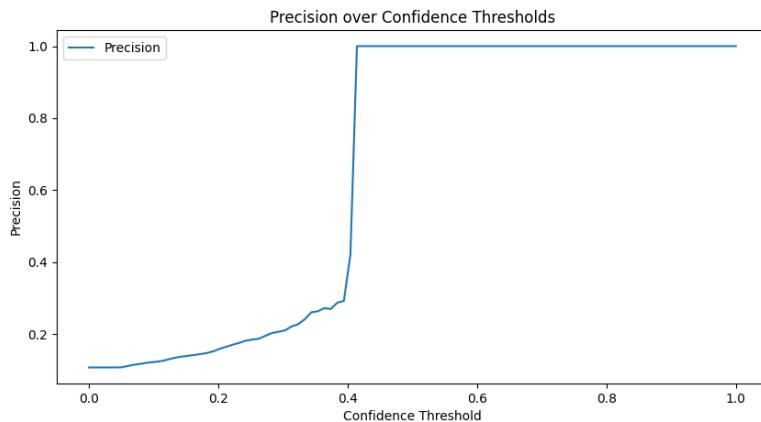


Figure s186. precision\_over\_recall, maskrcnn, pre-trained=False, epochs=150, data=hadji\_dimitar\_square

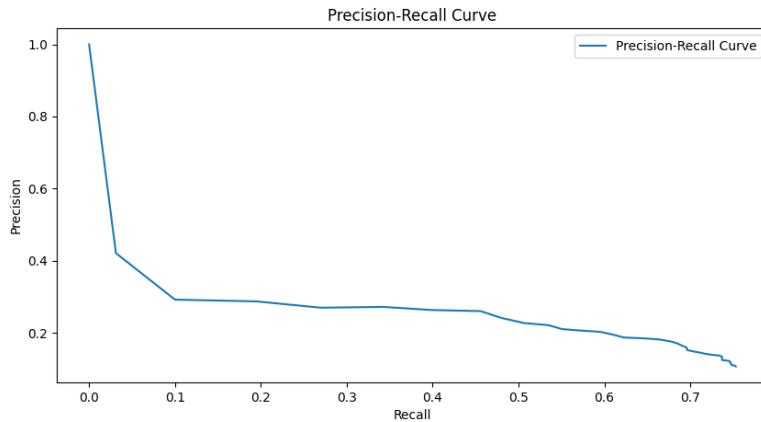


Figure s187. recall\_over\_confidence, maskrcnn, pre-trained=False, epochs=150, data=hadji\_dimitar\_square

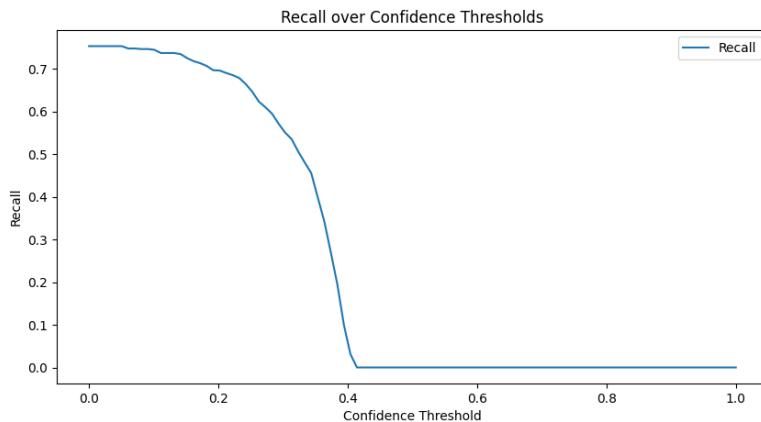


Figure s188. f1\_over\_confidence, maskrcnn, pre-trained=False, epochs=150, data=keskvaljak

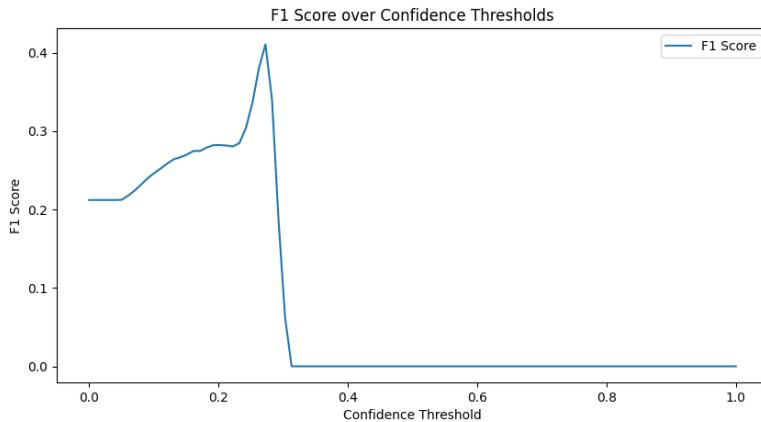


Figure s189. precision\_over\_confidence, maskrcnn, pre-trained=False, epochs=150, data=keskvaljak

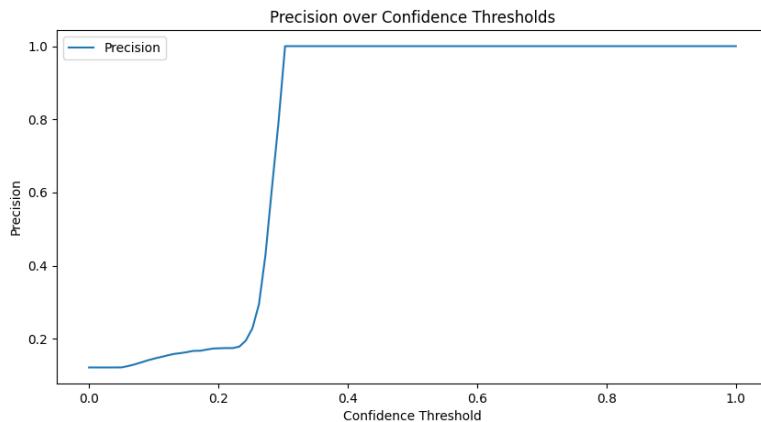


Figure s190. precision\_over\_recall, maskrcnn, pre-trained=False, epochs=150, data=keskvaljak

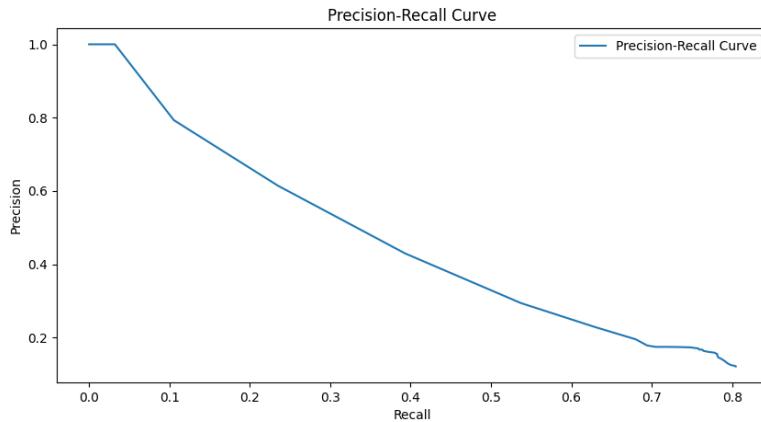


Figure s191. recall\_over\_confidence, maskrcnn, pre-trained=False, epochs=150, data=keskvaljak

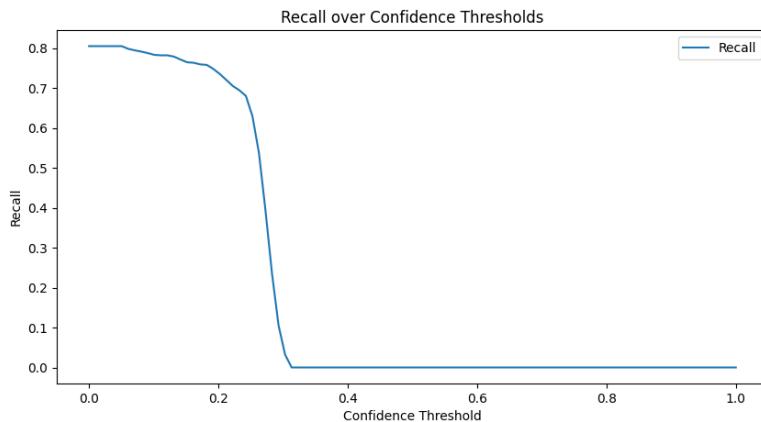


Figure s192. f1\_over\_confidence, maskrcnn, pre-trained=False, epochs=150, data=kielce\_university\_of\_technology

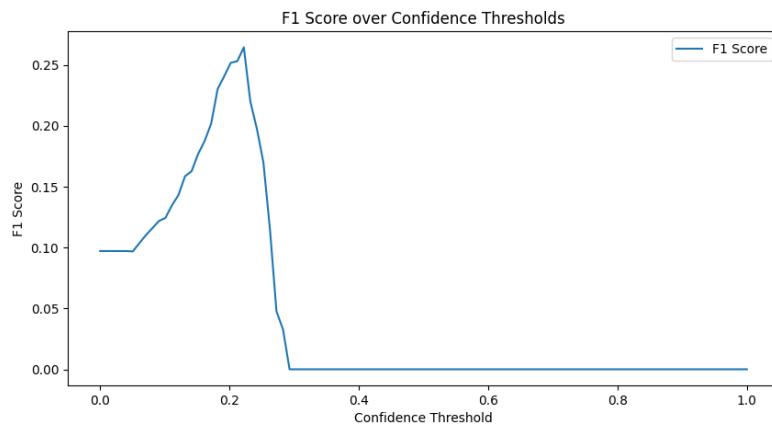


Figure s193. precision\_over\_confidence, maskrcnn, pre-trained=False, epochs=150, data=kielce\_university\_of\_technology

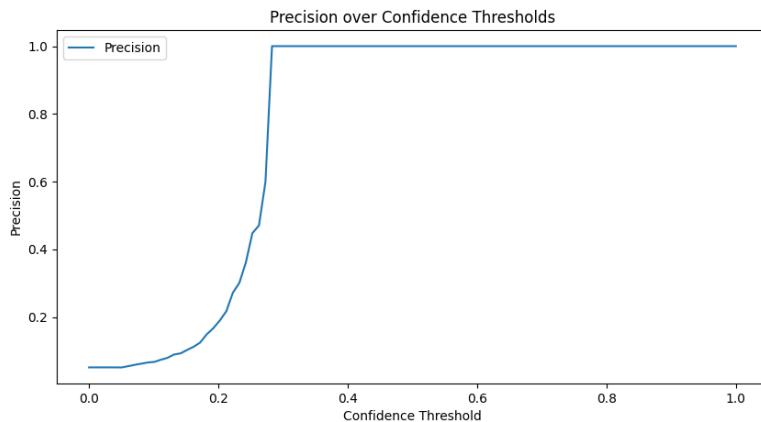


Figure s194. precision\_over\_recall, maskrcnn, pre-trained=False, epochs=150, data=kielce\_university\_of\_technology

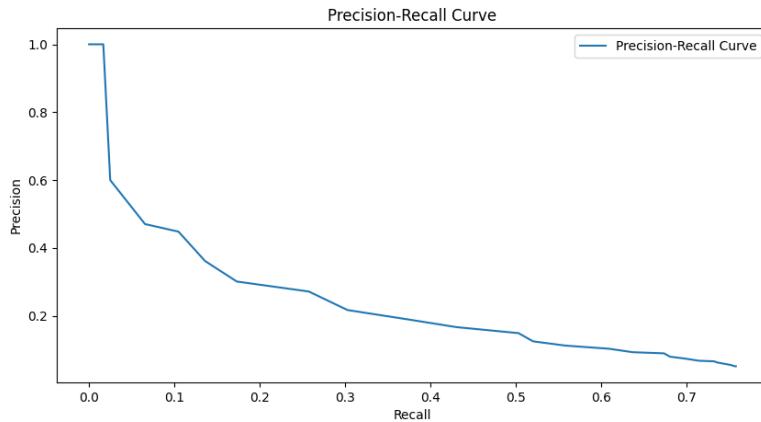


Figure s195. recall\_over\_confidence, maskrcnn, pre-trained=False, epochs=150, data=kielce\_university\_of\_technology

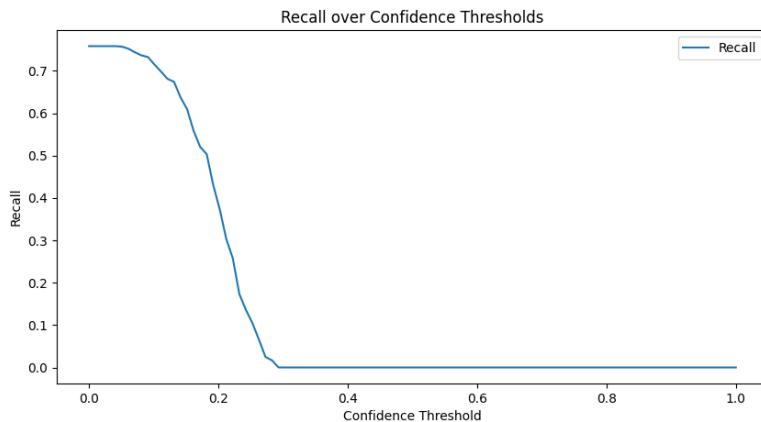


Figure s196. f1\_over\_confidence, maskrcnn, pre-trained=False, epochs=150, data=toggenburg\_alpaca\_ranch

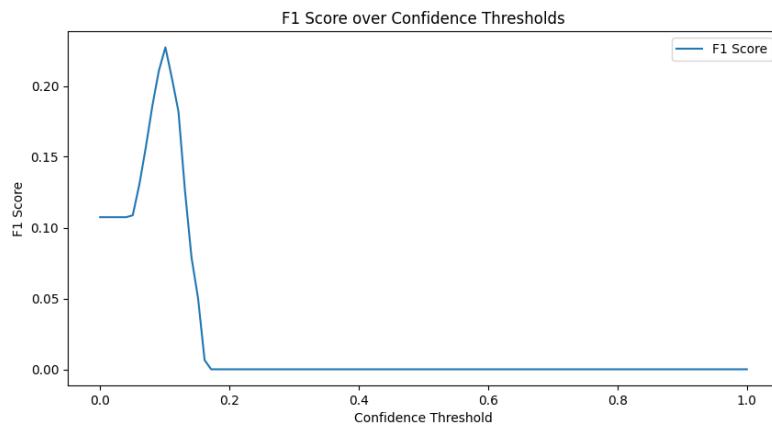


Figure s197. precision\_over\_confidence, maskrcnn, pre-trained=False, epochs=150, data=toggenburg\_alpaca\_ranch

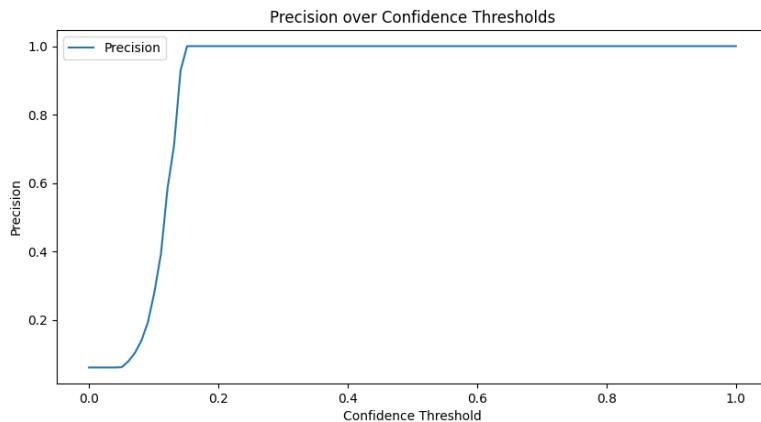


Figure s198. precision\_over\_recall, maskrcnn, pre-trained=False, epochs=150, data=toggenburg\_alpaca\_ranch

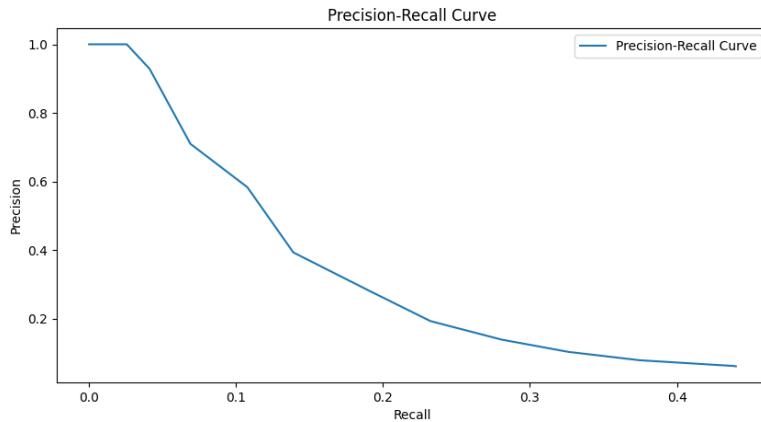


Figure s199. recall\_over\_confidence, maskrcnn, pre-trained=False, epochs=150, data=toggenburg\_alpaca\_ranch

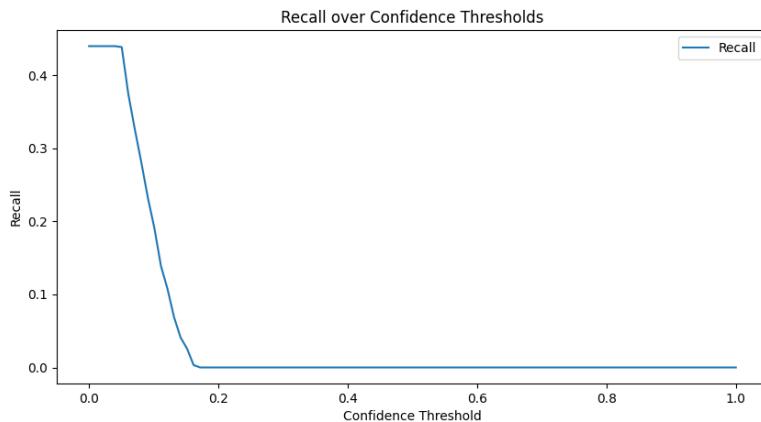


Figure s200. f1\_over\_confidence, maskrcnn, pre-trained=True, epochs=0, data=duomo

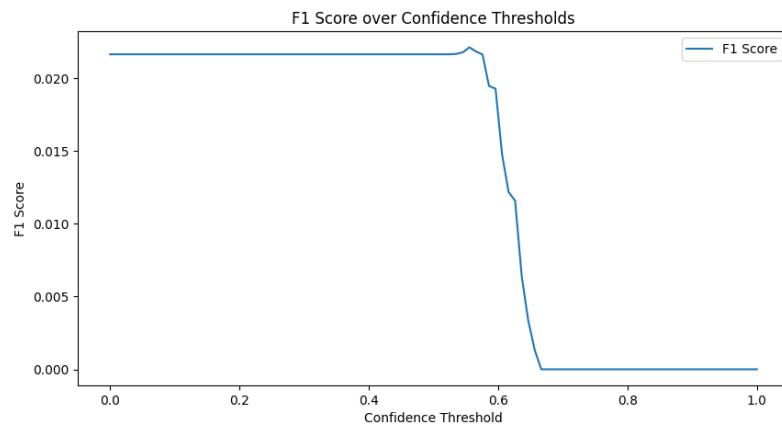


Figure s201. precision\_over\_confidence, maskrcnn, pre-trained=True, epochs=0, data=duomo

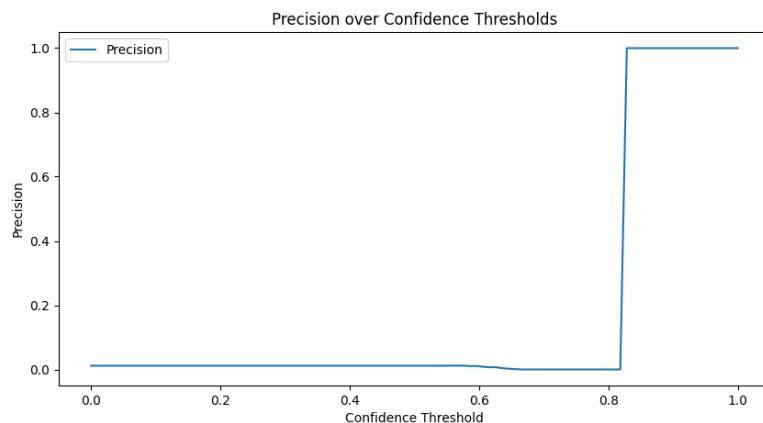


Figure s202. precision\_over\_recall, maskrcnn, pre-trained=True, epochs=0, data=duomo

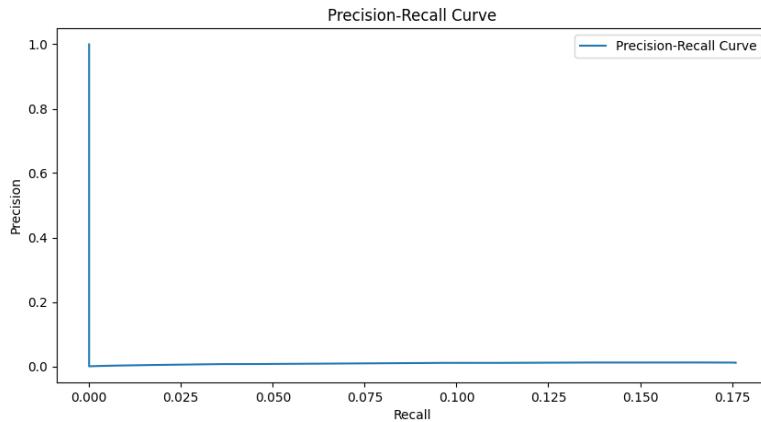


Figure s203. recall\_over\_confidence, maskrcnn, pre-trained=True, epochs=0, data=duomo

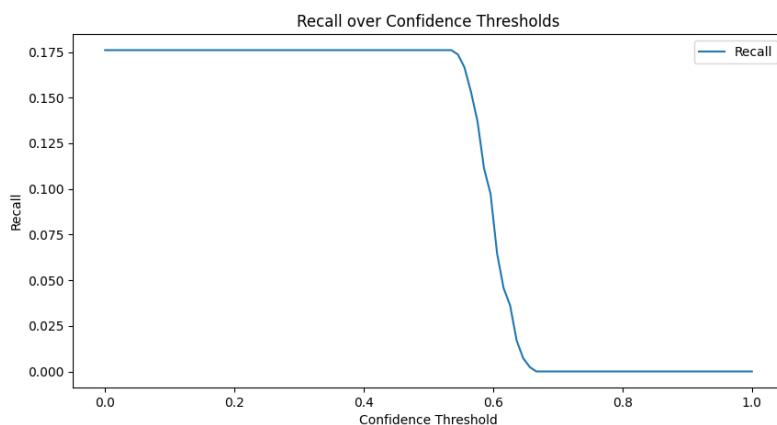


Figure s204. f1\_over\_confidence, maskrcnn, pre-trained=True, epochs=0, data=hadji\_dimitar\_square

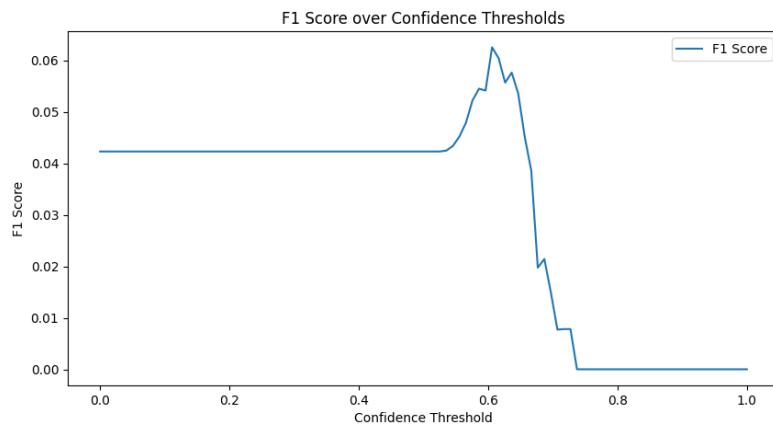


Figure s205. precision\_over\_confidence, maskrcnn, pre-trained=True, epochs=0, data=hadji\_dimitar\_square

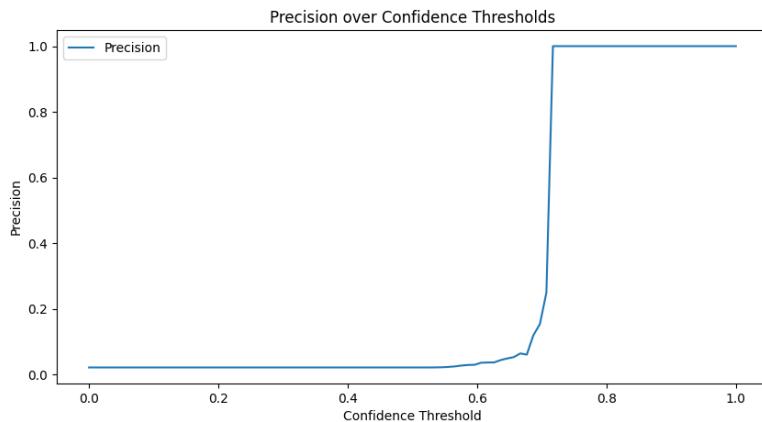


Figure s206. precision\_over\_recall, maskrcnn, pre-trained=True, epochs=0, data=hadji\_dimitar\_square

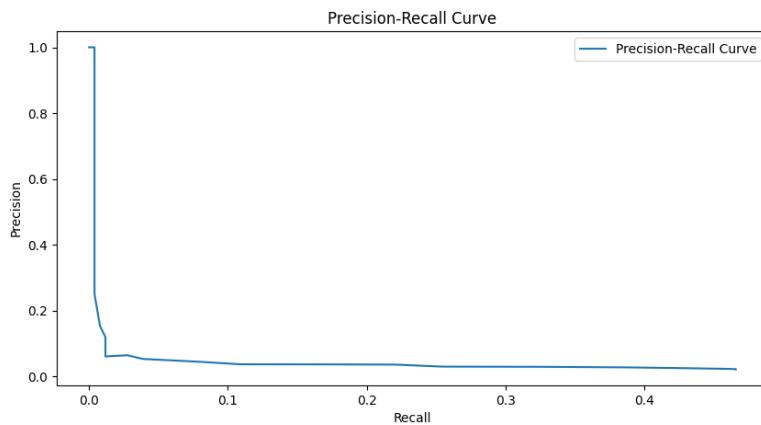


Figure s207. recall\_over\_confidence, maskrcnn, pre-trained=True, epochs=0, data=hadji\_dimitar\_square

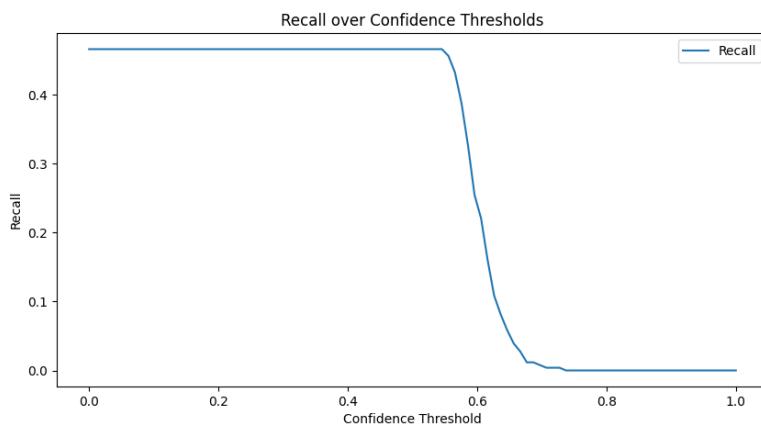


Figure s208. f1\_over\_confidence, maskrcnn, pre-trained=True, epochs=0, data=keskvaljak

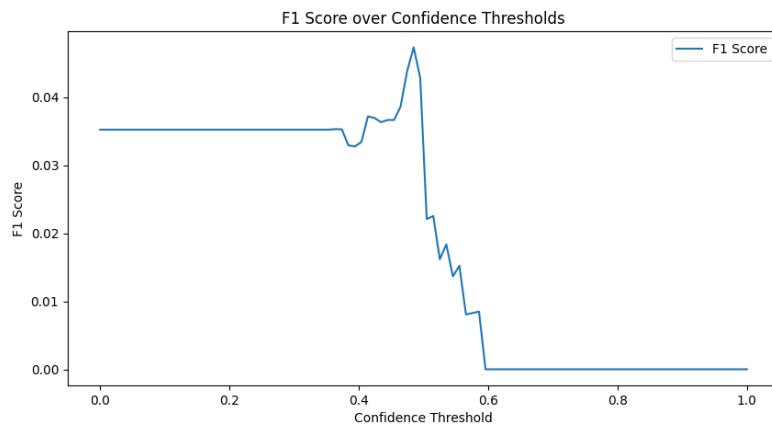


Figure s209. precision\_over\_confidence, maskrcnn, pre-trained=True, epochs=0, data=keskvaljak

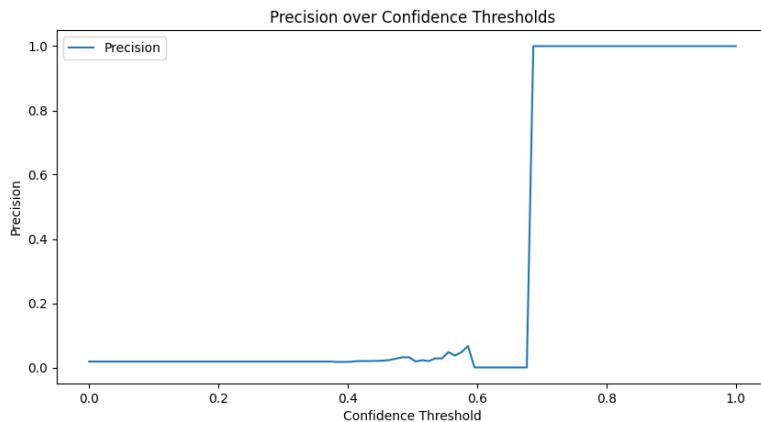


Figure s210. precision\_over\_recall, maskrcnn, pre-trained=True, epochs=0, data=keskvaljak

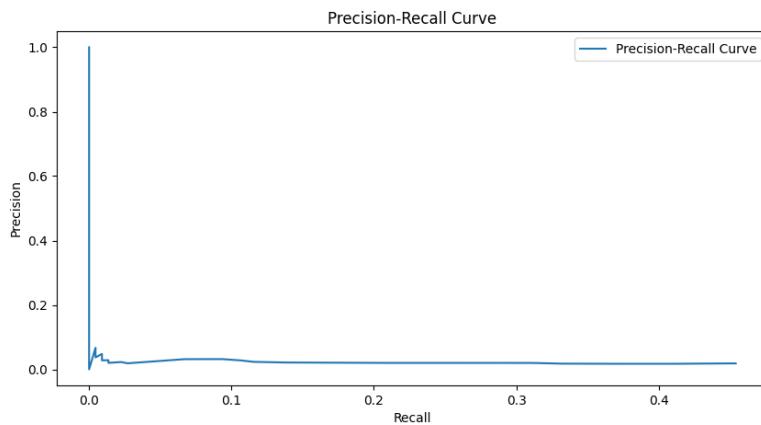


Figure s211. recall\_over\_confidence, maskrcnn, pre-trained=True, epochs=0, data=keskvaljak

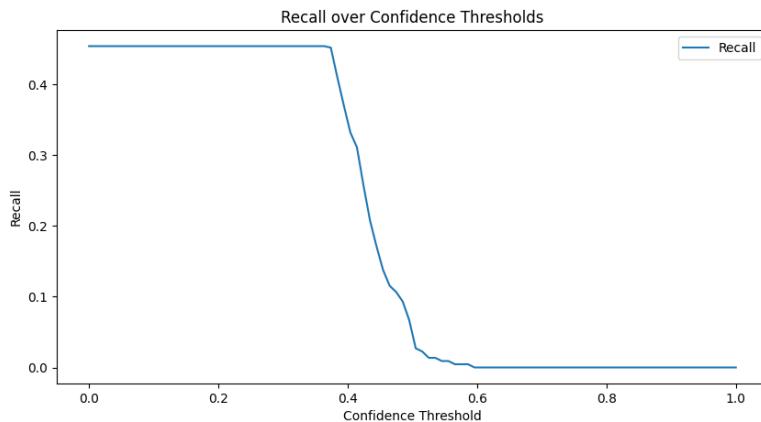


Figure s212. f1\_over\_confidence, maskrcnn, pre-trained=True, epochs=0, data=kielce\_university\_of\_technology

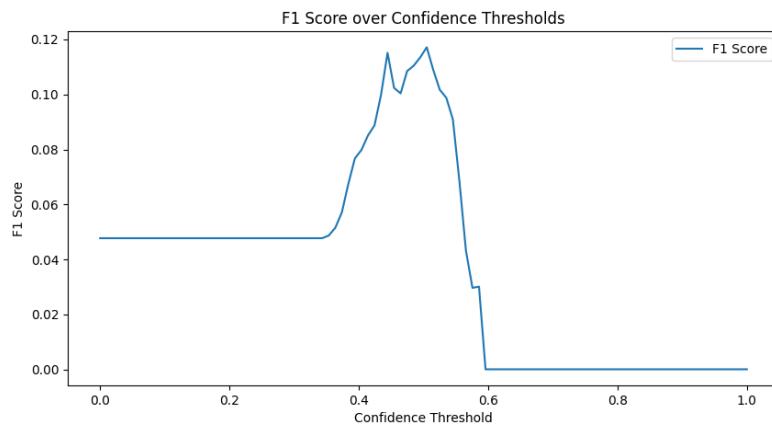


Figure s213. precision\_over\_confidence, maskrcnn, pre-trained=True, epochs=0, data=kielce\_university\_of\_technology

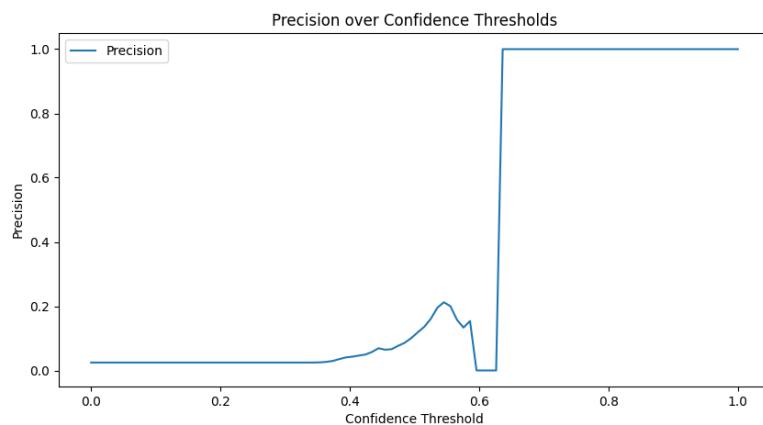


Figure s214. precision\_over\_recall, maskrcnn, pre-trained=True, epochs=0, data=kielce\_university\_of\_technology

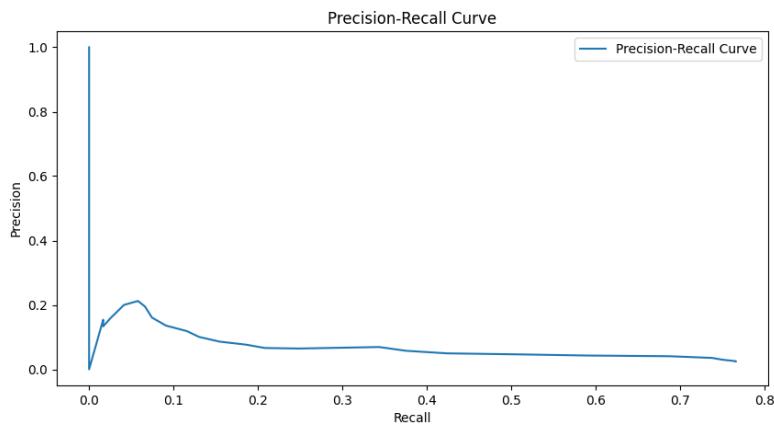


Figure s215. recall\_over\_confidence, maskrcnn, pre-trained=True, epochs=0, data=kielce\_university\_of\_technology

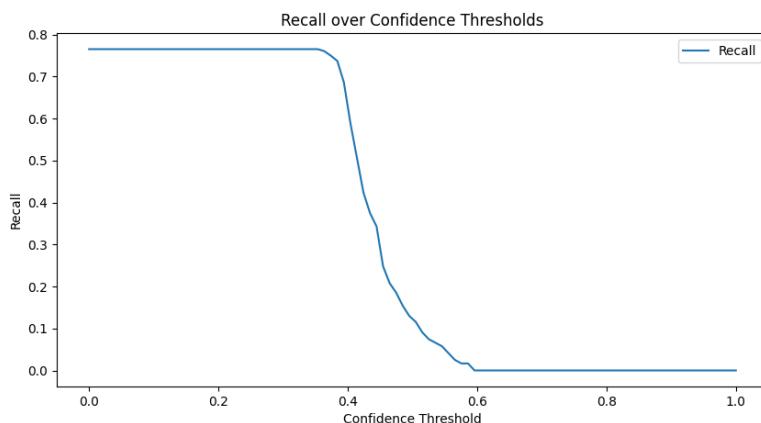


Figure s216. f1\_over\_confidence, maskrcnn, pre-trained=True, epochs=0, data=toggenburg\_alpaca\_ranch

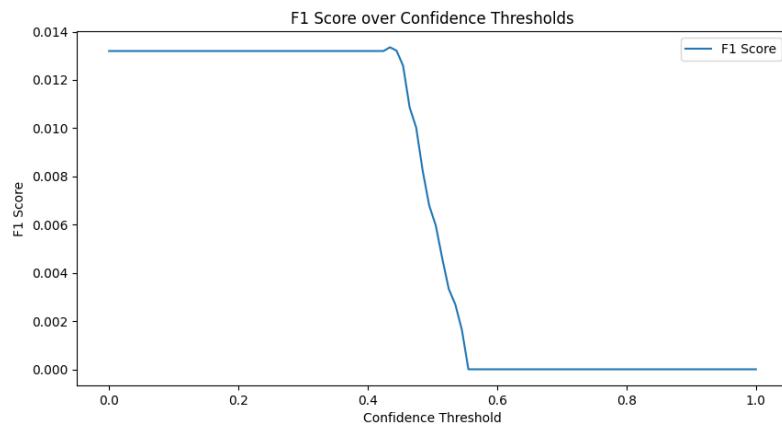


Figure s217. precision\_over\_confidence, maskrcnn, pre-trained=True, epochs=0, data=toggenburg\_alpaca\_ranch

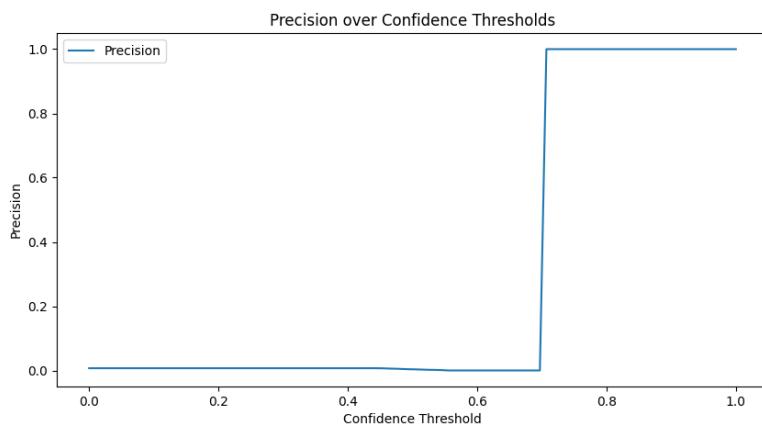


Figure s218. precision\_over\_recall, maskrcnn, pre-trained=True, epochs=0, data=toggenburg\_alpaca\_ranch

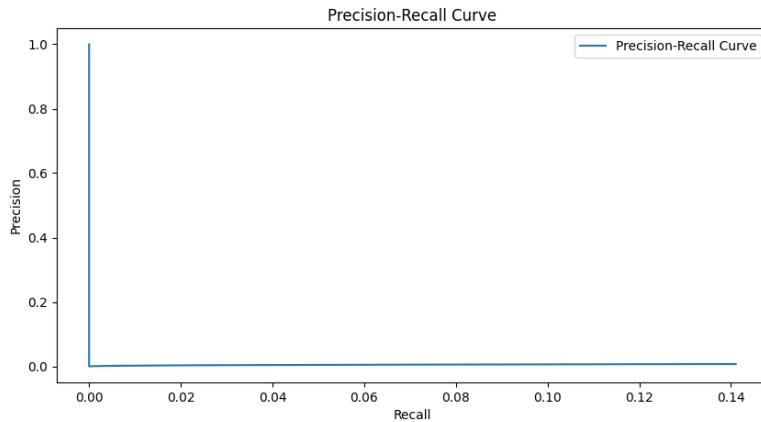


Figure s219. recall\_over\_confidence, maskrcnn, pre-trained=True, epochs=0, data=toggenburg\_alpaca\_ranch

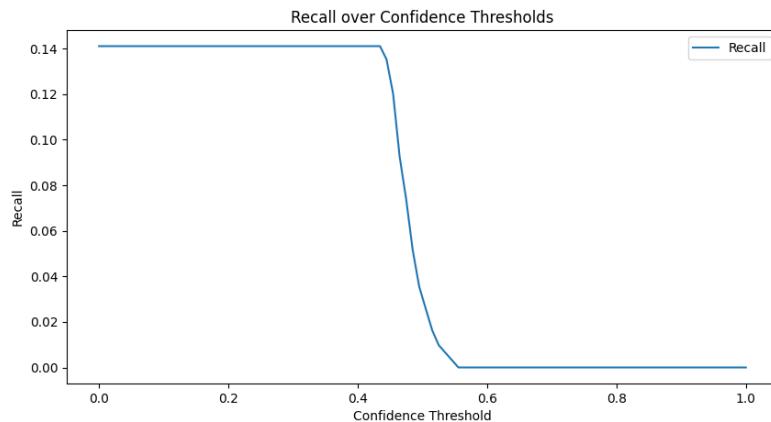


Figure s220. f1\_over\_confidence, maskrcnn, pre-trained=True, epochs=50, data=duomo

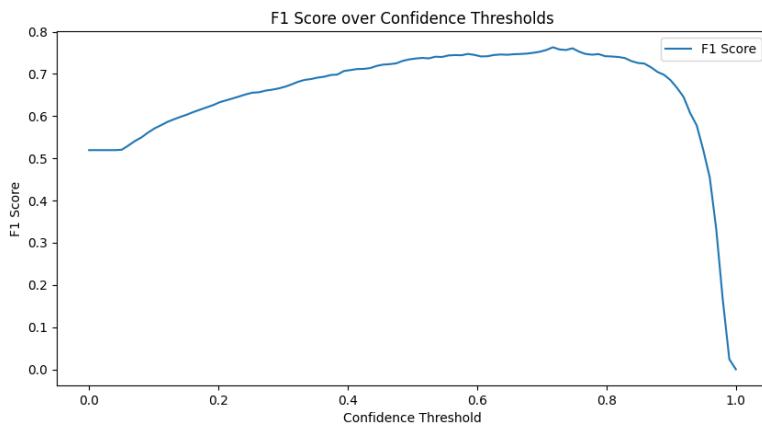


Figure s221. precision\_over\_confidence, maskrcnn, pre-trained=True, epochs=50, data=duomo

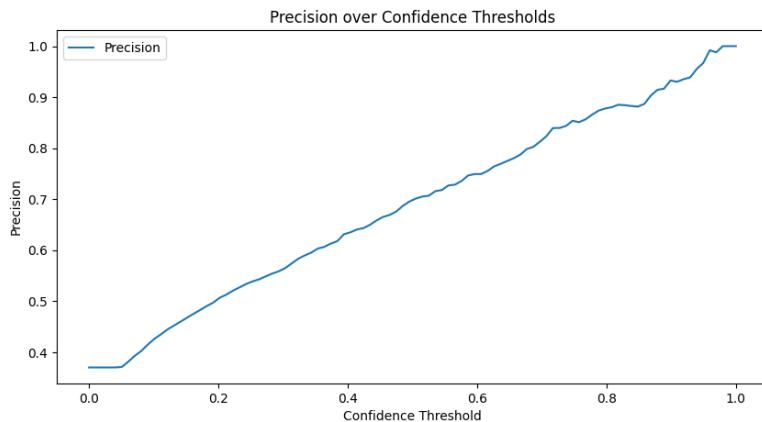


Figure s222. precision\_over\_recall, maskrcnn, pre-trained=True, epochs=50, data=duomo

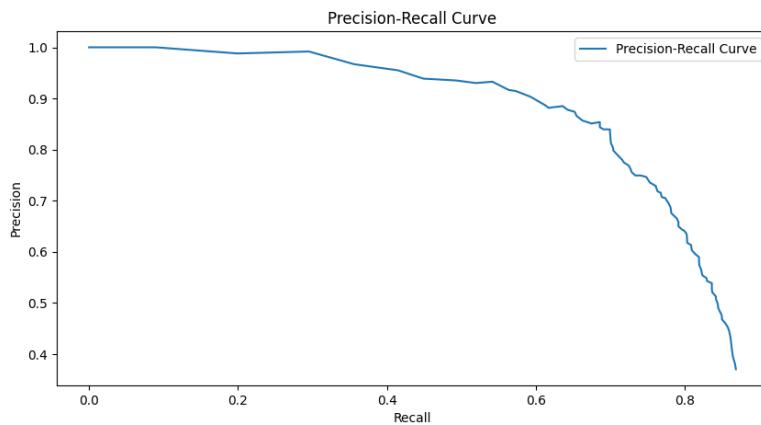


Figure s223. recall\_over\_confidence, maskrcnn, pre-trained=True, epochs=50, data=duomo

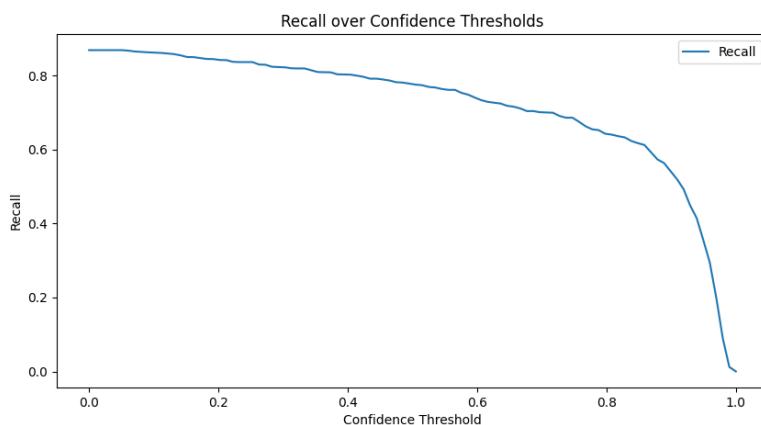


Figure s224. f1\_over\_confidence, maskrcnn, pre-trained=True, epochs=50, data=hadji\_dimitar\_square

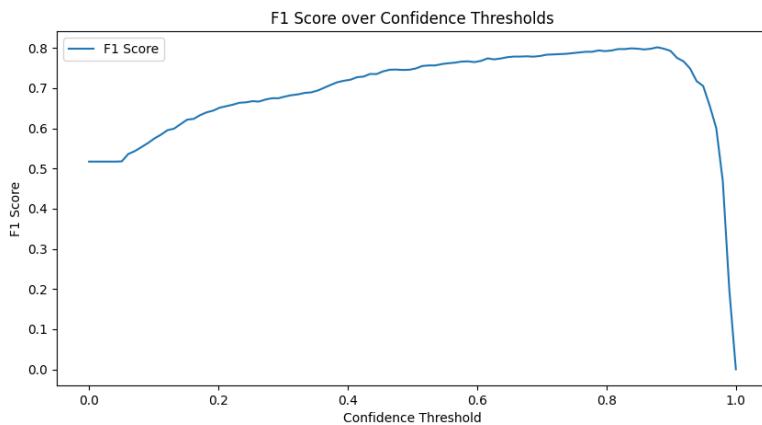


Figure s225. precision\_over\_confidence, maskrcnn, pre-trained=True, epochs=50, data=hadji\_dimitar\_square

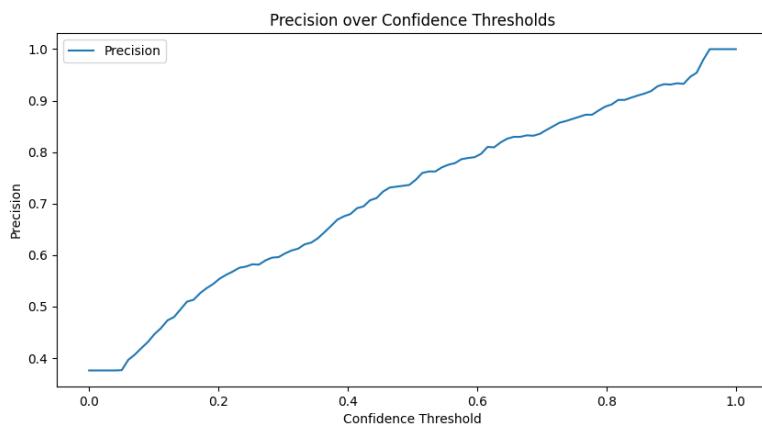


Figure s226. precision\_over\_recall, maskrcnn, pre-trained=True, epochs=50, data=hadji\_dimitar\_square

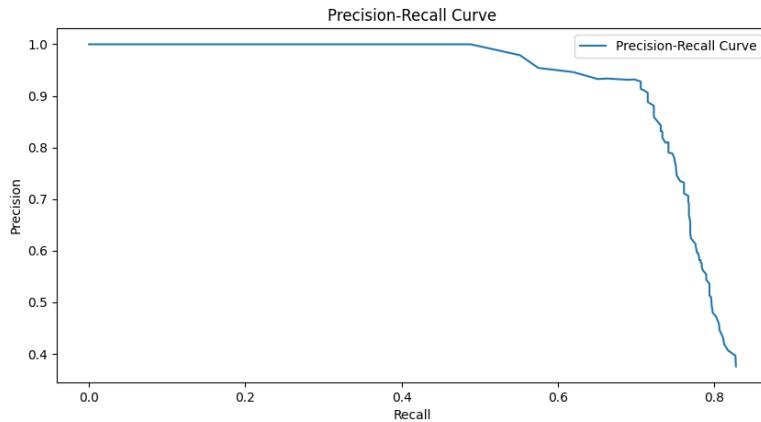


Figure s227. recall\_over\_confidence, maskrcnn, pre-trained=True, epochs=50, data=hadjidimitar\_square

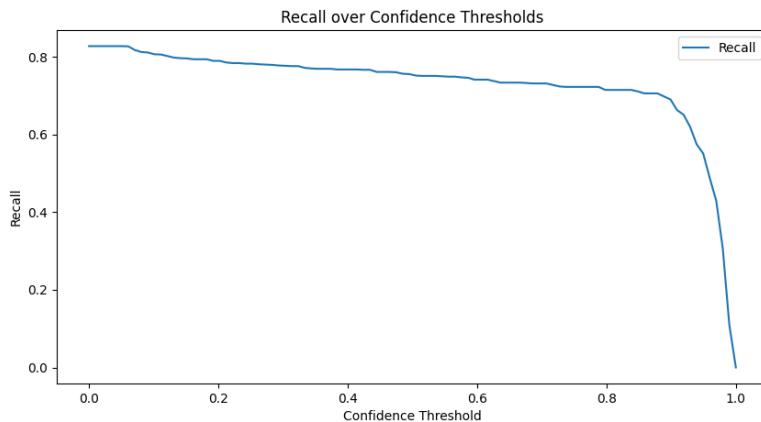


Figure s228. f1\_over\_confidence, maskrcnn, pre-trained=True, epochs=50, data=keskvaljak

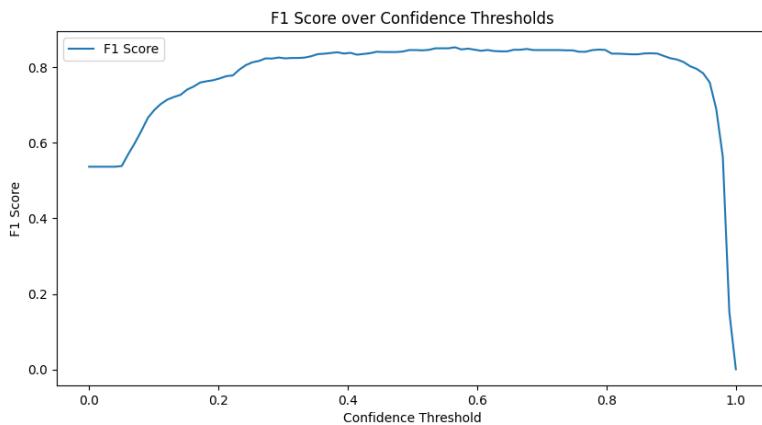


Figure s229. precision\_over\_confidence, maskrcnn, pre-trained=True, epochs=50, data=keskvaljak

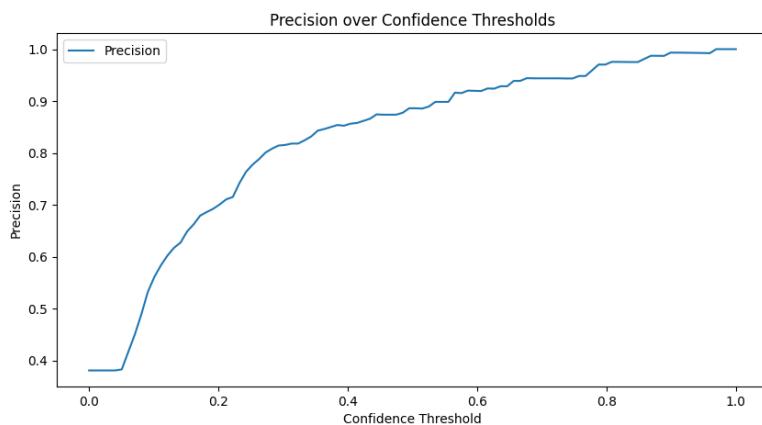


Figure s230. precision\_over\_recall, maskrcnn, pre-trained=True, epochs=50, data=keskvaljak

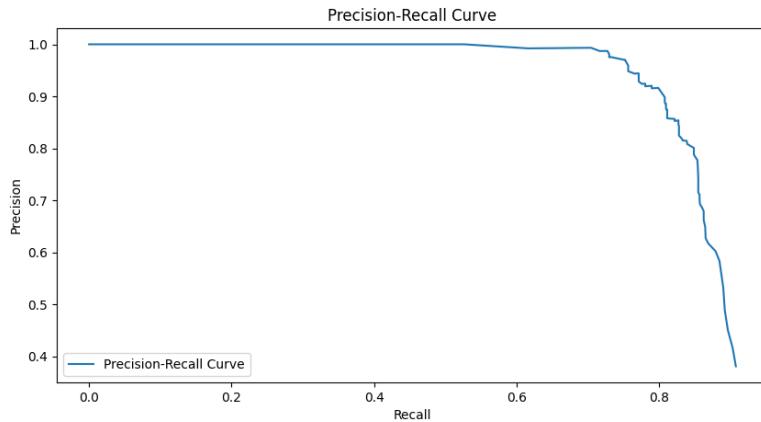


Figure s231. recall\_over\_confidence, maskrcnn, pre-trained=True, epochs=50, data=keskvaljak

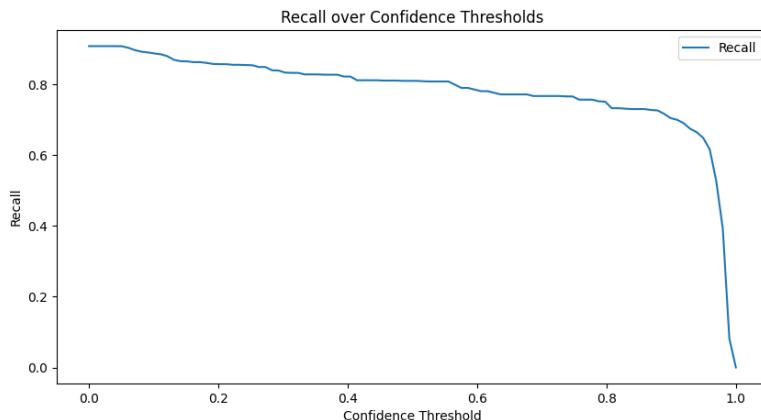


Figure s232. f1\_over\_confidence, maskrcnn, pre-trained=True, epochs=50, data=kielce\_university\_of\_technology

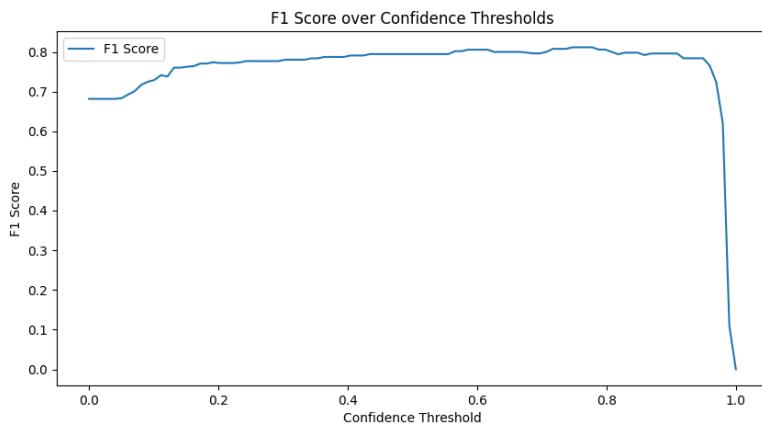


Figure s233. precision\_over\_confidence, maskrcnn, pre-trained=True, epochs=50, data=kielce\_university\_of\_technology

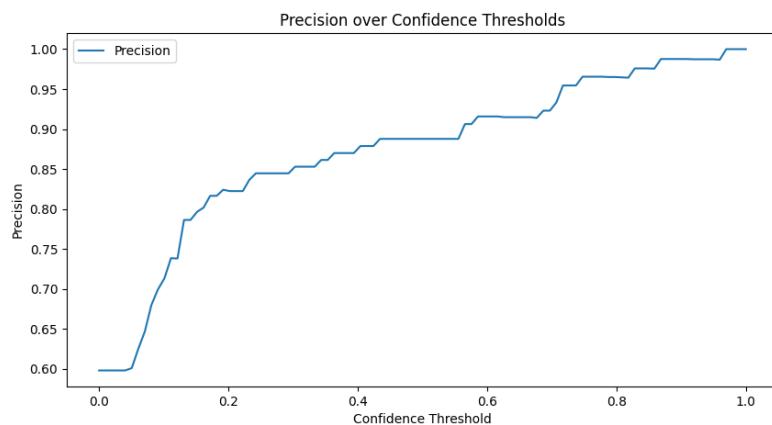


Figure s234. precision\_over\_recall, maskrcnn, pre-trained=True, epochs=50, data=kielce\_university\_of\_technology

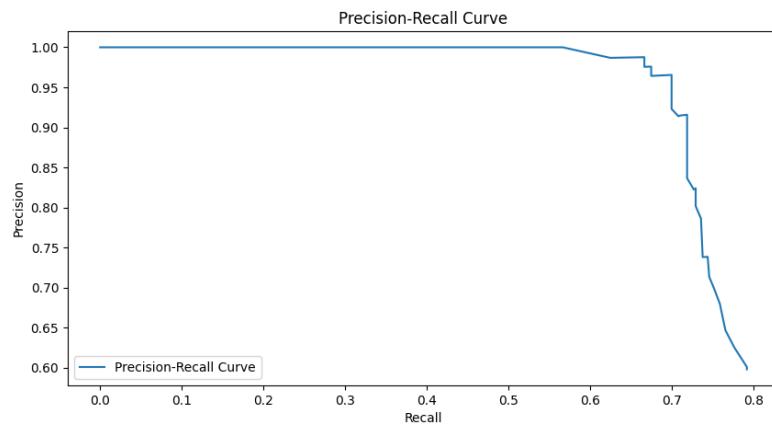


Figure s235. recall\_over\_confidence, maskrcnn, pre-trained=True, epochs=50, data=kielce\_university\_of\_technology

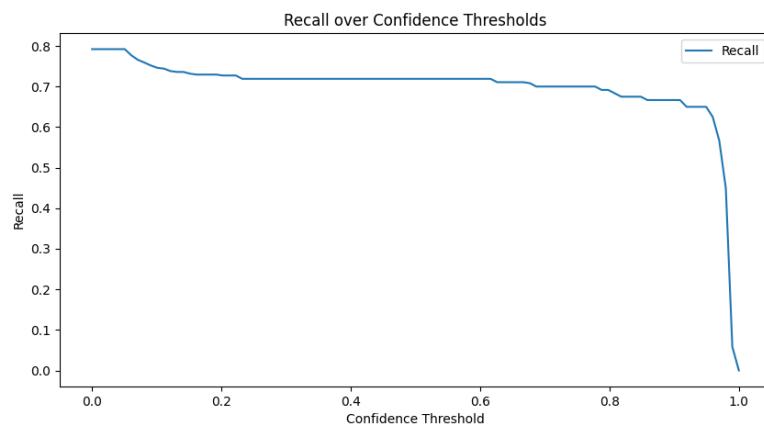


Figure s236. f1\_over\_confidence, maskrcnn, pre-trained=True, epochs=50, data=toggenburg\_alpaca\_ranch

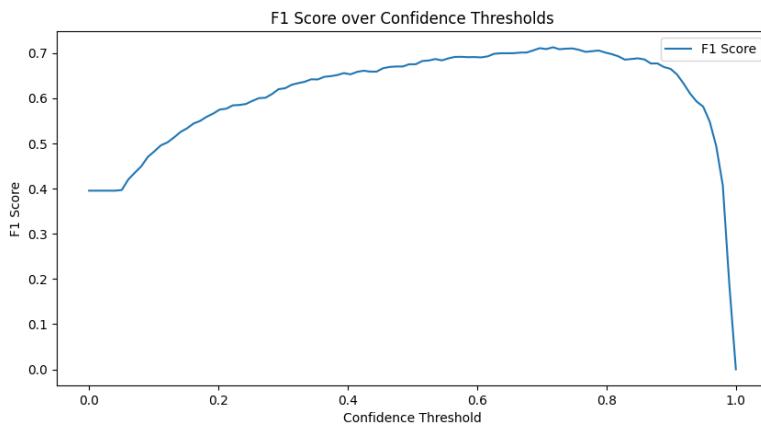


Figure s237. precision\_over\_confidence, maskrcnn, pre-trained=True, epochs=50, data=toggenburg\_alpaca\_ranch

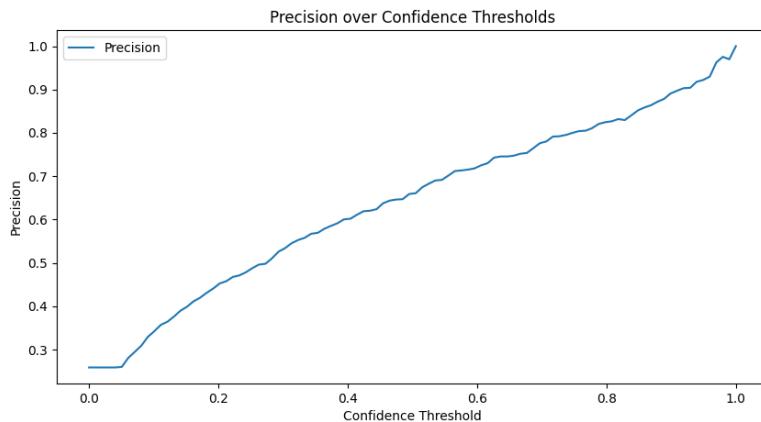


Figure s238. precision\_over\_recall, maskrcnn, pre-trained=True, epochs=50, data=toggenburg\_alpaca\_ranch

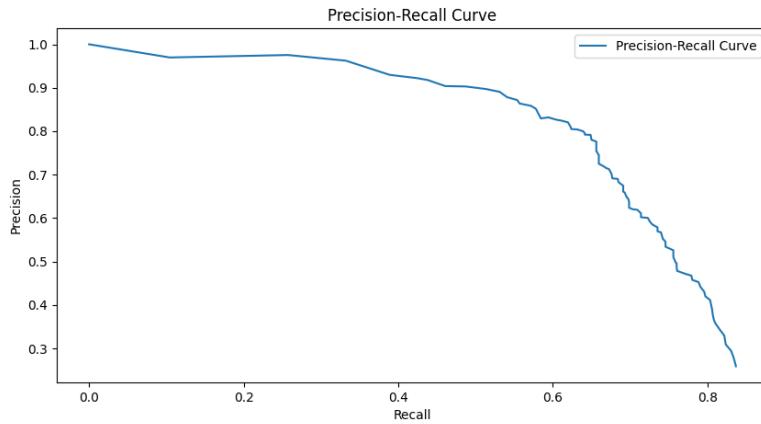


Figure s239. recall\_over\_confidence, maskrcnn, pre-trained=True, epochs=50, data=toggenburg\_alpaca\_ranch

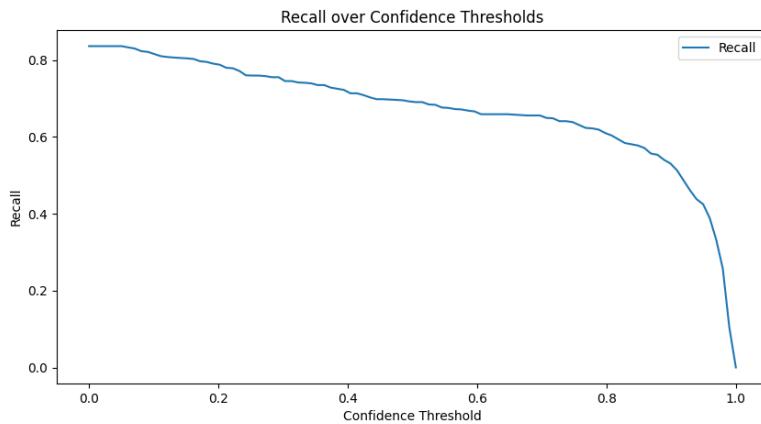


Figure s240. f1\_over\_confidence, maskrcnn, pre-trained=True, epochs=100, data=duomo

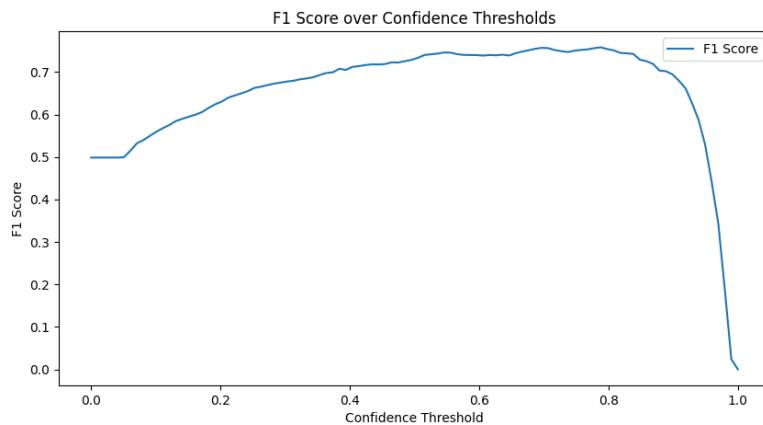


Figure s241. precision\_over\_confidence, maskrcnn, pre-trained=True, epochs=100, data=duomo

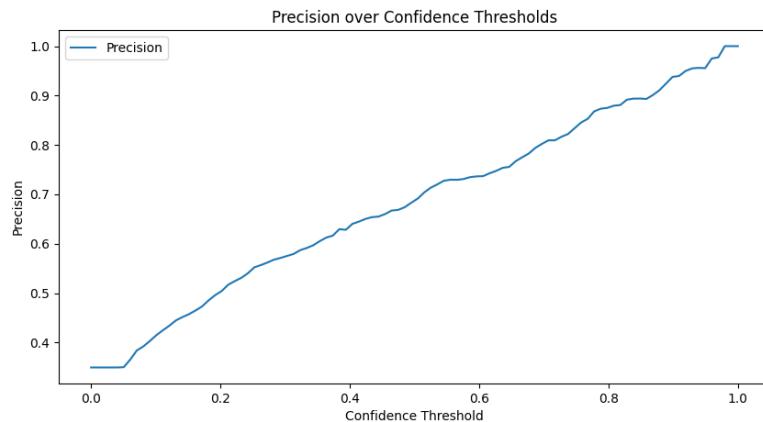


Figure s242. precision\_over\_recall, maskrcnn, pre-trained=True, epochs=100, data=duomo

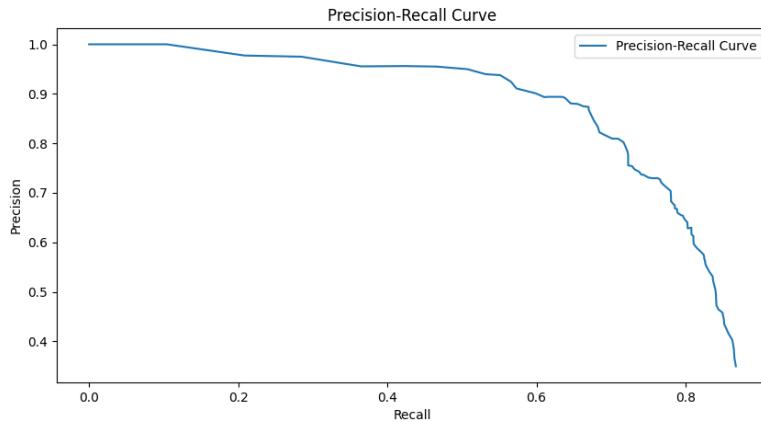


Figure s243. recall\_over\_confidence, maskrcnn, pre-trained=True, epochs=100, data=duomo

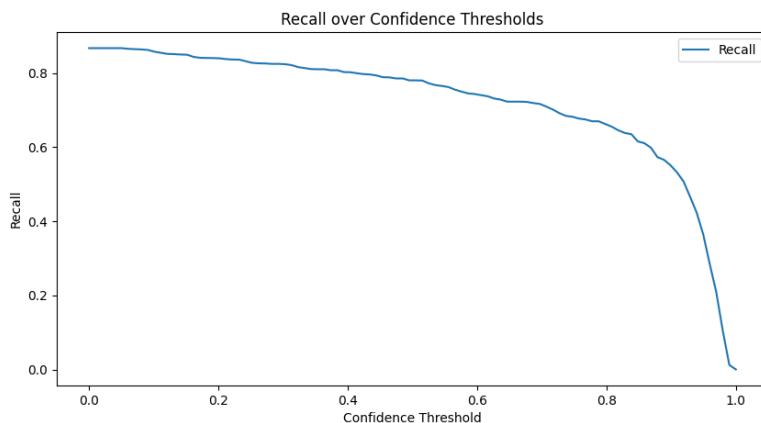


Figure s244. f1\_over\_confidence, maskrcnn, pre-trained=True, epochs=100, data=hadji\_dimitar\_square

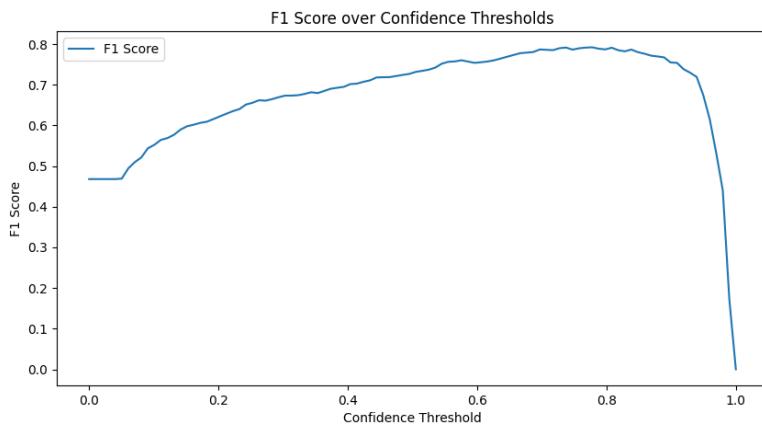


Figure s245. precision\_over\_confidence, maskrcnn, pre-trained=True, epochs=100, data=hadji\_dimitar\_square

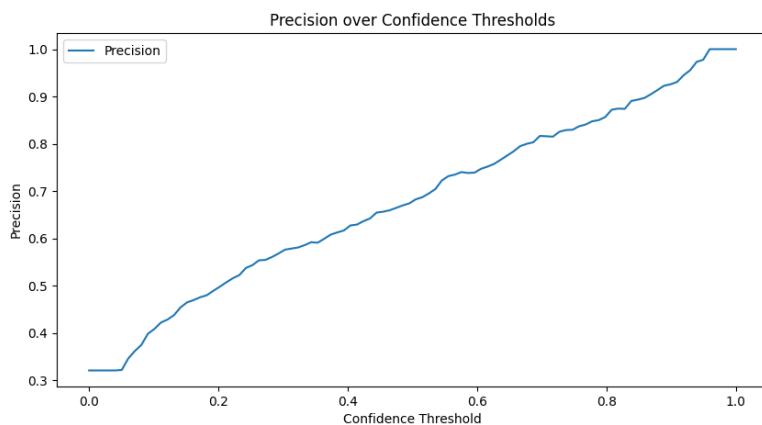


Figure s246. precision\_over\_recall, maskrcnn, pre-trained=True, epochs=100, data=hadji\_dimitar\_square

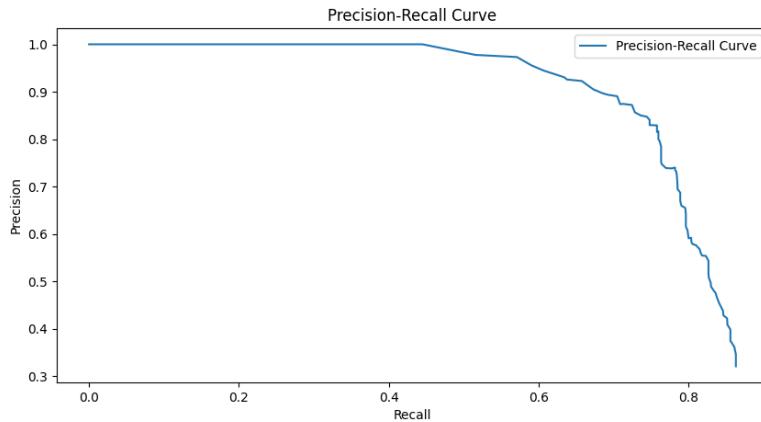


Figure s247. recall\_over\_confidence, maskrcnn, pre-trained=True, epochs=100, data=hadjidimitar\_square

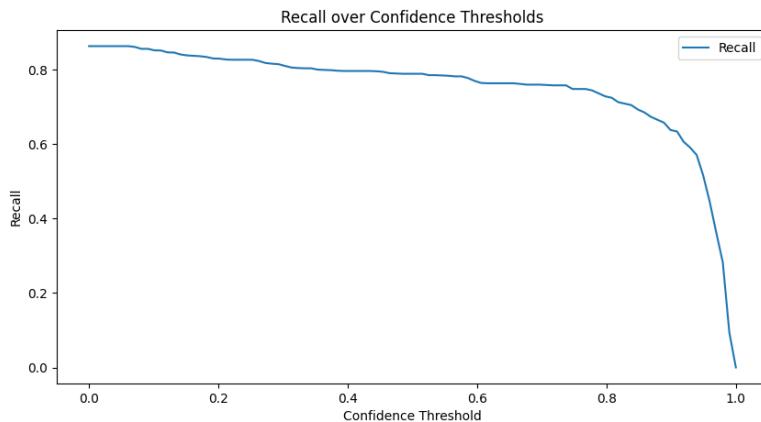


Figure s248. f1\_over\_confidence, maskrcnn, pre-trained=True, epochs=100, data=keskvaljak

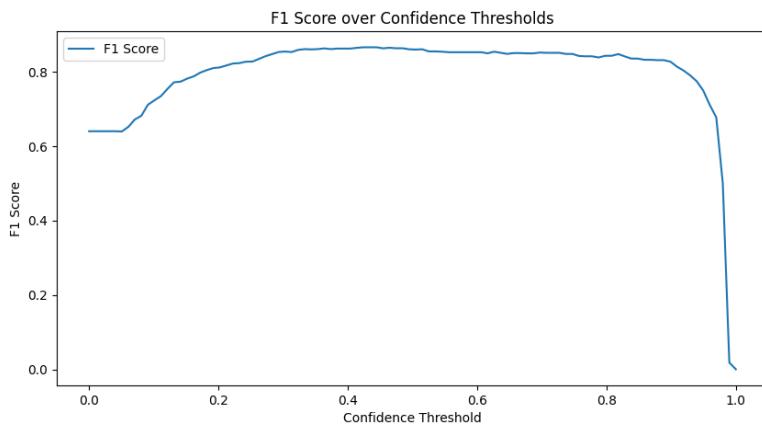


Figure s249. precision\_over\_confidence, maskrcnn, pre-trained=True, epochs=100, data=keskvaljak

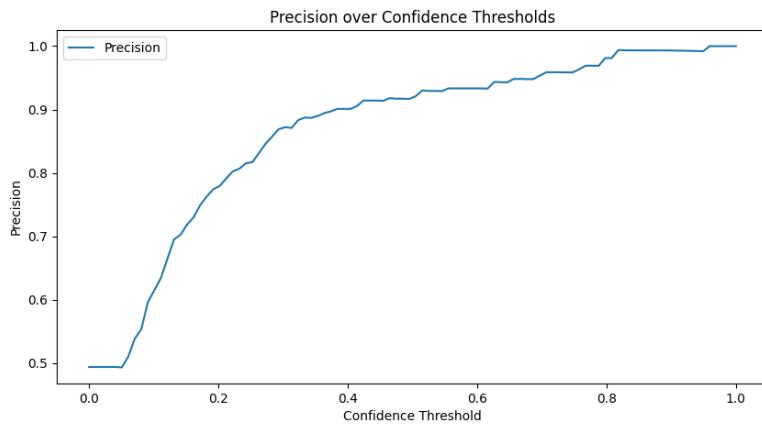


Figure s250. precision\_over\_recall, maskrcnn, pre-trained=True, epochs=100, data=keskvaljak

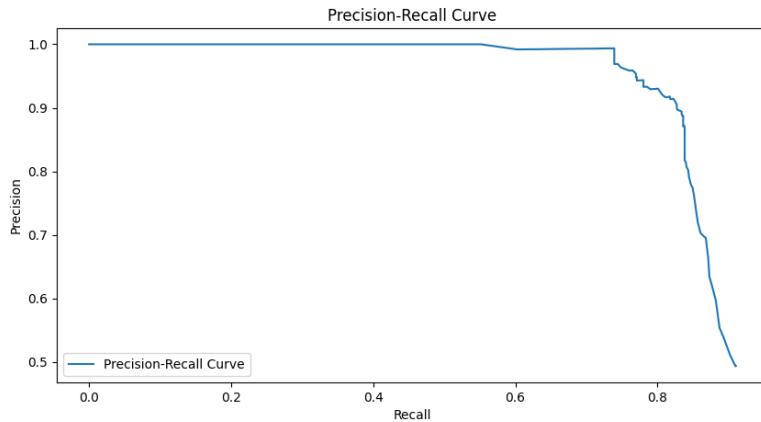


Figure s251. recall\_over\_confidence, maskrcnn, pre-trained=True, epochs=100, data=keskvaljak

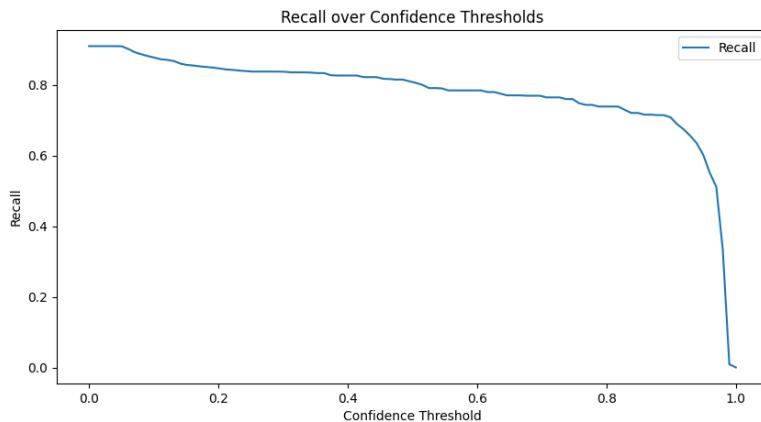


Figure s252. f1\_over\_confidence, maskrcnn, pre-trained=True, epochs=100, data=kielce\_university\_of\_technology

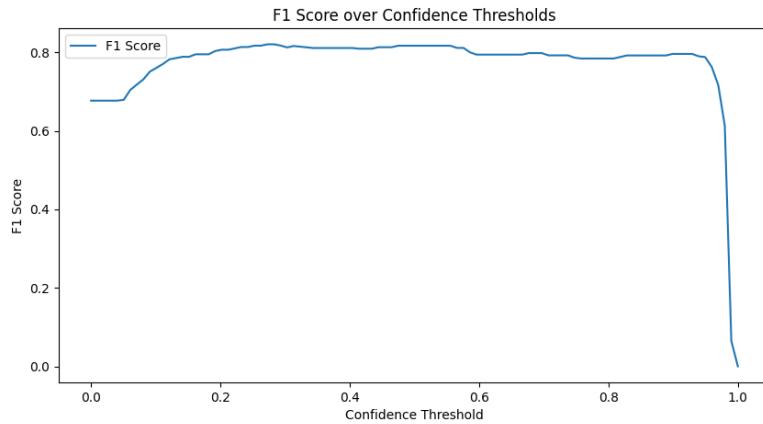


Figure s253. precision\_over\_confidence, maskrcnn, pre-trained=True, epochs=100, data=kielce\_university\_of\_technology

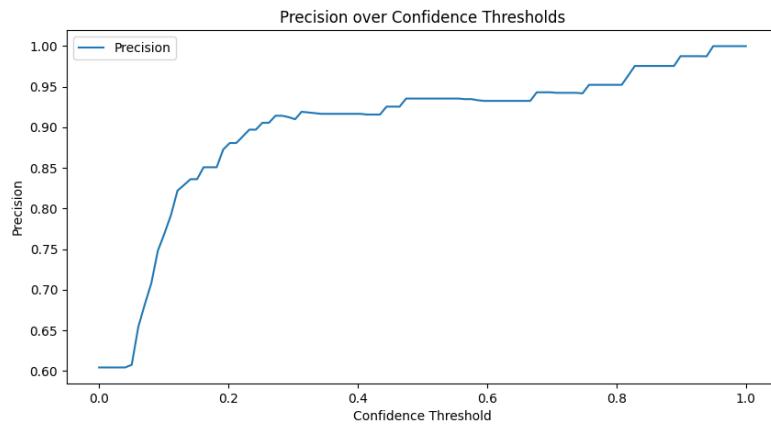


Figure s254. precision\_over\_recall, maskrcnn, pre-trained=True, epochs=100, data=kielce\_university\_of\_technology

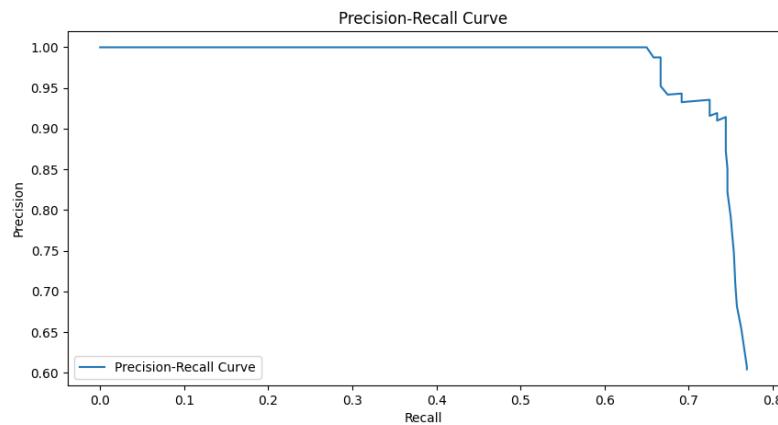


Figure s255. recall\_over\_confidence, maskrcnn, pre-trained=True, epochs=100, data=kielce\_university\_of\_technology

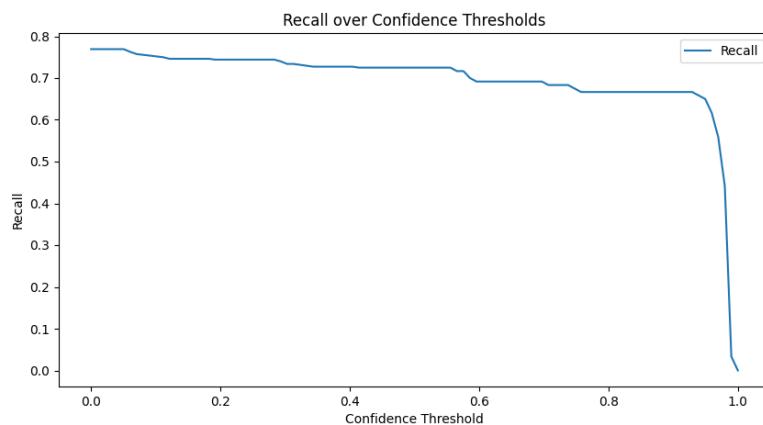


Figure s256. f1\_over\_confidence, maskrcnn, pre-trained=True, epochs=100, data=toggenburg\_alpaca\_ranch

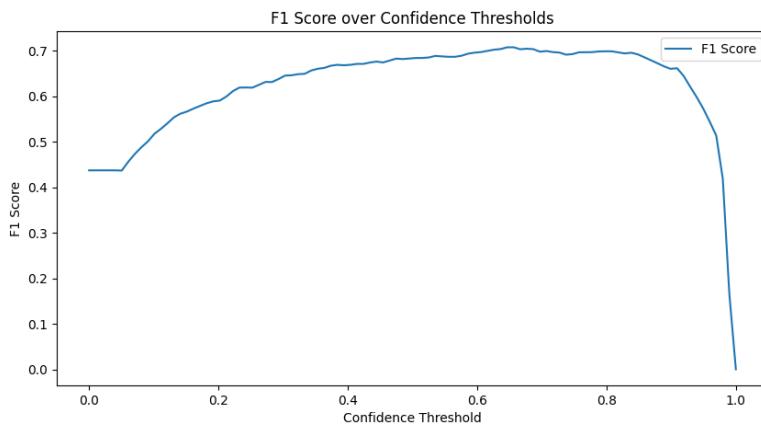


Figure s257. precision\_over\_confidence, maskrcnn, pre-trained=True, epochs=100, data=toggenburg\_alpaca\_ranch

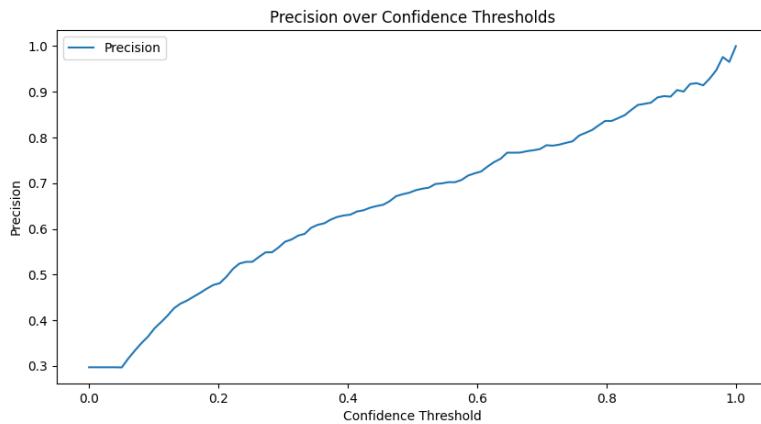


Figure s258. precision\_over\_recall, maskrcnn, pre-trained=True, epochs=100, data=toggenburg\_alpaca\_ranch

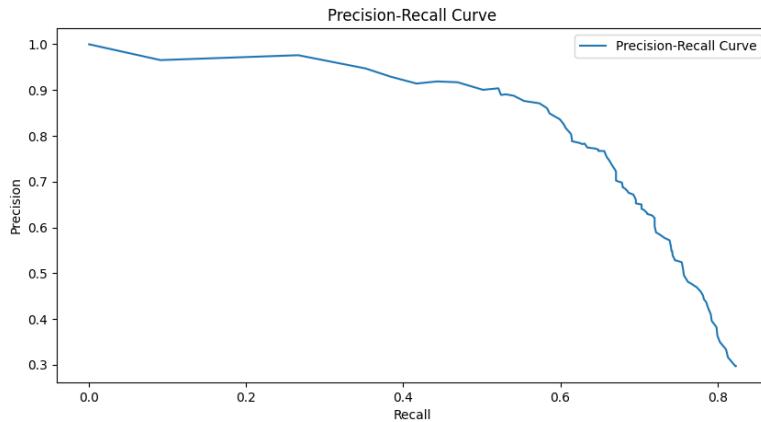


Figure s259. recall\_over\_confidence, maskrcnn, pre-trained=True, epochs=100, data=toggenburg\_alpaca\_ranch

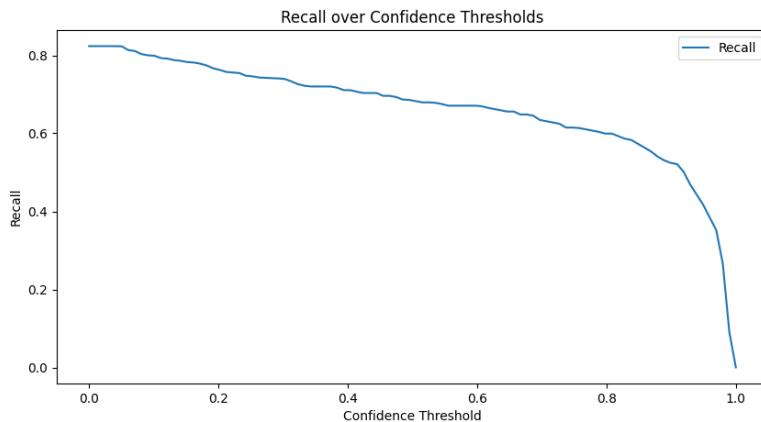


Figure s260. f1\_over\_confidence, maskrcnn, pre-trained=True, epochs=150, data=duomo

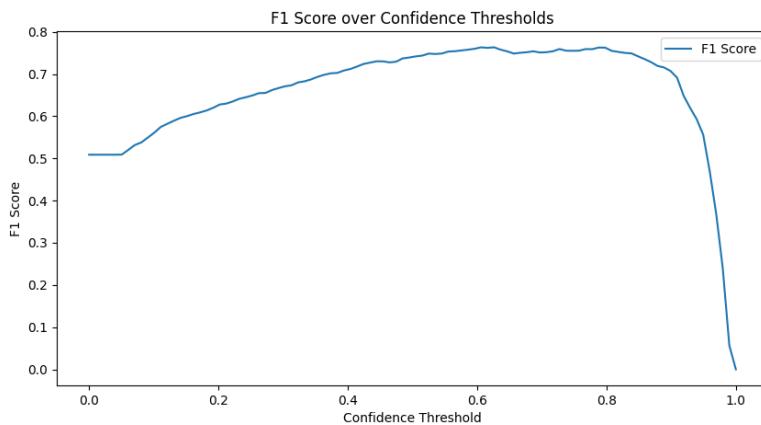


Figure s261. precision\_over\_confidence, maskrcnn, pre-trained=True, epochs=150, data=duomo

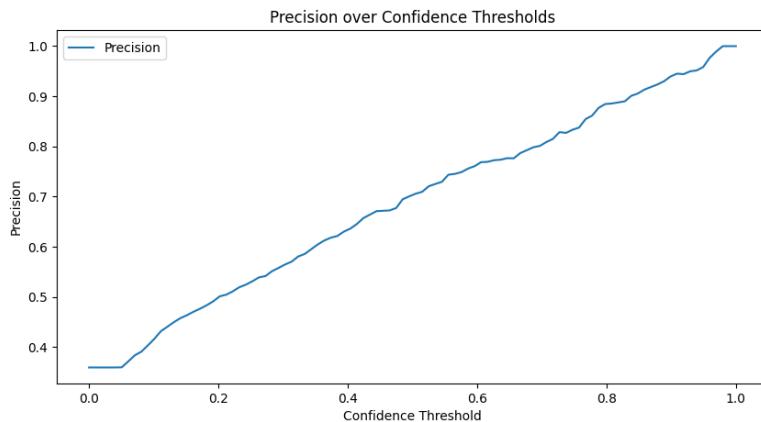


Figure s262. precision\_over\_recall, maskrcnn, pre-trained=True, epochs=150, data=duomo

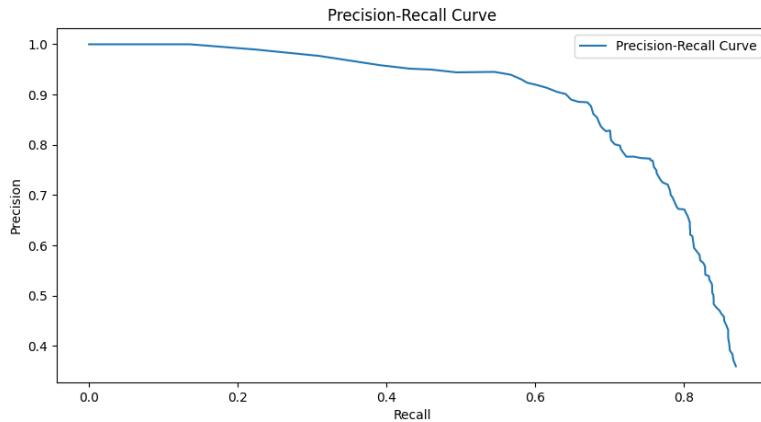


Figure s263. recall\_over\_confidence, maskrcnn, pre-trained=True, epochs=150, data=duomo

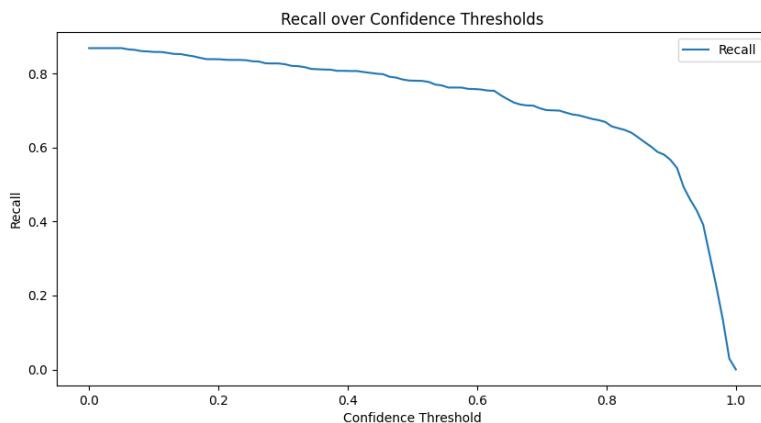


Figure s264. confidence, maskrcnn, pre-trained=True, epochs=150, data=hadji\_dimitar\_square

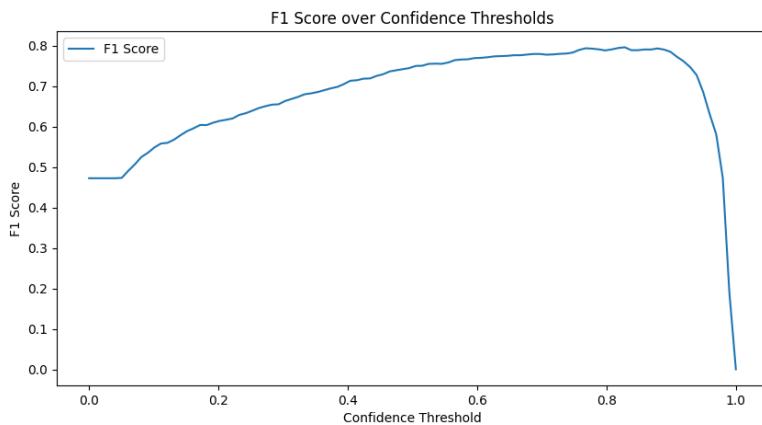


Figure s265. precision\_over\_confidence, maskrcnn, pre-trained=True, epochs=150, data=hadji\_dimitar\_square

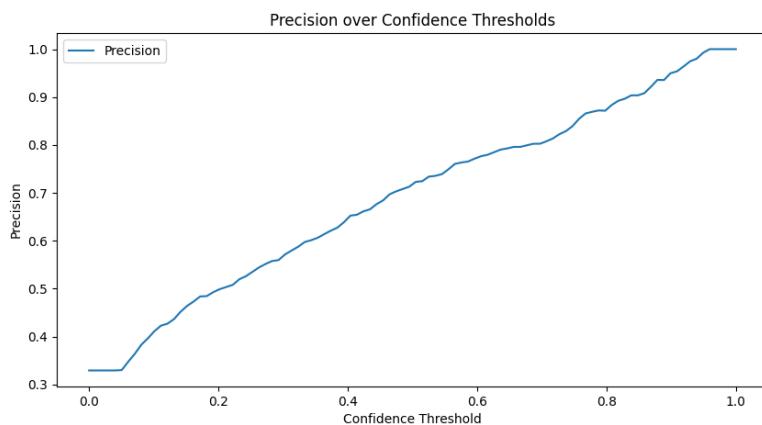


Figure s266. precision\_over\_recall, maskrcnn, pre-trained=True, epochs=150, data=hadji\_dimitar\_square

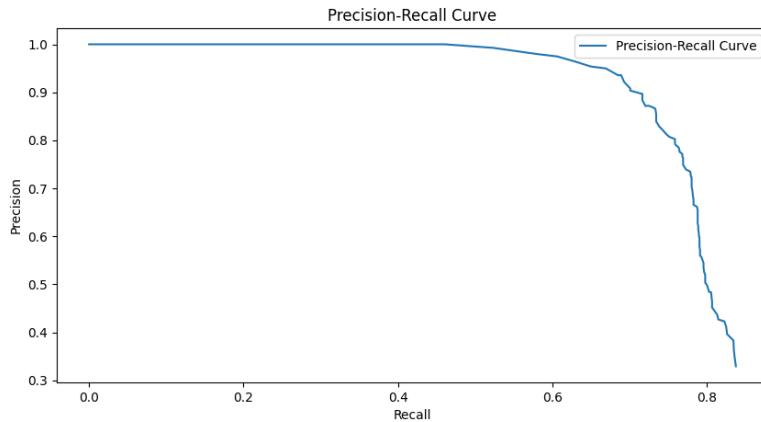


Figure s267. recall\_over\_confidence, maskrcnn, pre-trained=True, epochs=150, data=hadjidimitar\_square

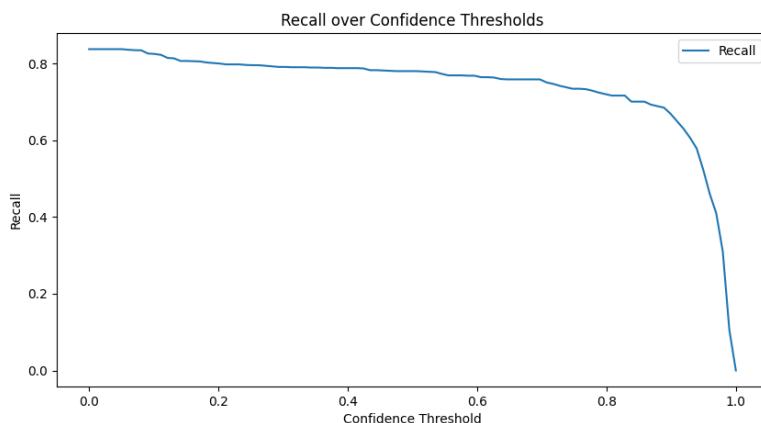


Figure s268. f1\_over\_confidence, maskrcnn, pre-trained=True, epochs=150, data=keskvaljak

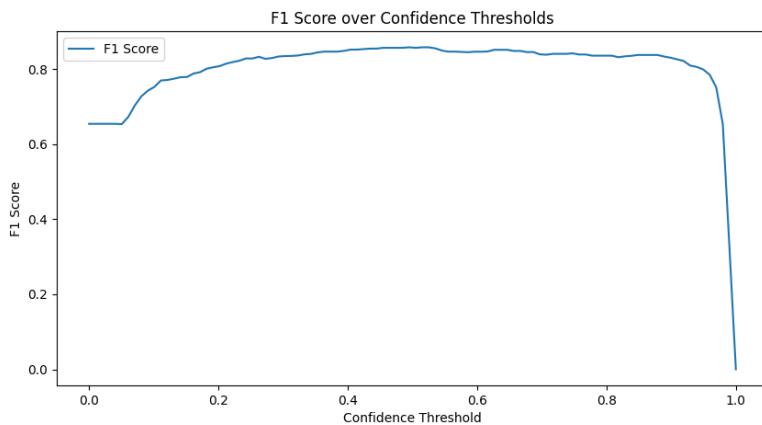


Figure s269. precision\_over\_confidence, maskrcnn, pre-trained=True, epochs=150, data=keskvaljak

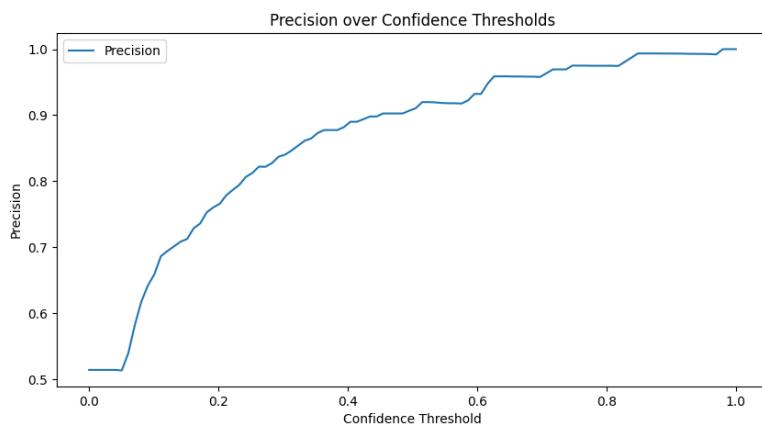


Figure s270. precision\_over\_recall, maskrcnn, pre-trained=True, epochs=150, data=keskvaljak

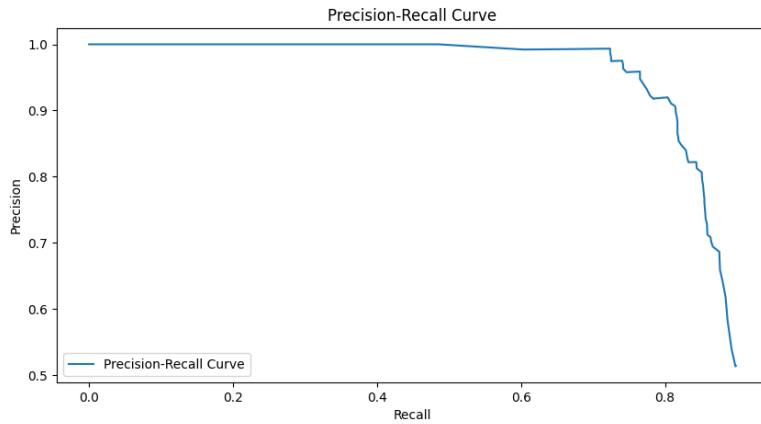


Figure s271. recall\_over\_confidence, maskrcnn, pre-trained=True, epochs=150, data=keskvaljak

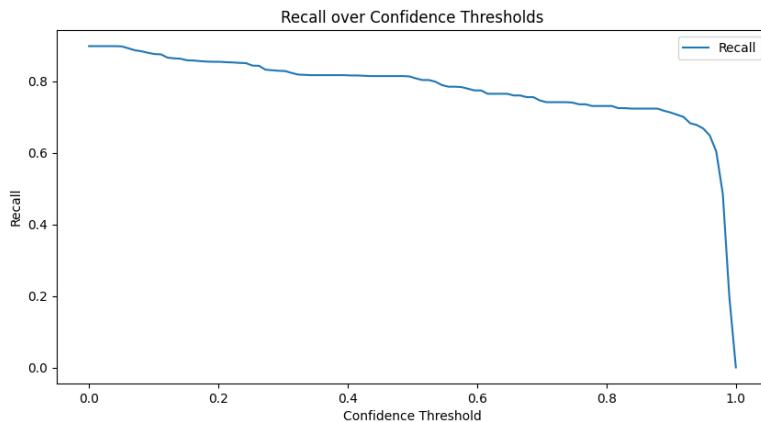


Figure s272. f1\_over\_confidence, maskrcnn, pre-trained=True, epochs=150, data=kielce\_university\_of\_technology

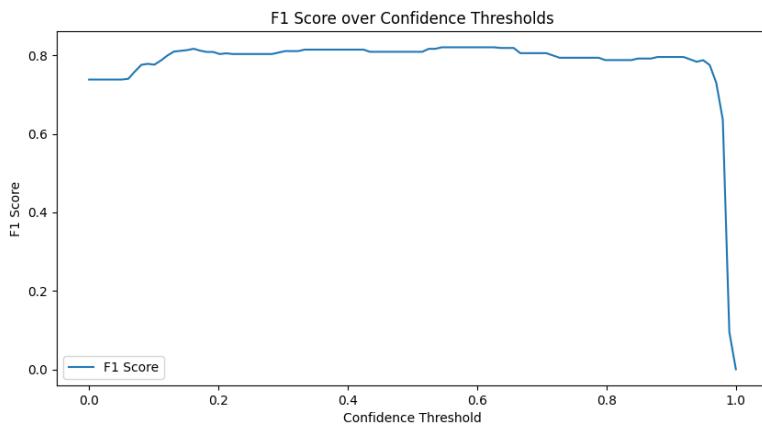


Figure s273. precision\_over\_confidence, maskrcnn, pre-trained=True, epochs=150, data=kielce\_university\_of\_technology

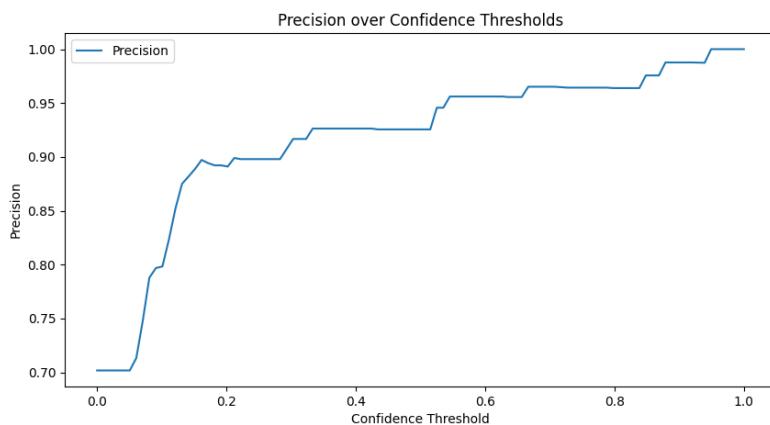


Figure s274. precision\_over\_recall, maskrcnn, pre-trained=True, epochs=150, data=kielce\_university\_of\_technology

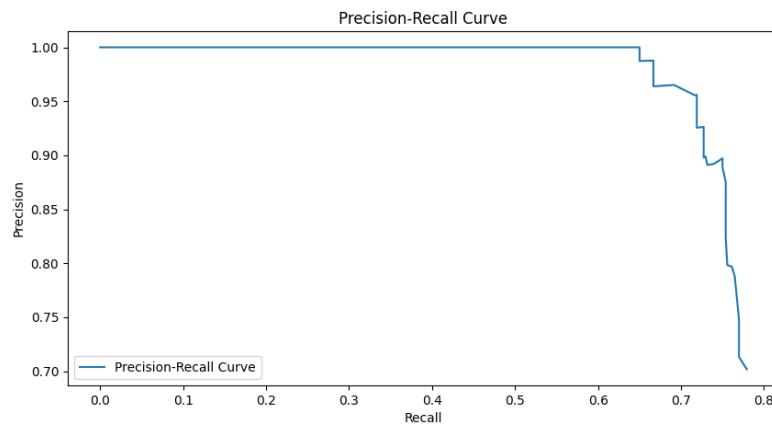


Figure s275. recall\_over\_confidence, maskrcnn, pre-trained=True, epochs=150, data=kielce\_university\_of\_technology

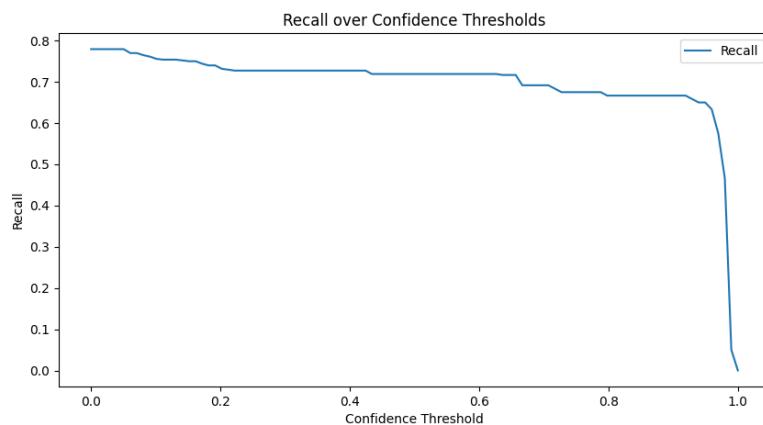


Figure s276. f1\_over\_confidence, maskrcnn, pre-trained=True, epochs=150, data=toggenburg\_alpaca\_ranch

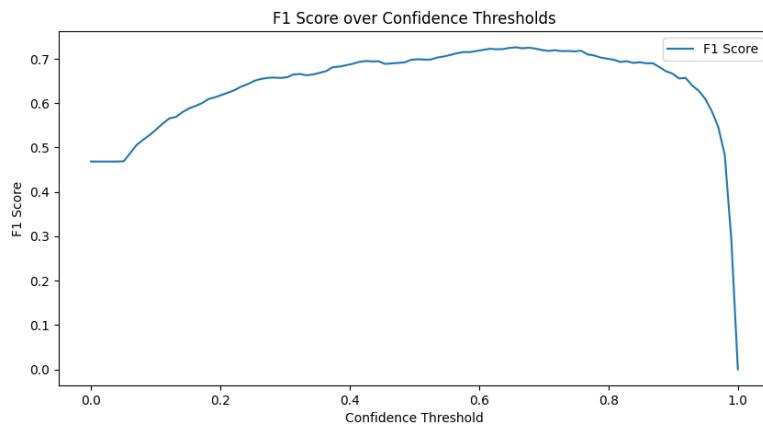


Figure s277. precision\_over\_confidence, maskrcnn, pre-trained=True, epochs=150, data=toggenburg\_alpaca\_ranch

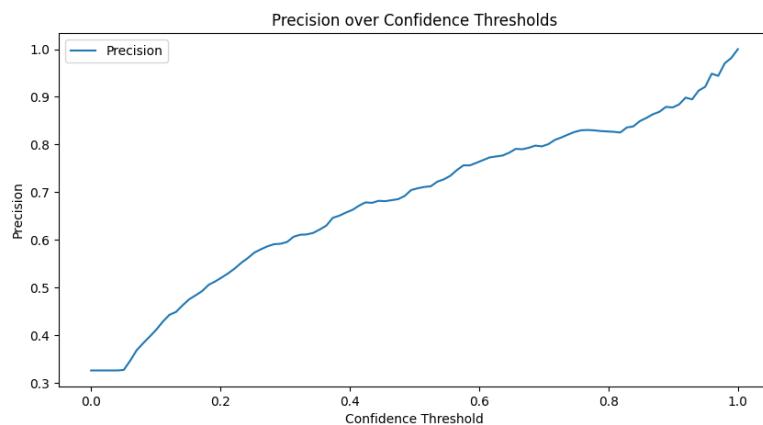


Figure s278. precision\_over\_recall, maskrcnn, pre-trained=True, epochs=150, data=toggenburg\_alpaca\_ranch

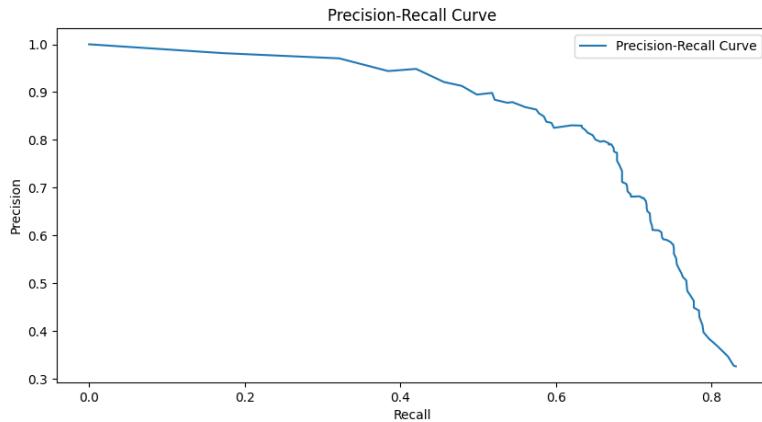


Figure s279. recall\_over\_confidence, maskrcnn, pre-trained=True, epochs=150, data=toggenburg\_alpaca\_ranch

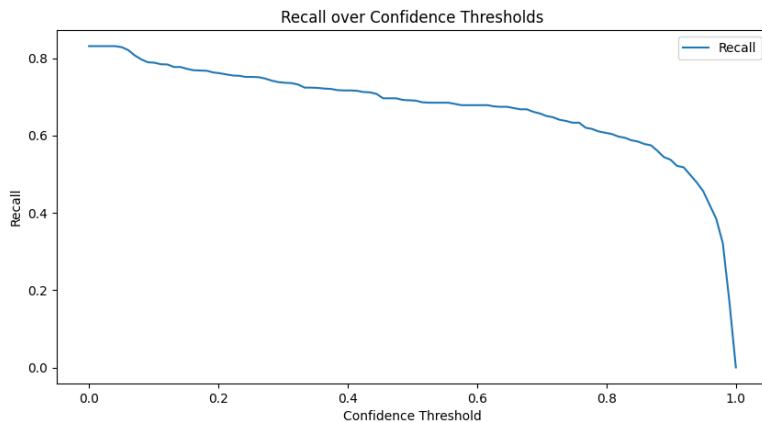


Figure s280. f1\_over\_confidence, retinanet, pre-trained=True, epochs=0, data=duomo

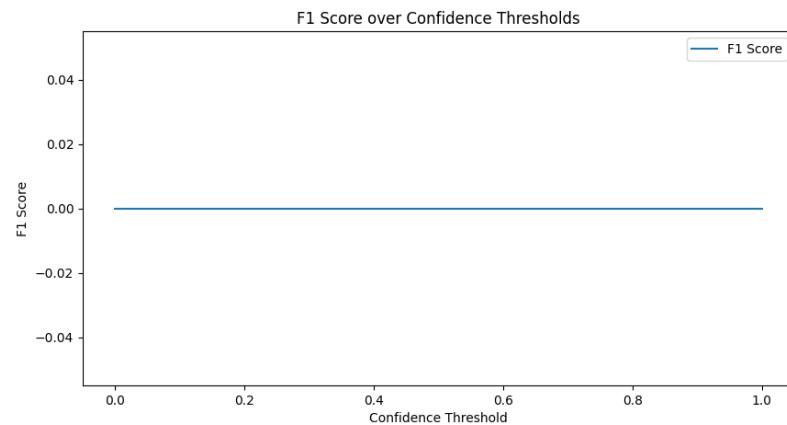


Figure s281. precision\_over\_confidence, retinanet, pre-trained=True, epochs=0, data=duomo

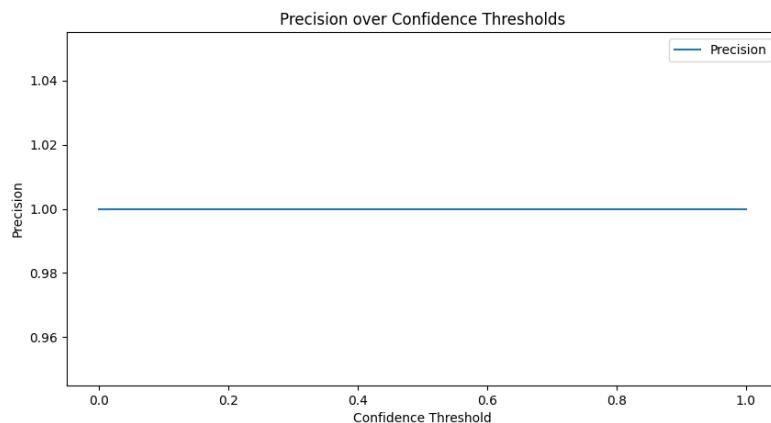


Figure s282. precision\_over\_recall, retinanet, pre-trained=True, epochs=0, data=duomo

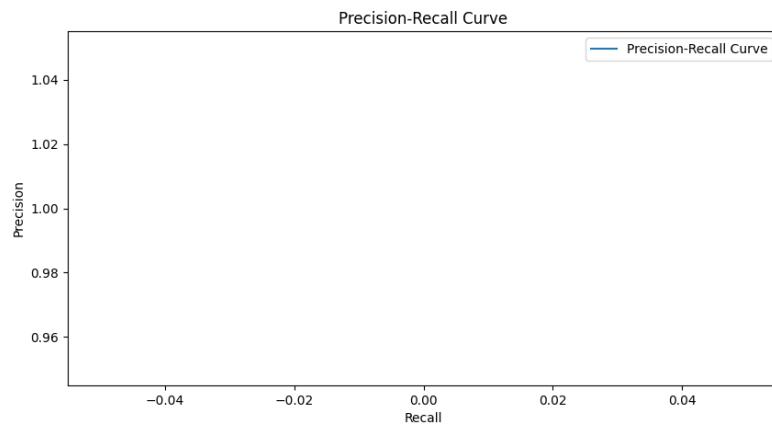


Figure s283. recall\_over\_confidence, retinanet, pre-trained=True, epochs=0, data=duomo

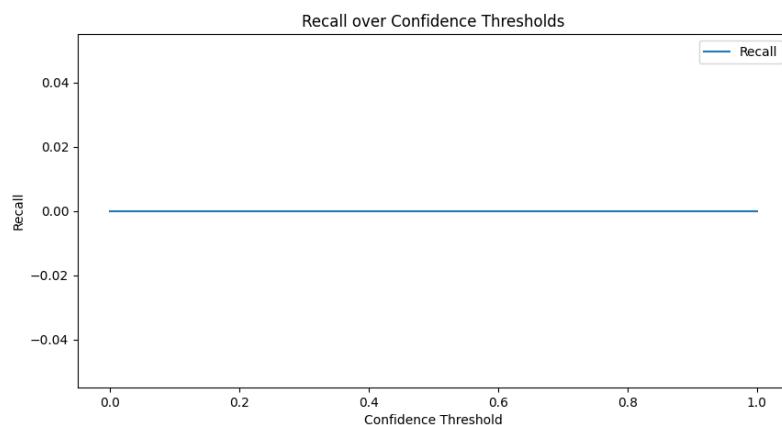


Figure s284. f1\_over\_confidence, retinanet, pre-trained=True, epochs=0, data=hadji\_dimitar\_square

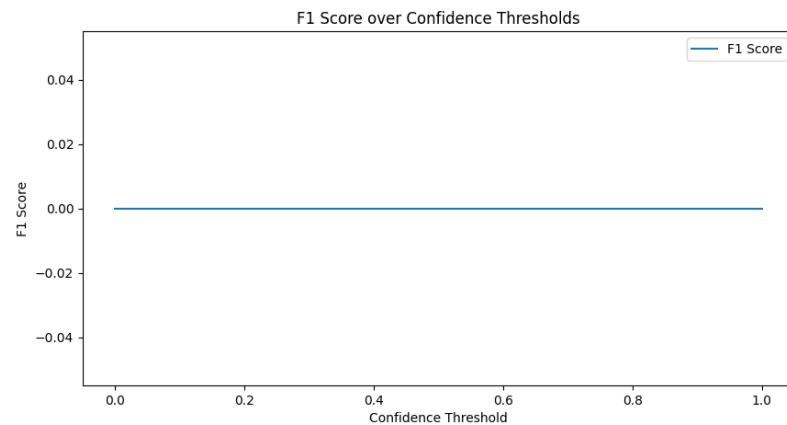


Figure s285. precision\_over\_confidence, retinanet, pre-trained=True, epochs=0, data=hadji\_dimitar\_square

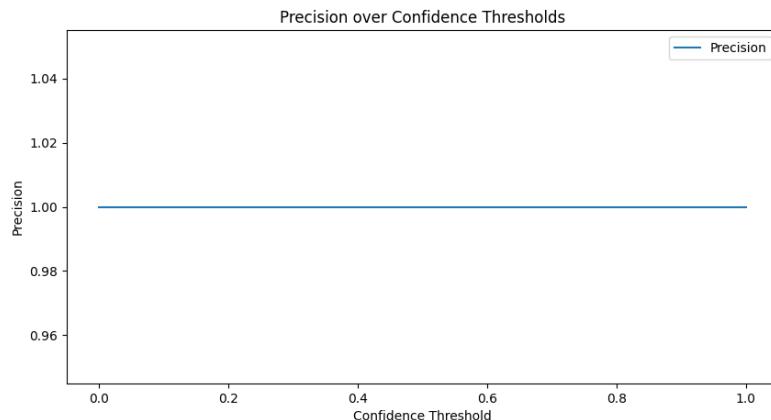


Figure s286. precision\_over\_recall, retinanet, pre-trained=True, epochs=0, data=hadji\_dimitar\_square

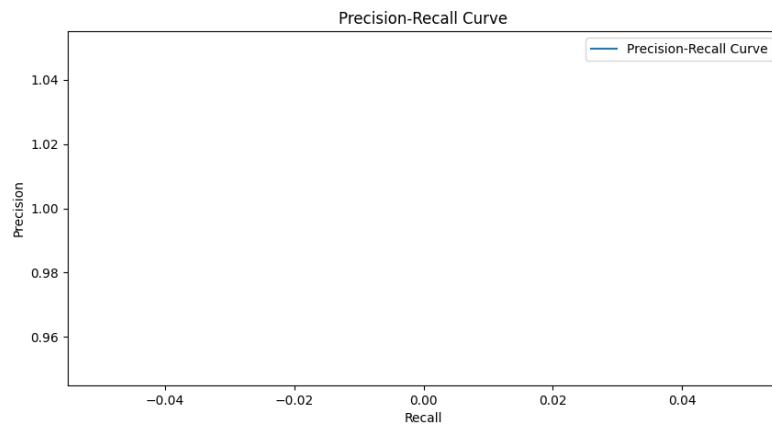


Figure s287. recall\_over\_confidence, retinanet, pre-trained=True, epochs=0, data=hadji\_dimitar\_square

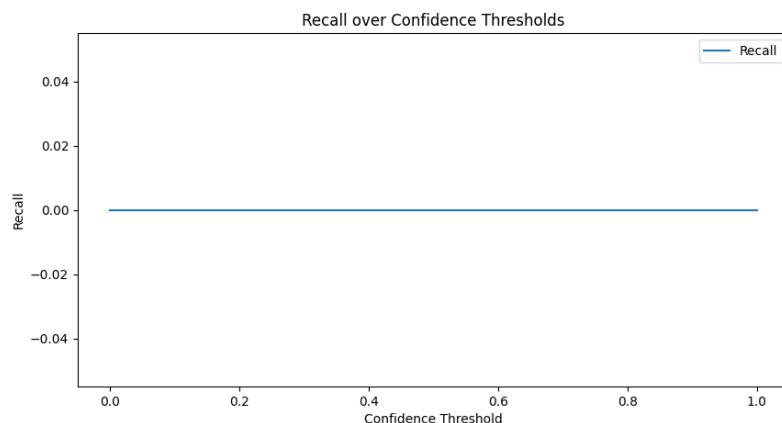


Figure s288. f1\_over\_confidence, retinanet, pre-trained=True, epochs=0, data=keskvaljak

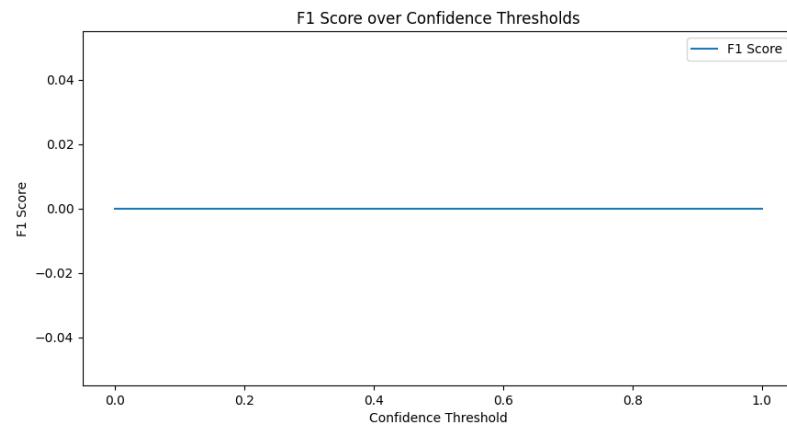


Figure s289. precision\_over\_confidence, retinanet, pre-trained=True, epochs=0, data=keskvaljak

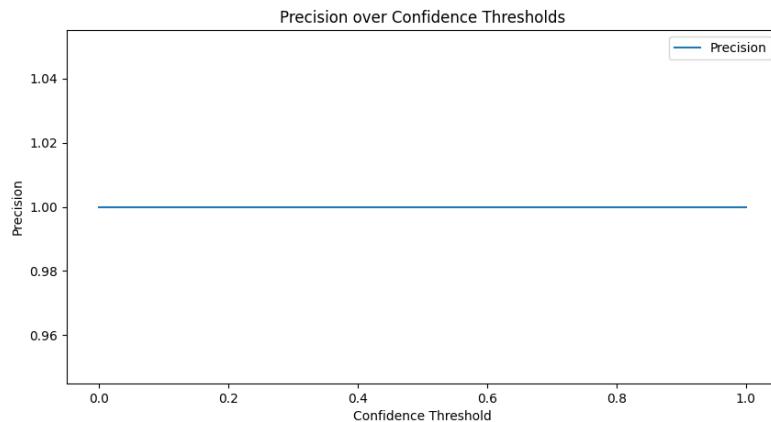


Figure s290. precision\_over\_recall, retinanet, pre-trained=True, epochs=0, data=keskvaljak

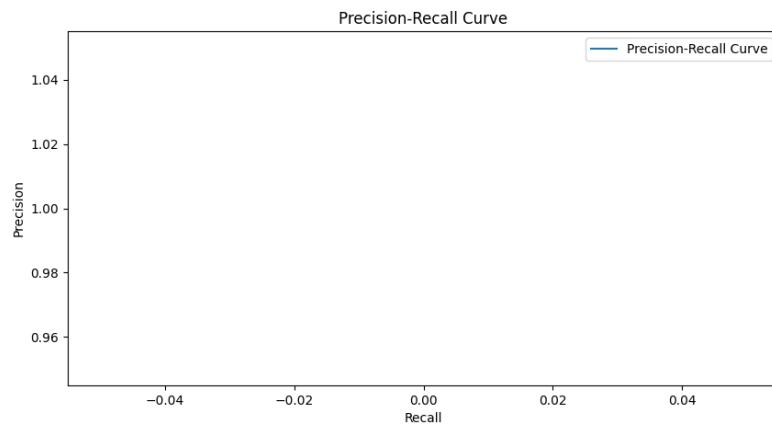


Figure s291. recall\_over\_confidence, retinanet, pre-trained=True, epochs=0, data=keskvaljak

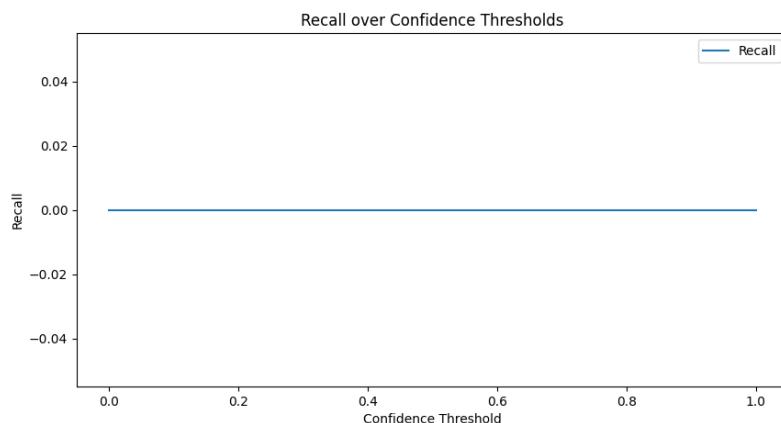


Figure s292. f1\_over\_confidence, retinanet, pre-trained=True, epochs=0, data=kielce\_university\_of\_technology

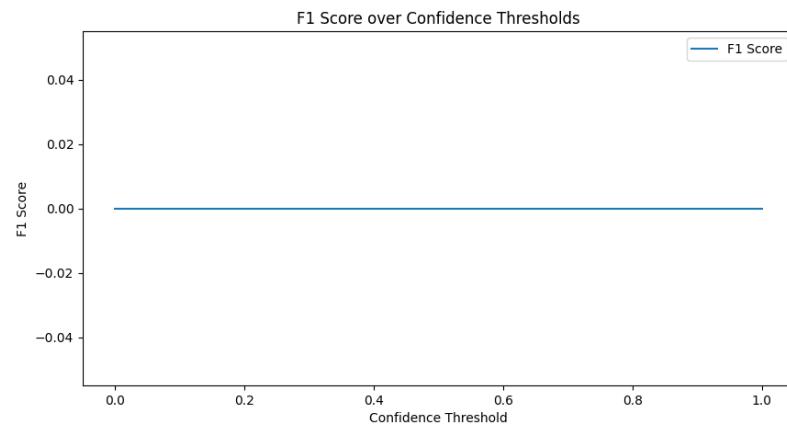


Figure s293. precision\_over\_confidence, retinanet, pre-trained=True, epochs=0, data=kielce\_university\_of\_technology

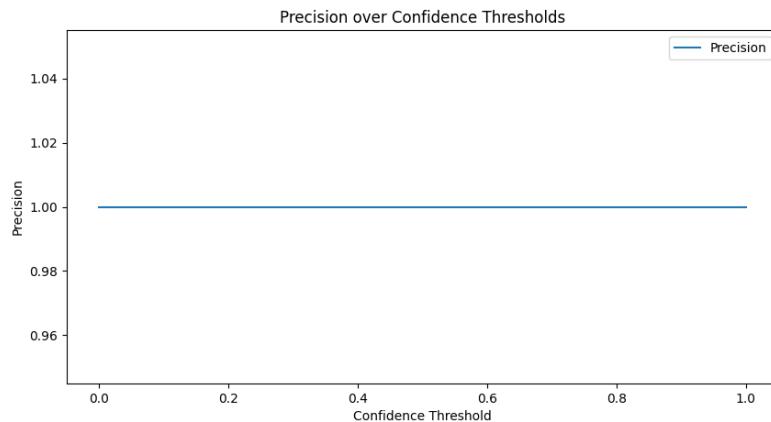


Figure s294. precision\_over\_recall, retinanet, pre-trained=True, epochs=0, data=kielce\_university\_of\_technology

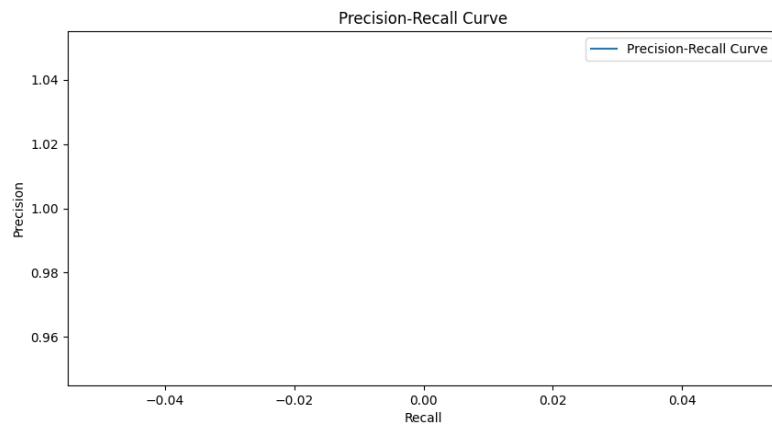


Figure s295. recall\_over\_confidence, retinanet, pre-trained=True, epochs=0, data=kielce\_university\_of\_technology

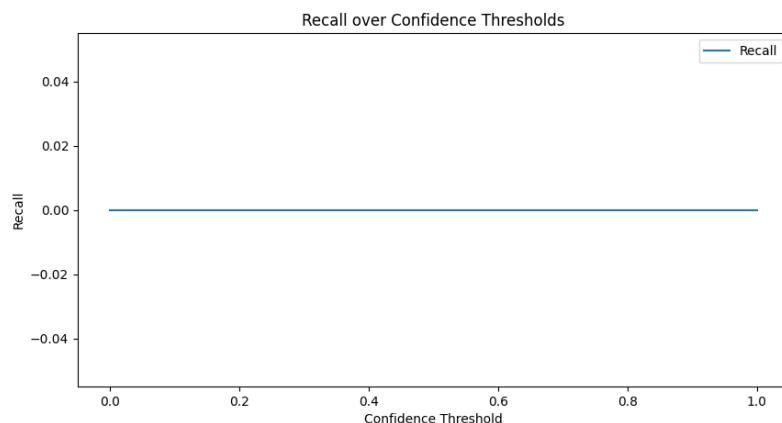


Figure s296. f1\_over\_confidence, retinanet, pre-trained=True, epochs=0, data=toggenburg\_alpaca\_ranch

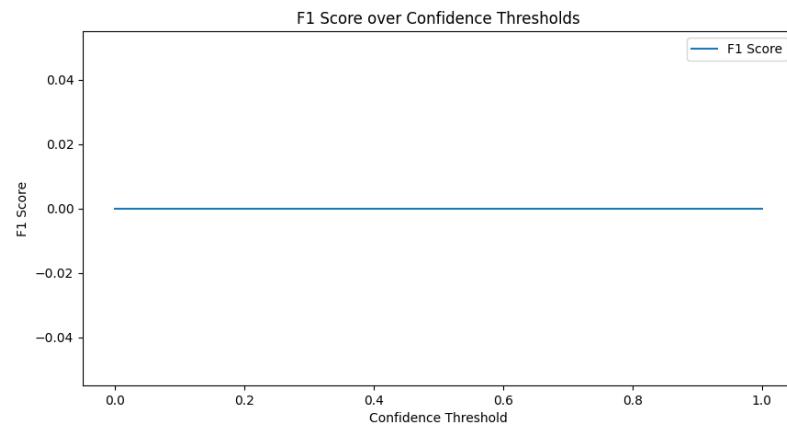


Figure s297. precision\_over\_confidence, retinanet, pre-trained=True, epochs=0, data=toggenburg\_alpaca\_ranch

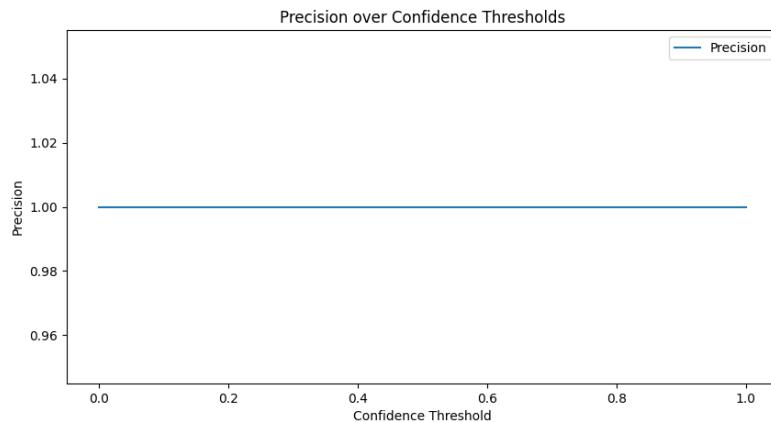


Figure s298. precision\_over\_recall, retinanet, pre-trained=True, epochs=0, data=toggenburg\_alpaca\_ranch

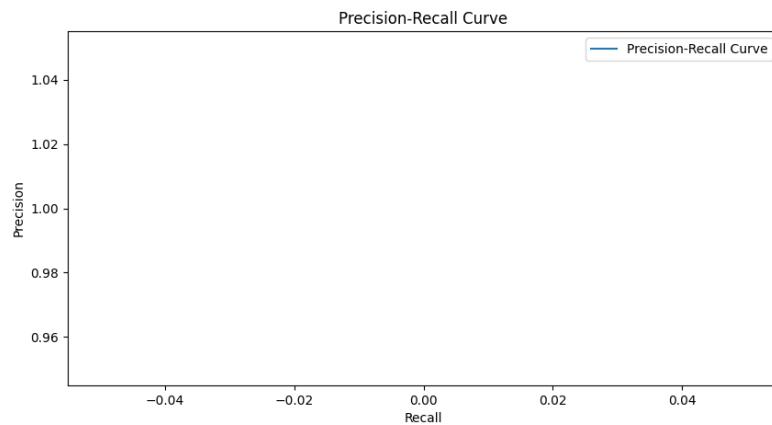


Figure s299. recall\_over\_confidence, retinanet, pre-trained=True, epochs=0, data=toggenburg\_alpaca\_ranch

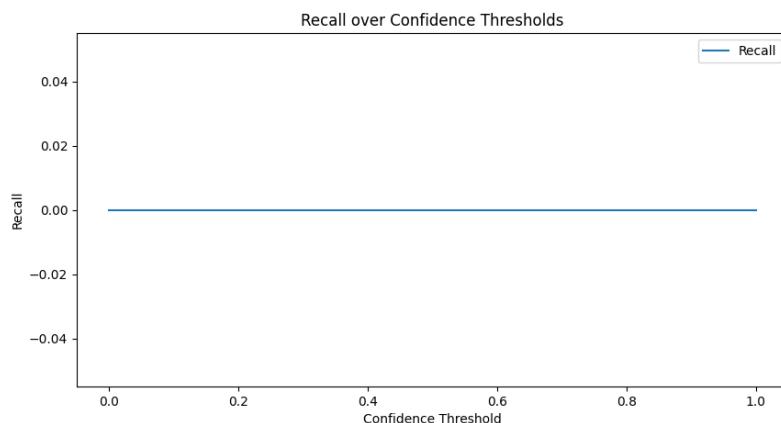


Figure s300. f1\_over\_confidence, retinanet, pre-trained=True, epochs=50, data=duomo

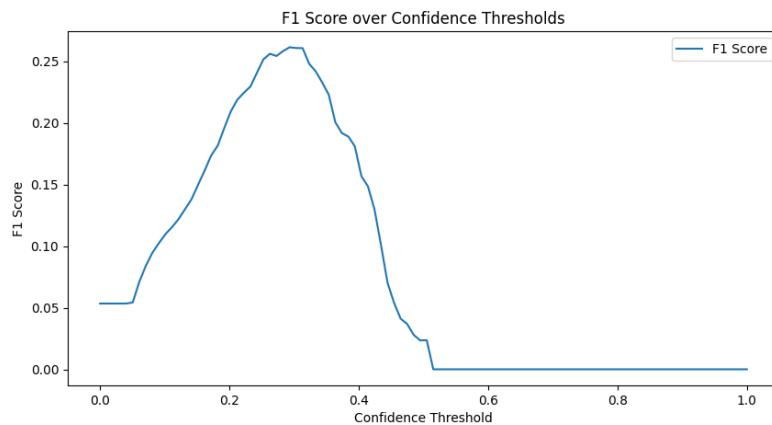


Figure s301. precision\_over\_confidence, retinanet, pre-trained=True, epochs=50, data=duomo

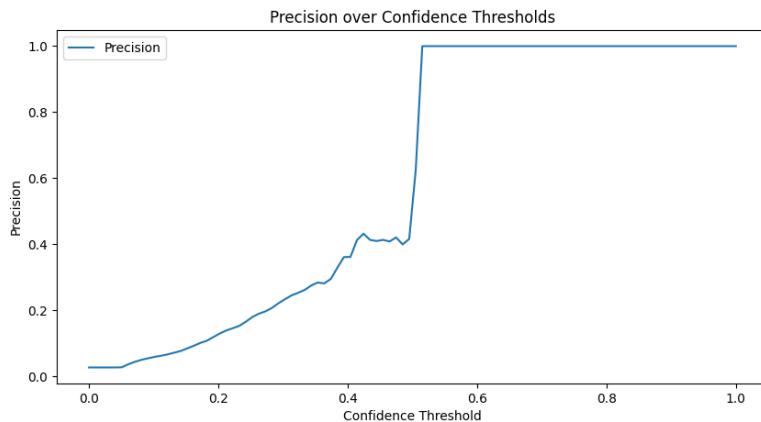


Figure s302. precision\_over\_recall, retinanet, pre-trained=True, epochs=50, data=duomo

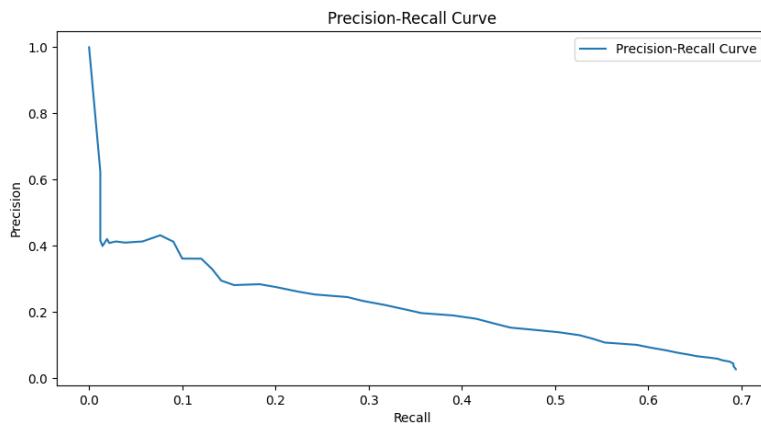


Figure s303. recall\_over\_confidence, retinanet, pre-trained=True, epochs=50, data=duomo

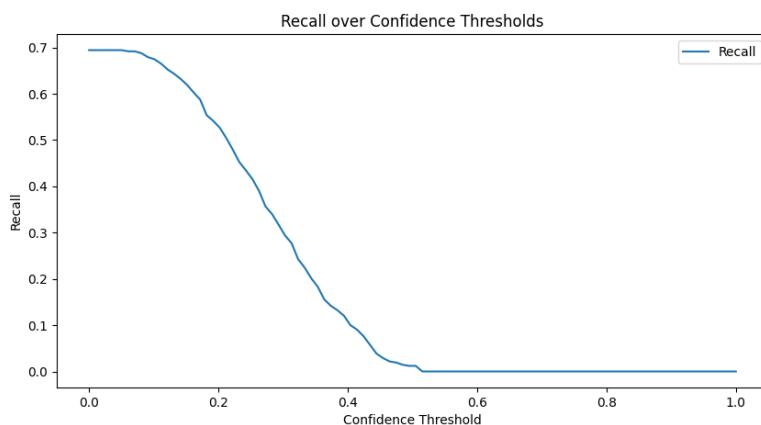


Figure s304. f1\_over\_confidence, retinanet, pre-trained=True, epochs=50, data=hadji\_dimitar\_square

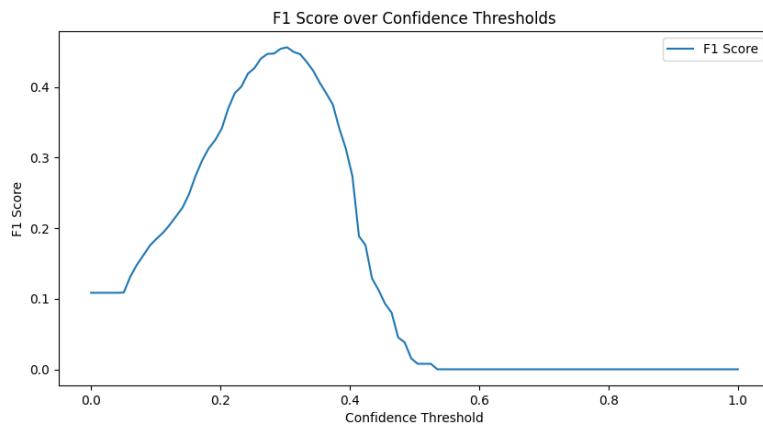


Figure s305. precision\_over\_confidence, retinanet, pre-trained=True, epochs=50, data=hadji\_dimitar\_square

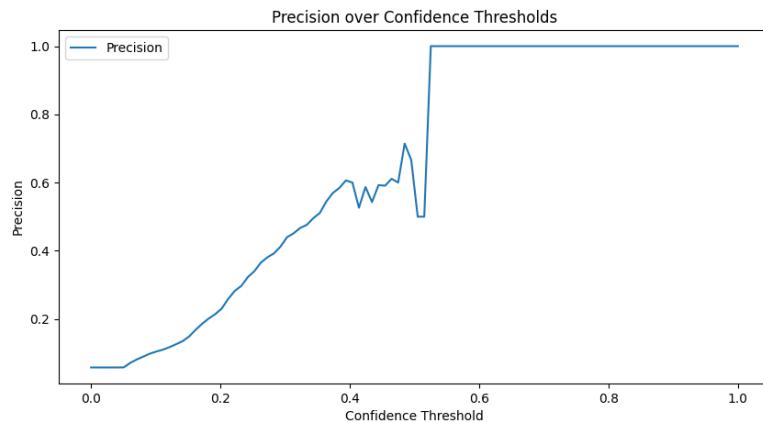


Figure s306. precision\_over\_recall, retinanet, pre-trained=True, epochs=50, data=hadji\_dimitar\_square

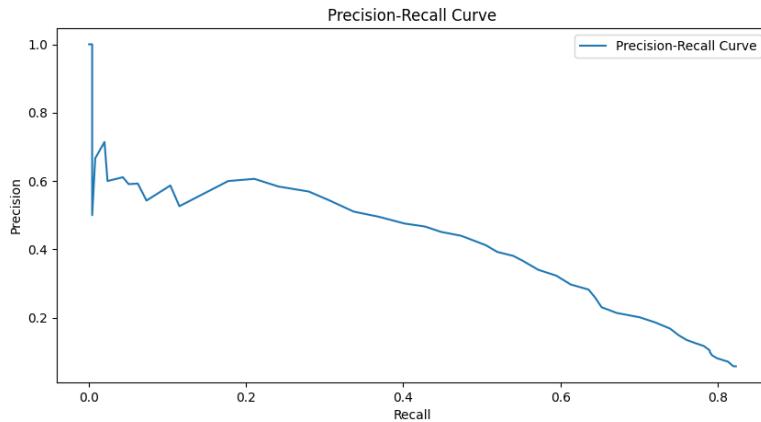


Figure s307. recall\_over\_confidence, retinanet, pre-trained=True, epochs=50, data=hadji\_dimitar\_square

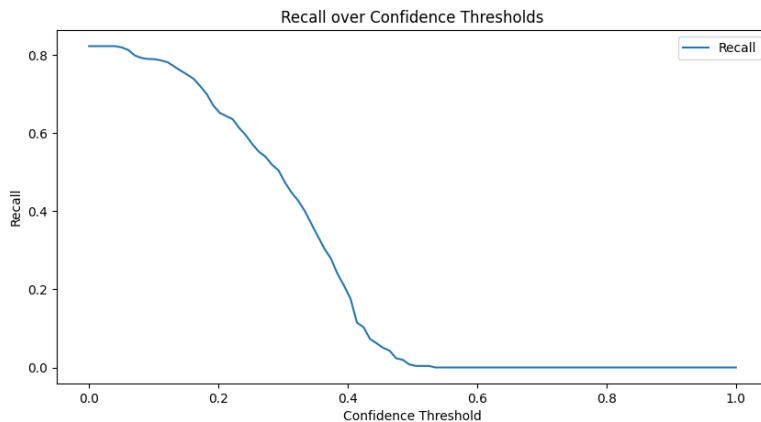


Figure s308. f1\_over\_confidence, retinanet, pre-trained=True, epochs=50, data=keskvaljak

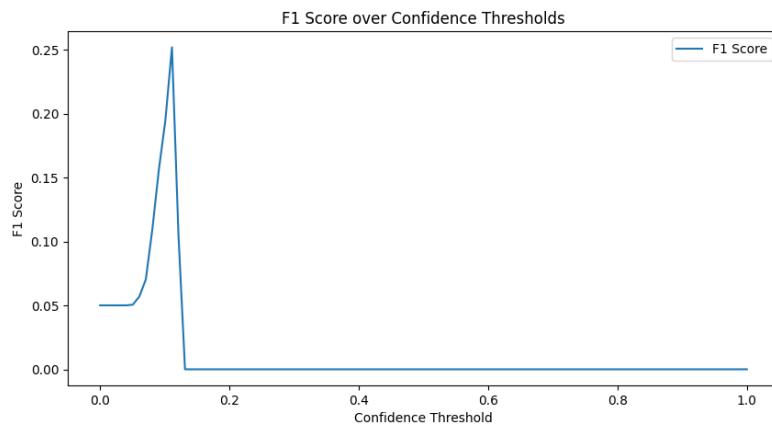


Figure s309. precision\_over\_confidence, retinanet, pre-trained=True, epochs=50, data=keskvaljak

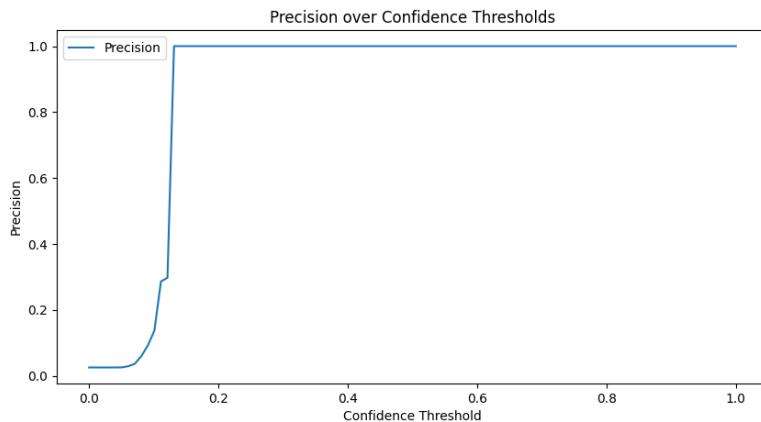


Figure s310. precision\_over\_recall, retinanet, pre-trained=True, epochs=50, data=keskvaljak

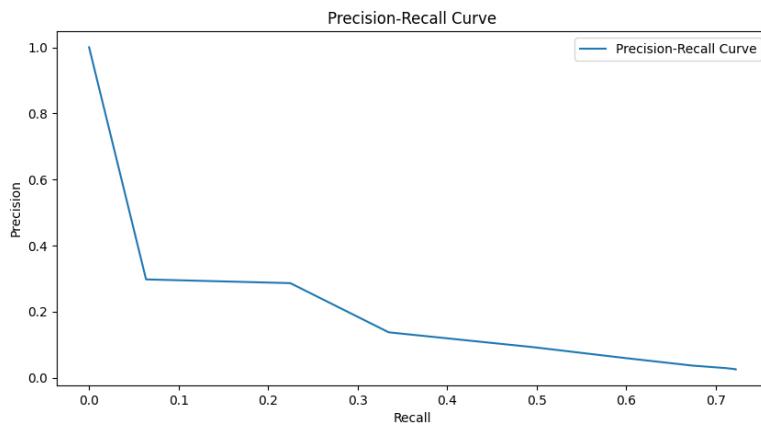


Figure s311. recall\_over\_confidence, retinanet, pre-trained=True, epochs=50, data=keskvaljak

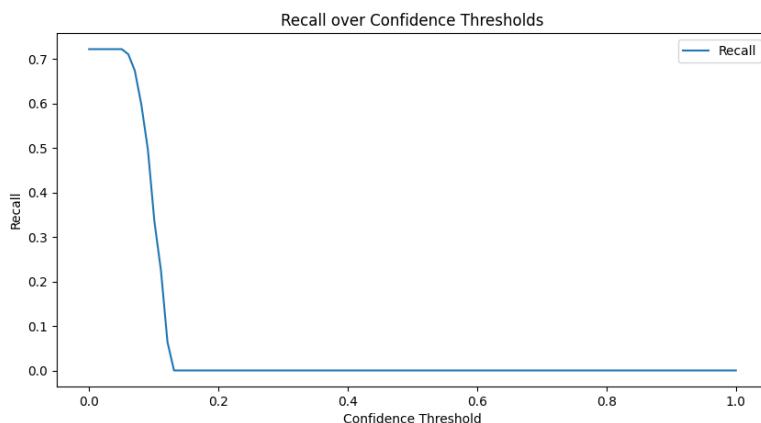


Figure s312. f1\_over\_confidence, retinanet, pre-trained=True, epochs=50, data=kielce\_university\_of\_technology

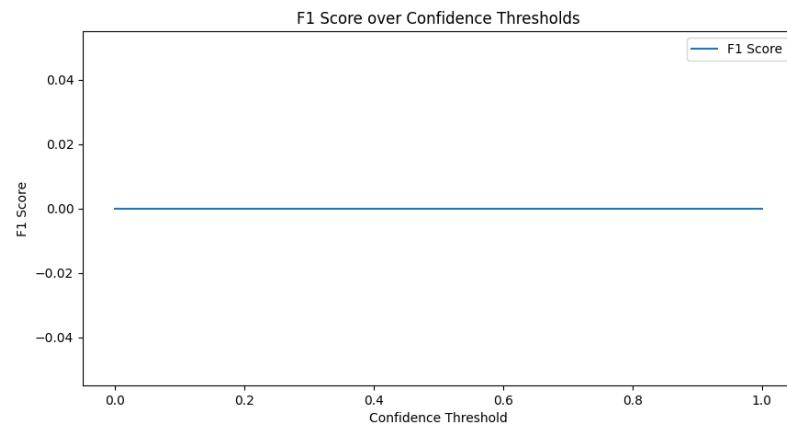


Figure s313. precision\_over\_confidence, retinanet, pre-trained=True, epochs=50, data=kielce\_university\_of\_technology

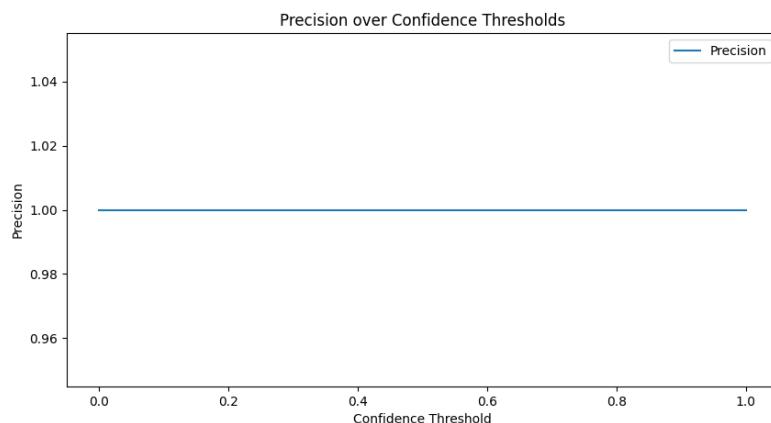


Figure s314. precision\_over\_recall, retinanet, pre-trained=True, epochs=50, data=kielce\_university\_of\_technology

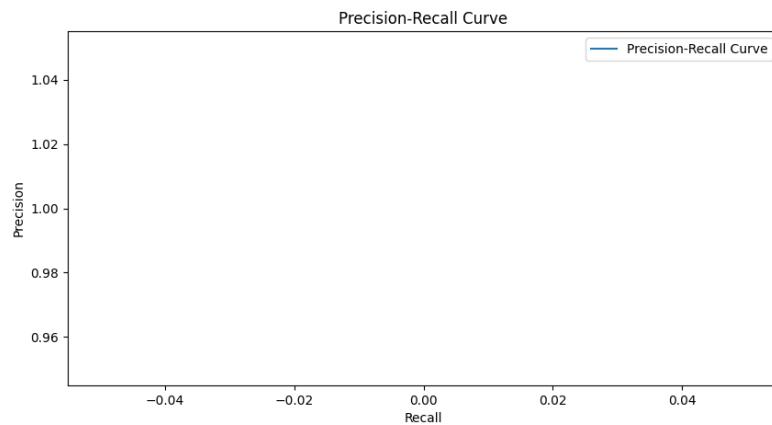


Figure s315. recall\_over\_confidence, retinanet, pre-trained=True, epochs=50, data=kielce\_university\_of\_technology

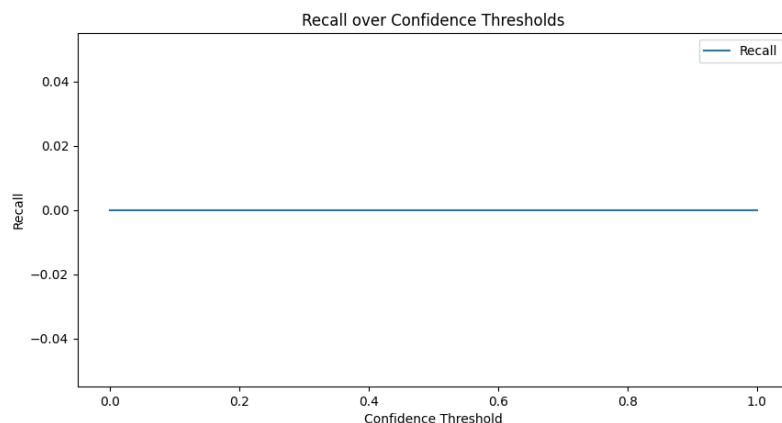


Figure s316. f1\_over\_confidence, retinanet, pre-trained=True, epochs=50, data=toggenburg\_alpaca\_ranch

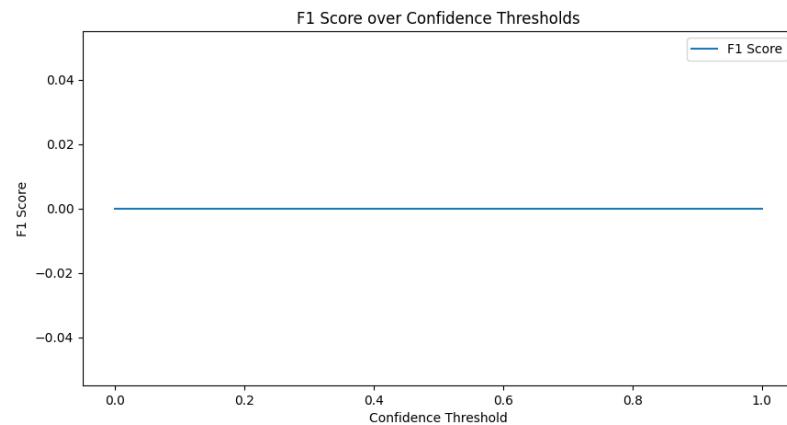


Figure s317. precision\_over\_confidence, retinanet, pre-trained=True, epochs=50, data=toggenburg\_alpaca\_ranch

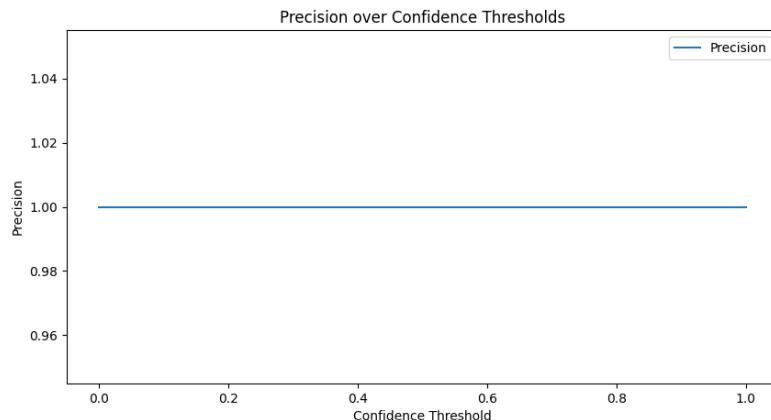


Figure s318. precision\_over\_recall, retinanet, pre-trained=True, epochs=50, data=toggenburg\_alpaca\_ranch

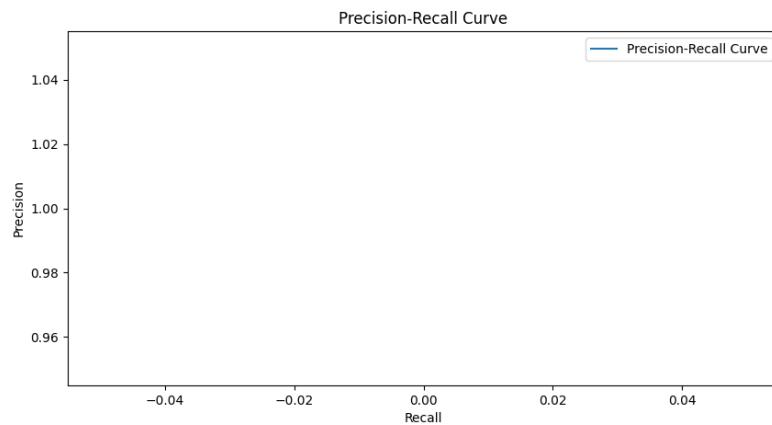


Figure s319. recall\_over\_confidence, retinanet, pre-trained=True, epochs=50, data=toggenburg\_alpaca\_ranch

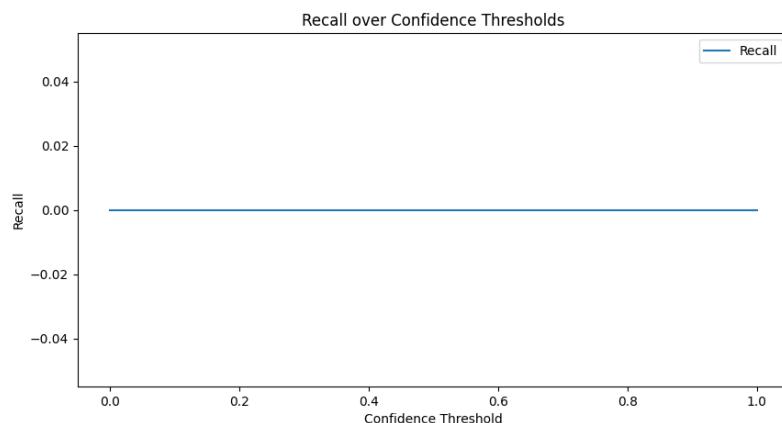


Figure s320. f1\_over\_confidence, retinanet, pre-trained=True, epochs=100, data=duomo

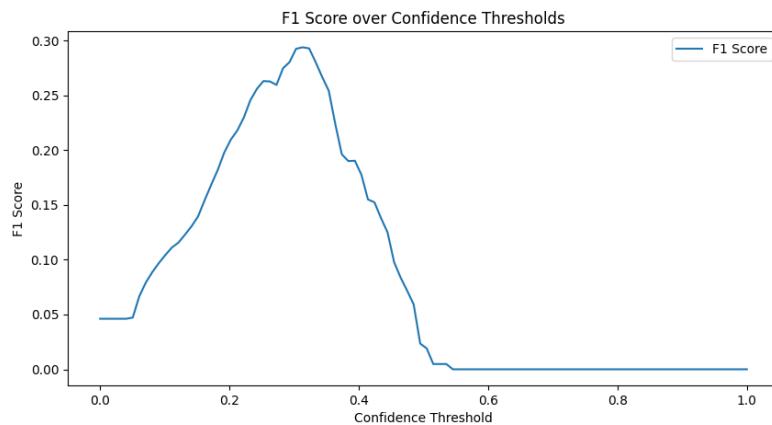


Figure s321. precision\_over\_confidence, retinanet, pre-trained=True, epochs=100, data=duomo

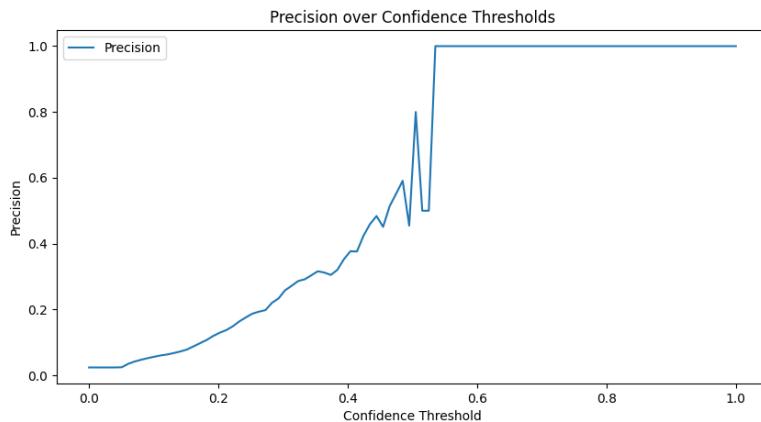


Figure s322. precision\_over\_recall, retinanet, pre-trained=True, epochs=100, data=duomo

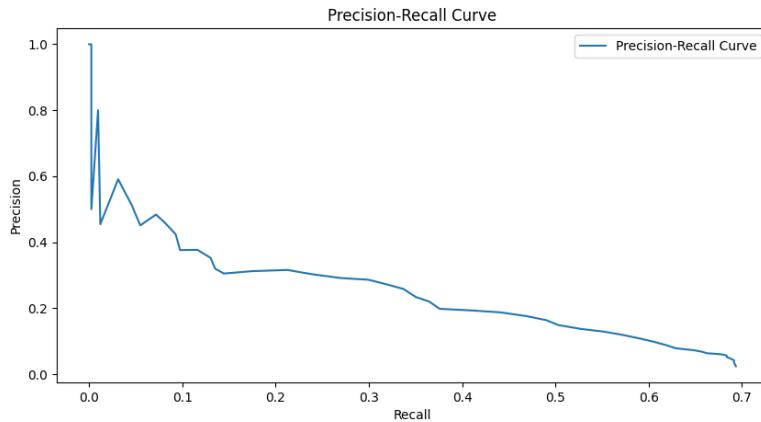


Figure s323. recall\_over\_confidence, retinanet, pre-trained=True, epochs=100, data=duomo

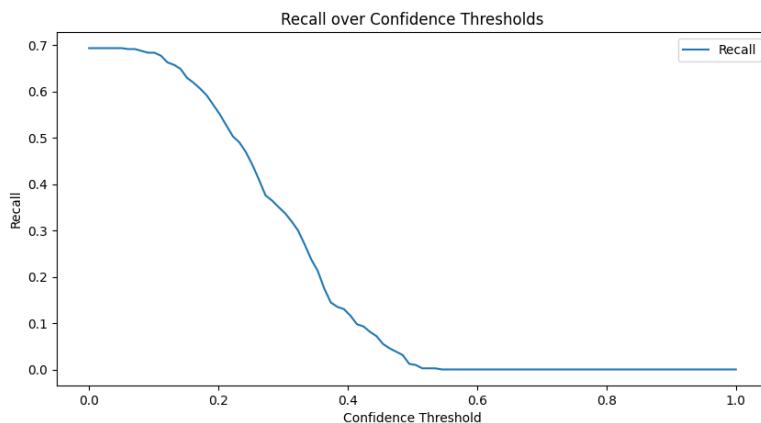


Figure s324. f1\_over\_confidence, retinanet, pre-trained=True, epochs=100, data=hadji\_dimitar\_square

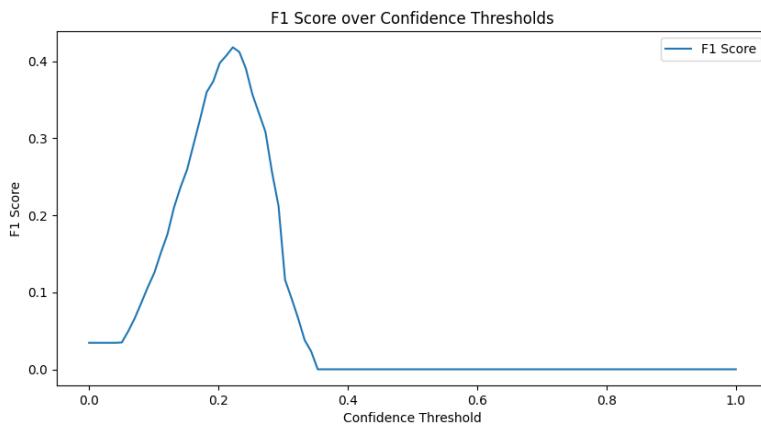


Figure s325. precision\_over\_confidence, retinanet, pre-trained=True, epochs=100, data=hadji\_dimitar\_square

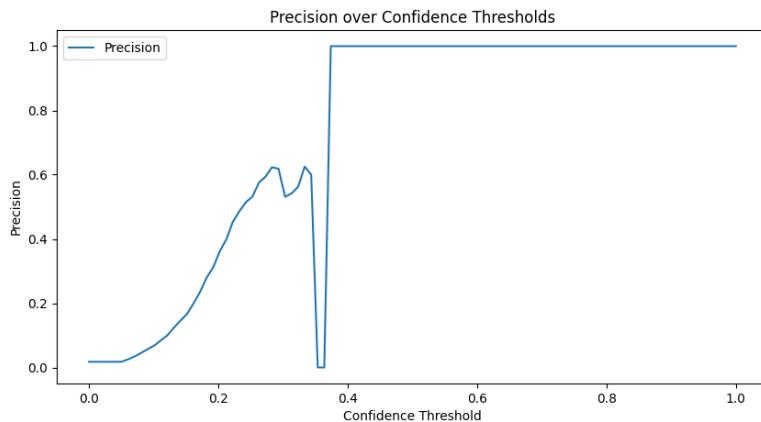


Figure s326. precision\_over\_recall, retinanet, pre-trained=True, epochs=100, data=hadji\_dimitar\_square

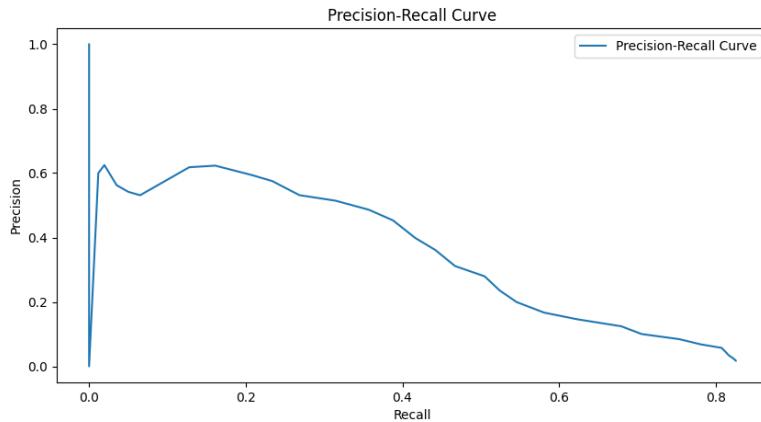


Figure s327. recall\_over\_confidence, retinanet, pre-trained=True, epochs=100, data=hadjji\_dimitar\_square

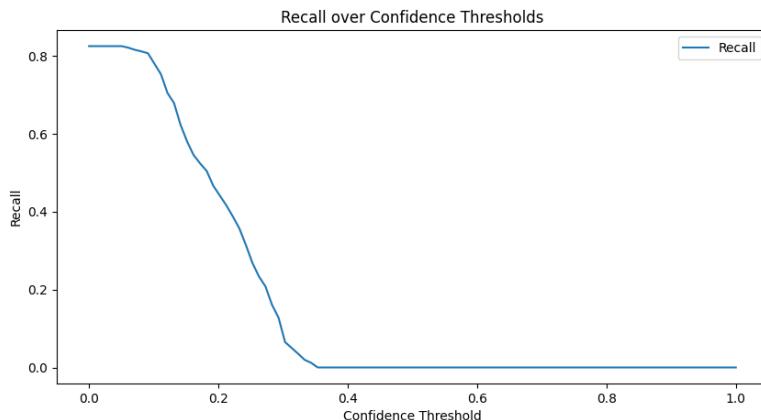


Figure s328. f1\_over\_confidence, retinanet, pre-trained=True, epochs=100, data=keskvaljak

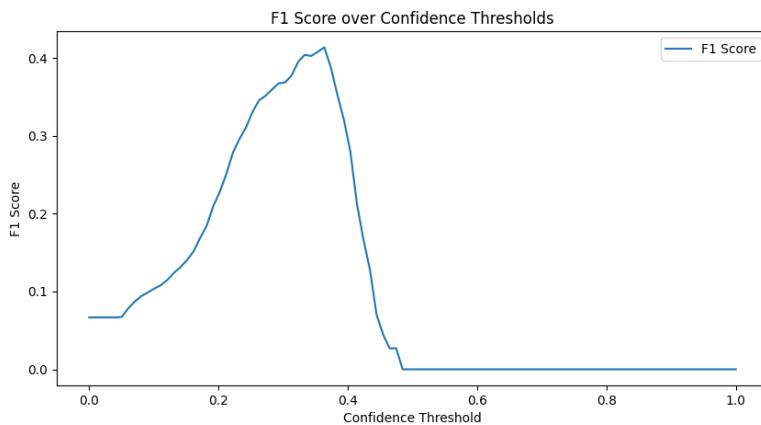


Figure s329. precision\_over\_confidence, retinanet, pre-trained=True, epochs=100, data=keskvaljak

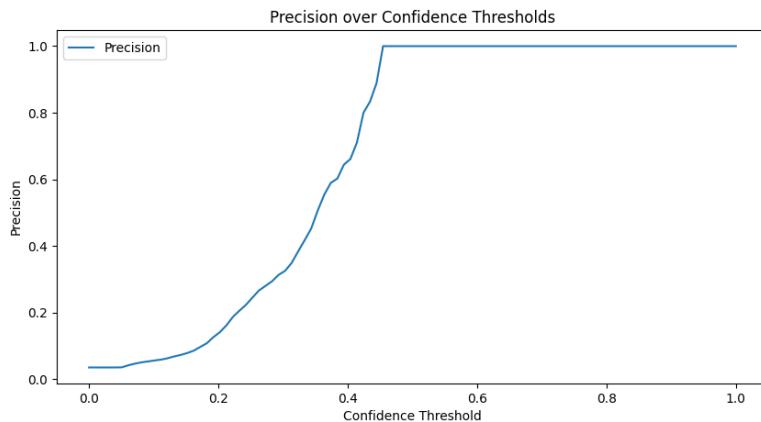


Figure s330. precision\_over\_recall, retinanet, pre-trained=True, epochs=100, data=keskvaljak

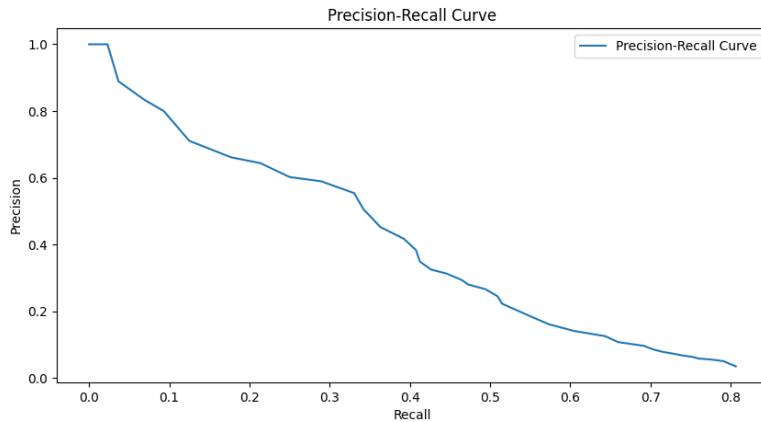


Figure s331. recall\_over\_confidence, retinanet, pre-trained=True, epochs=100, data=keskvaljak

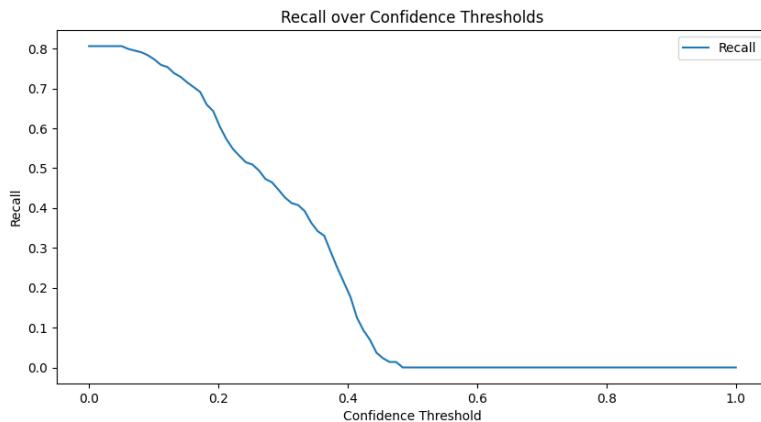


Figure s332. f1\_over\_confidence, retinanet, pre-trained=True, epochs=100, data=kielce\_university\_of\_technology

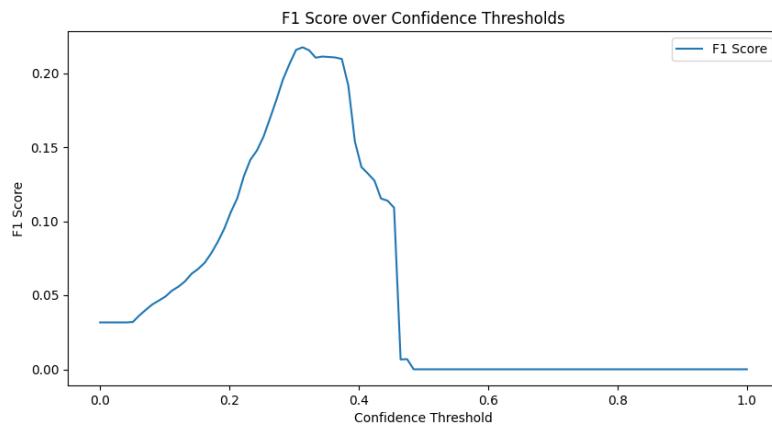


Figure s333. precision\_over\_confidence, retinanet, pre-trained=True, epochs=100, data=kielce\_university\_of\_technology

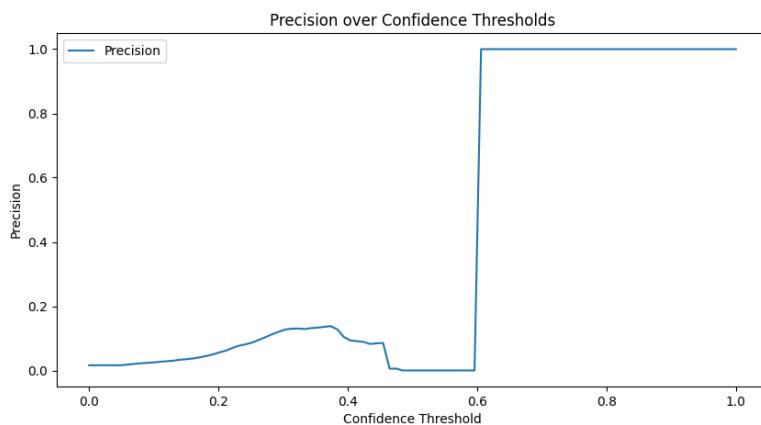


Figure s334. precision\_over\_recall, retinanet, pre-trained=True, epochs=100, data=kielce\_university\_of\_technology

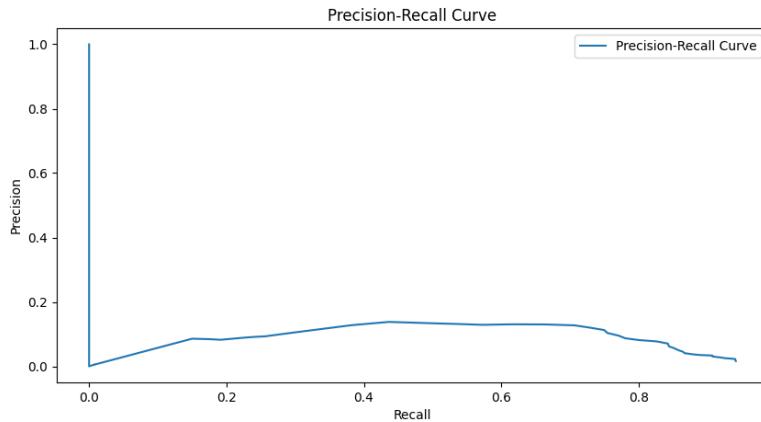


Figure s335. recall\_over\_confidence, retinanet, pre-trained=True, epochs=100, data=kielce\_university\_of\_technology

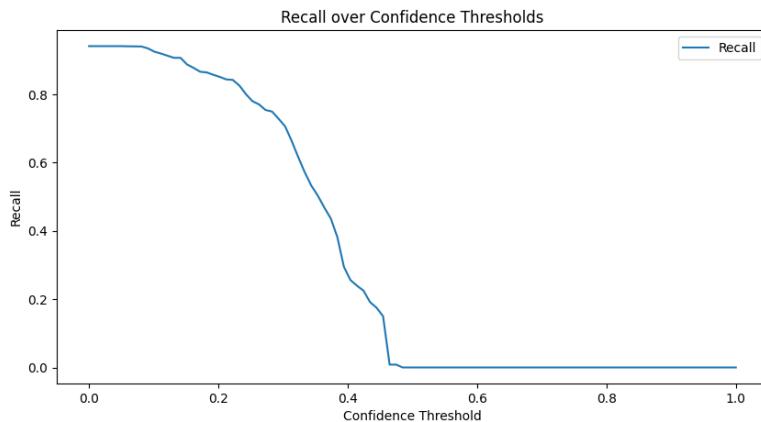


Figure s336. f1\_over\_confidence, retinanet, pre-trained=True, epochs=100, data=toggenburg\_alpaca\_ranch

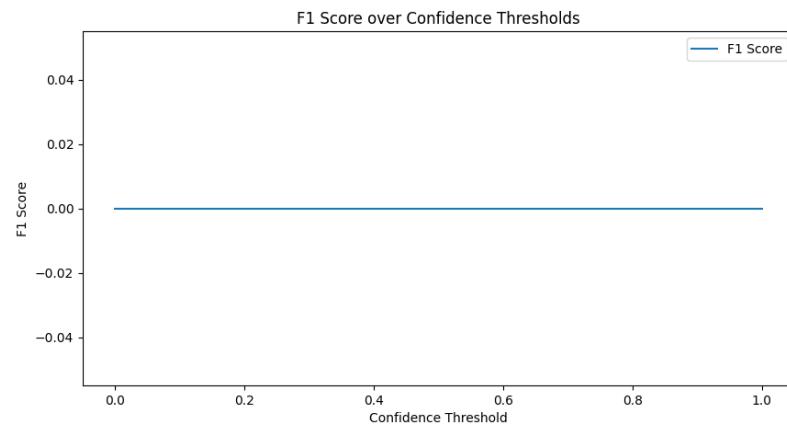


Figure s337. precision\_over\_confidence, retinanet, pre-trained=True, epochs=100, data=toggenburg\_alpaca\_ranch

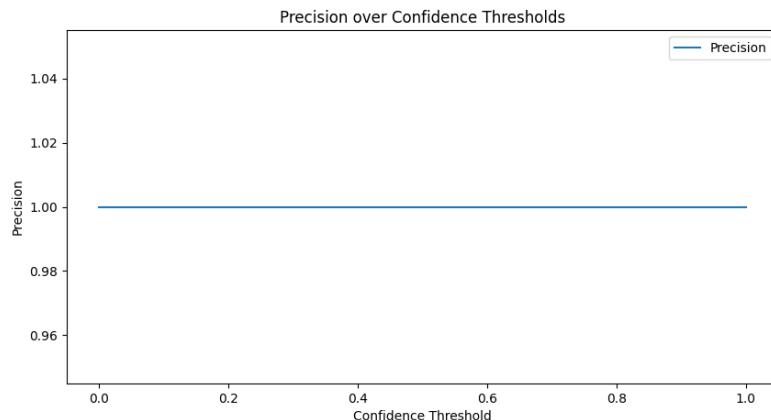


Figure s338. precision\_over\_recall, retinanet, pre-trained=True, epochs=100, data=toggenburg\_alpaca\_ranch

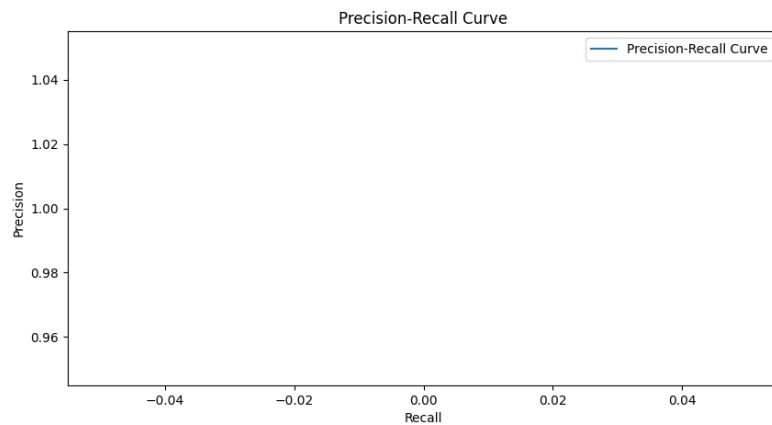


Figure s339. recall\_over\_confidence, retinanet, pre-trained=True, epochs=100, data=toggenburg\_alpaca\_ranch

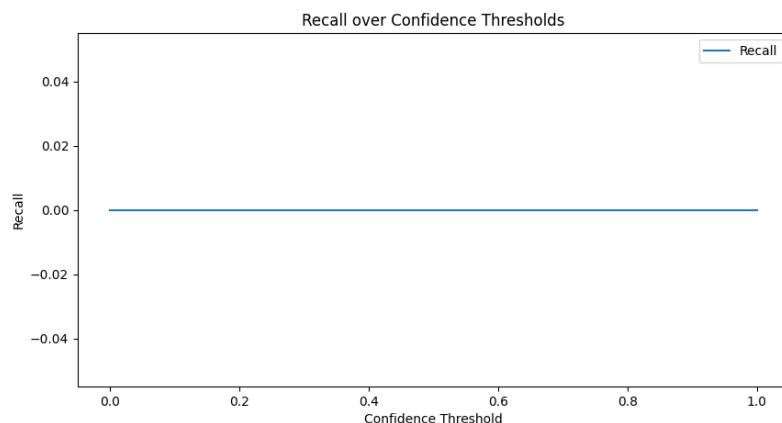


Figure s340. f1\_over\_confidence, retinanet, pre-trained=True, epochs=150, data=duomo

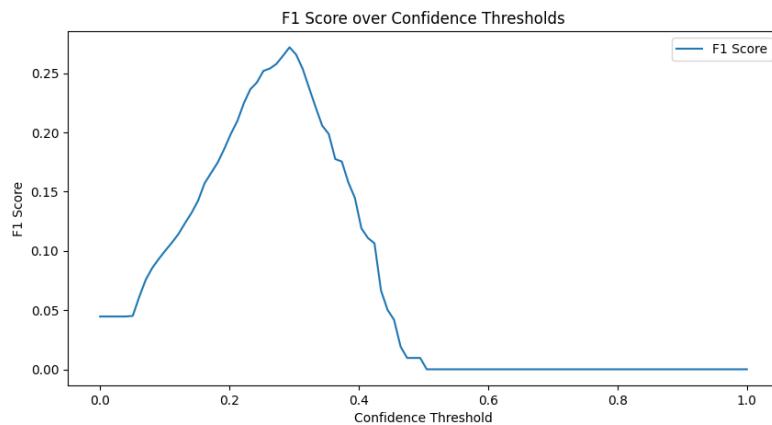


Figure s341. precision\_over\_confidence, retinanet, pre-trained=True, epochs=150, data=duomo

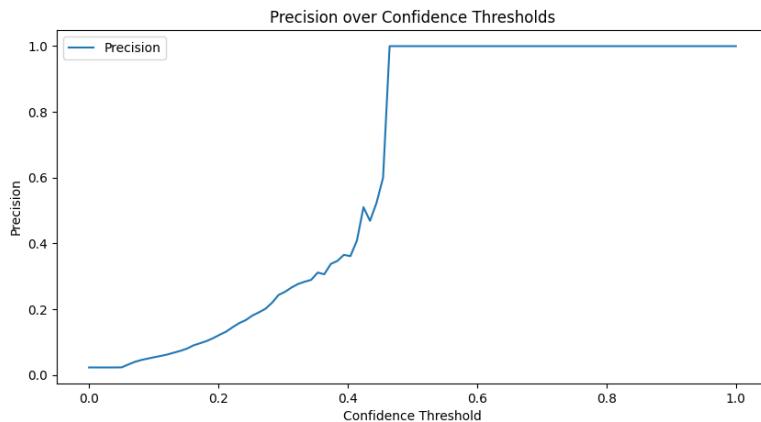


Figure s342. precision\_over\_recall, retinanet, pre-trained=True, epochs=150, data=duomo

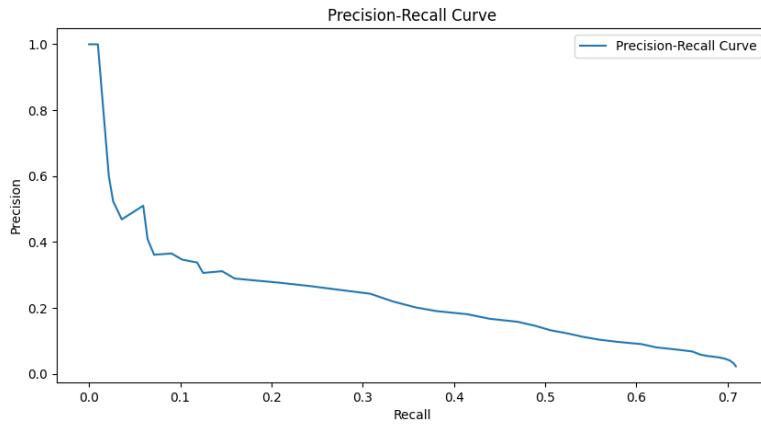


Figure s343. recall\_over\_confidence, retinanet, pre-trained=True, epochs=150, data=duomo

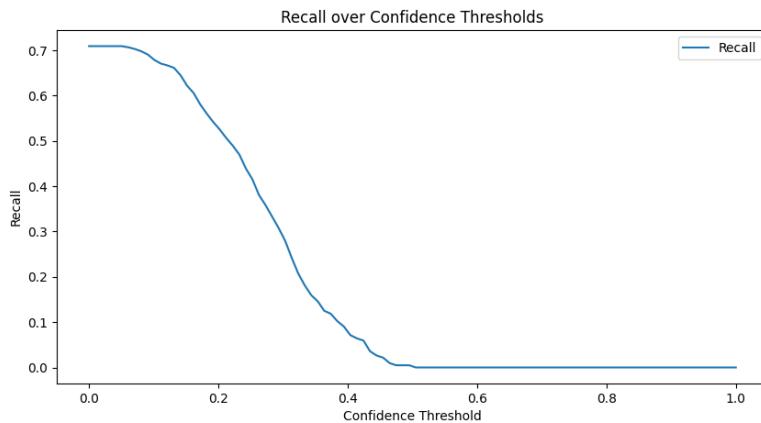


Figure s344. f1\_over\_confidence, retinanet, pre-trained=True, epochs=150, data=hadji\_dimitar\_square

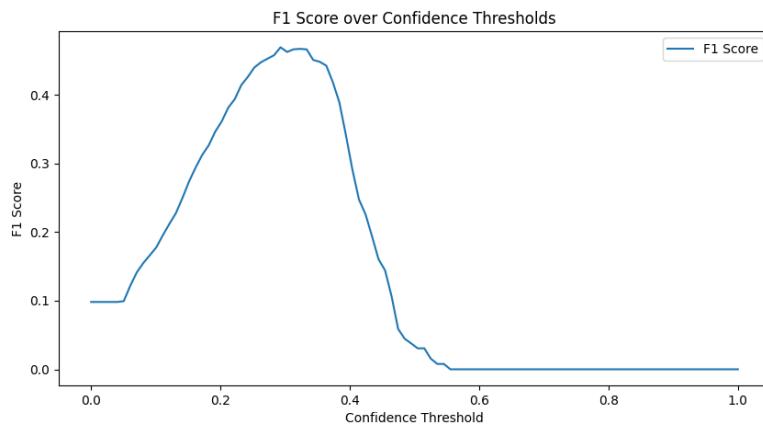


Figure s345. precision\_over\_confidence, retinanet, pre-trained=True, epochs=150, data=hadji\_dimitar\_square

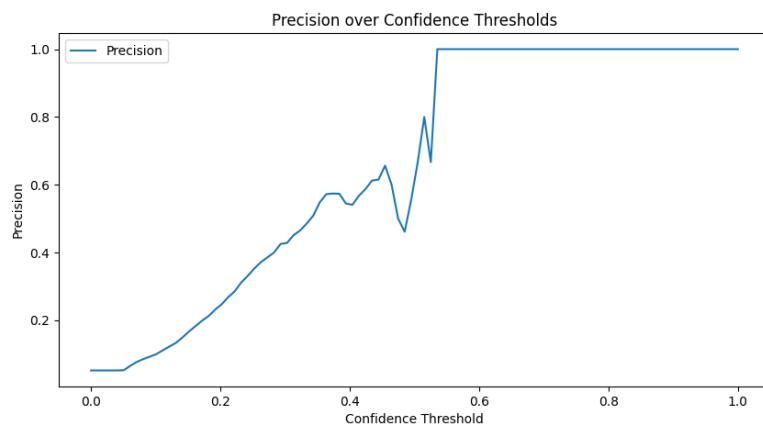


Figure s346. precision\_over\_recall, retinanet, pre-trained=True, epochs=150, data=hadji\_dimitar\_square

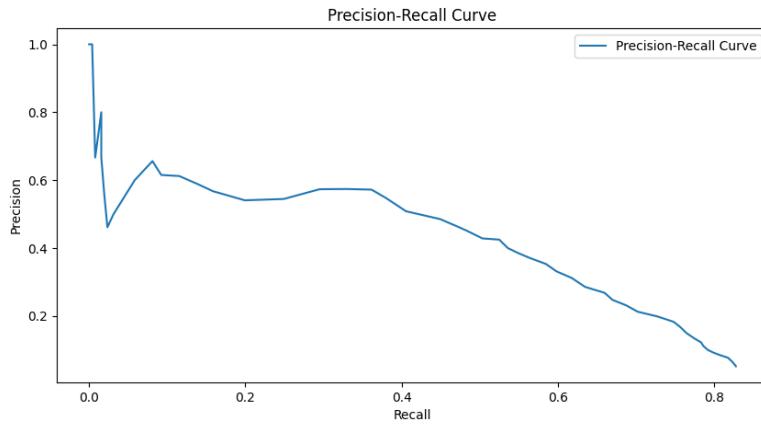


Figure s347. recall\_over\_confidence, retinanet, pre-trained=True, epochs=150, data=hadji\_dimitar\_square

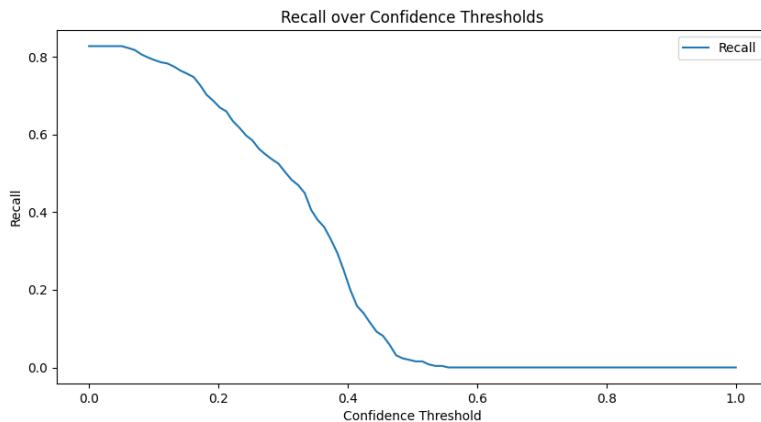


Figure s348. f1\_over\_confidence, retinanet, pre-trained=True, epochs=150, data=keskvaljak

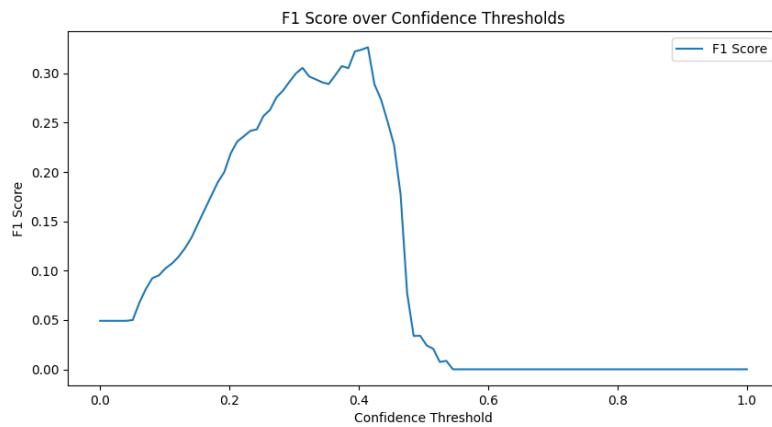


Figure s349. precision\_over\_confidence, retinanet, pre-trained=True, epochs=150, data=keskvaljak

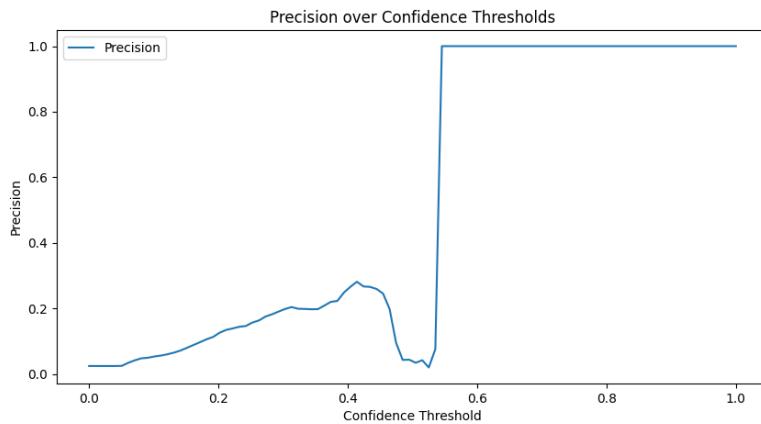


Figure s350. precision\_over\_recall, retinanet, pre-trained=True, epochs=150, data=keskvaljak

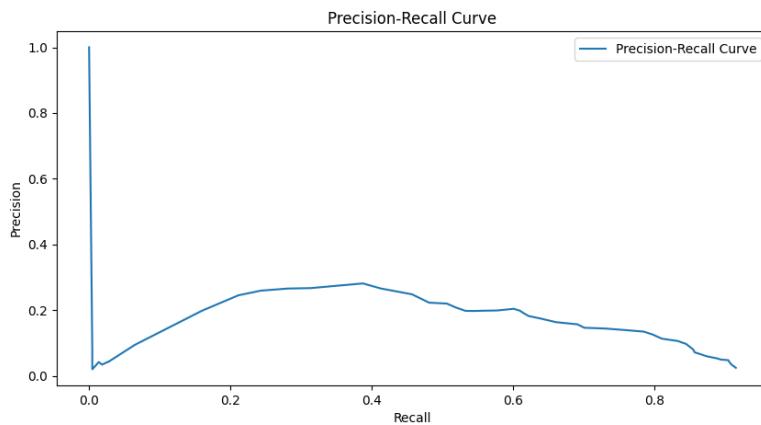


Figure s351. recall\_over\_confidence, retinanet, pre-trained=True, epochs=150, data=keskvaljak

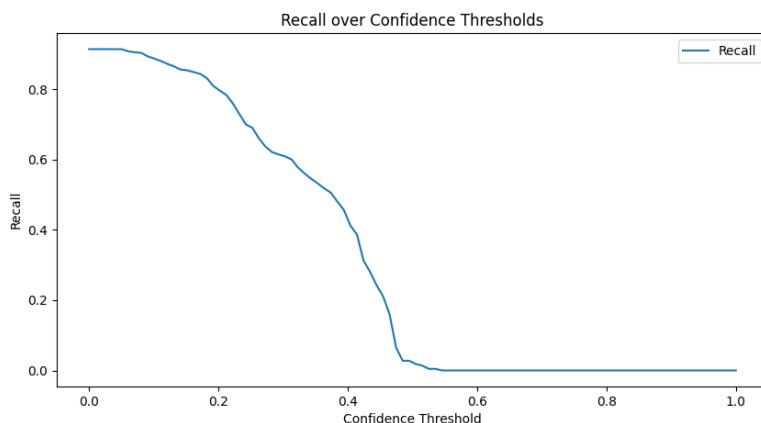


Figure s352. f1\_over\_confidence, retinanet, pre-trained=True, epochs=150, data=kielce\_university\_of\_technology

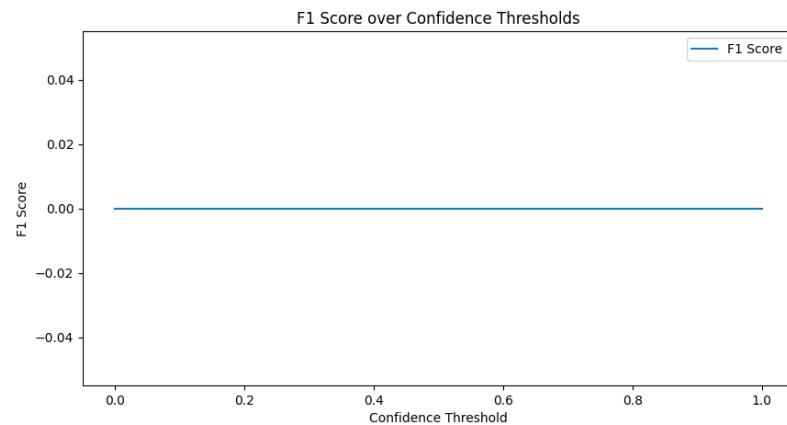


Figure s353. precision\_over\_confidence, retinanet, pre-trained=True, epochs=150, data=kielce\_university\_of\_technology

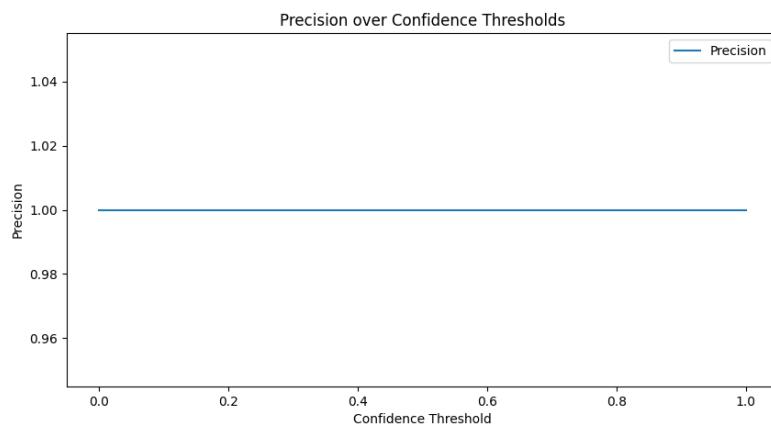


Figure s354. precision\_over\_recall, retinanet, pre-trained=True, epochs=150, data=kielce\_university\_of\_technology

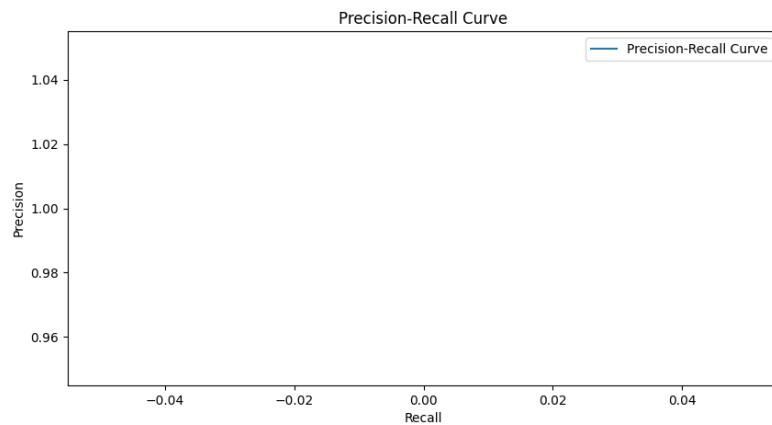


Figure s355. recall\_over\_confidence, retinanet, pre-trained=True, epochs=150, data=kielce\_university\_of\_technology

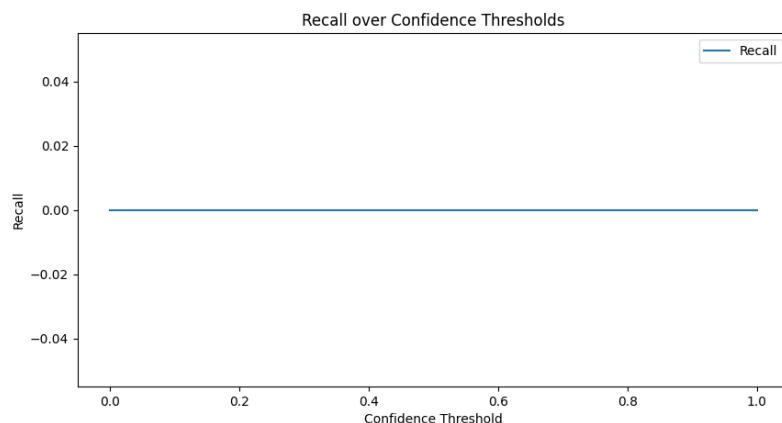


Figure s356. f1\_over\_confidence, retinanet, pre-trained=True, epochs=150, data=toggenburg\_alpaca\_ranch

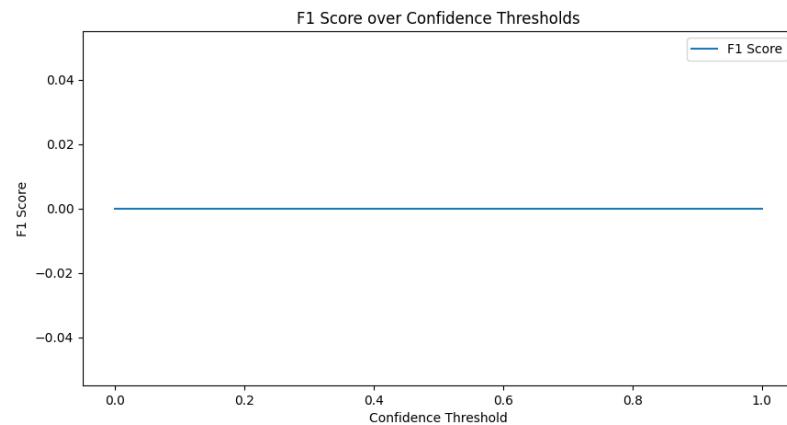


Figure s357. precision\_over\_confidence, retinanet, pre-trained=True, epochs=150, data=toggenburg\_alpaca\_ranch

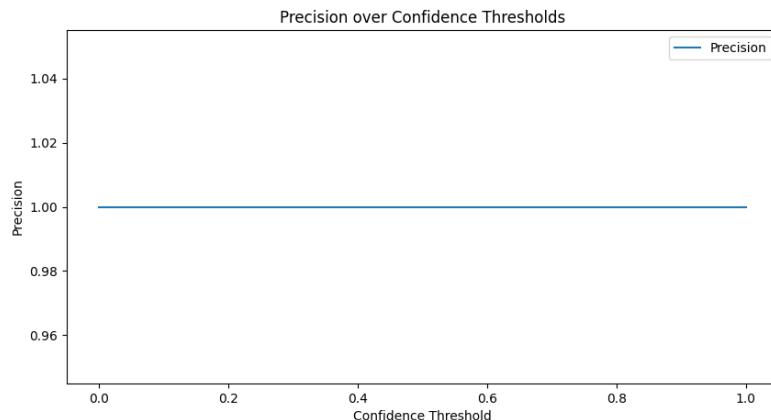


Figure s358. precision\_over\_recall, retinanet, pre-trained=True, epochs=150, data=toggenburg\_alpaca\_ranch

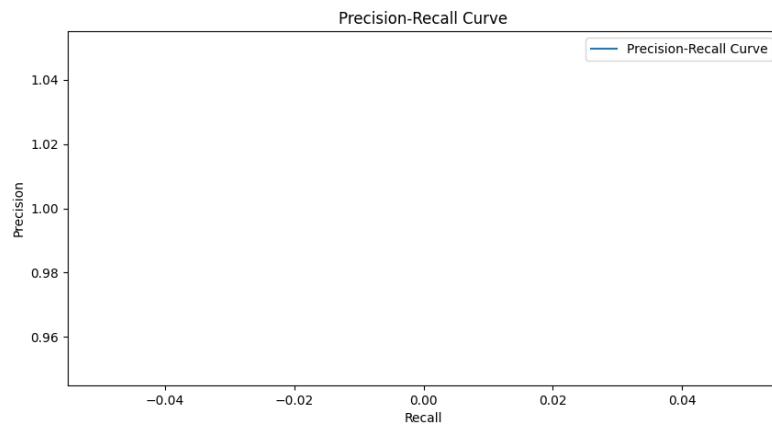


Figure s359. recall\_over\_confidence, retinanet, pre-trained=True, epochs=150, data=toggenburg\_alpaca\_ranch

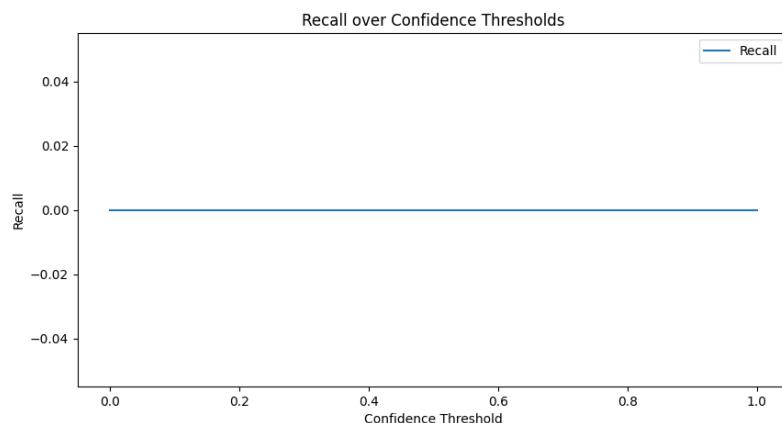


Figure s360. f1\_over\_confidence, yolov8n, pre-trained=True, epochs=50, data=duomo, hyperparameter-tuned=False

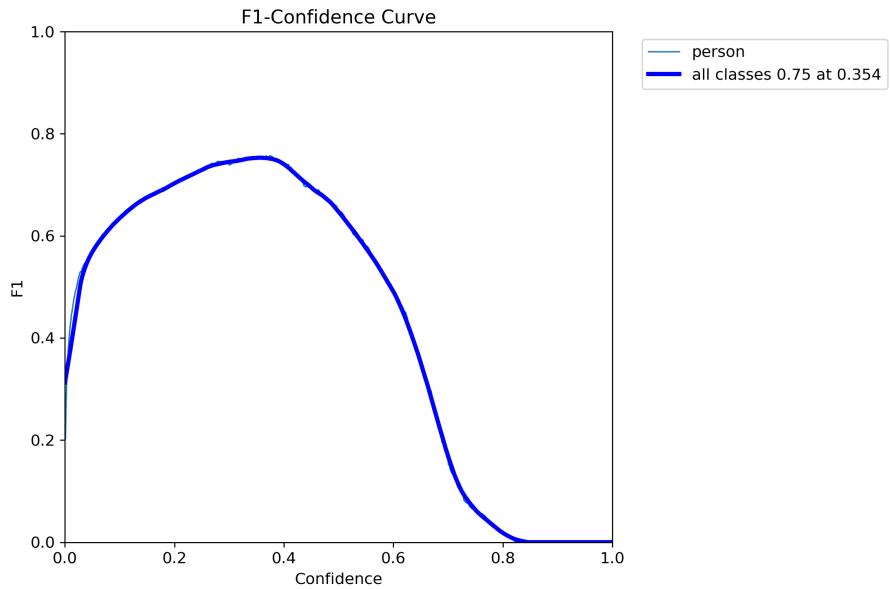


Figure s361. precision\_over\_recall, yolov8n, pre-trained=True, epochs=50, data=duomo, hyperparameter-tuned=False

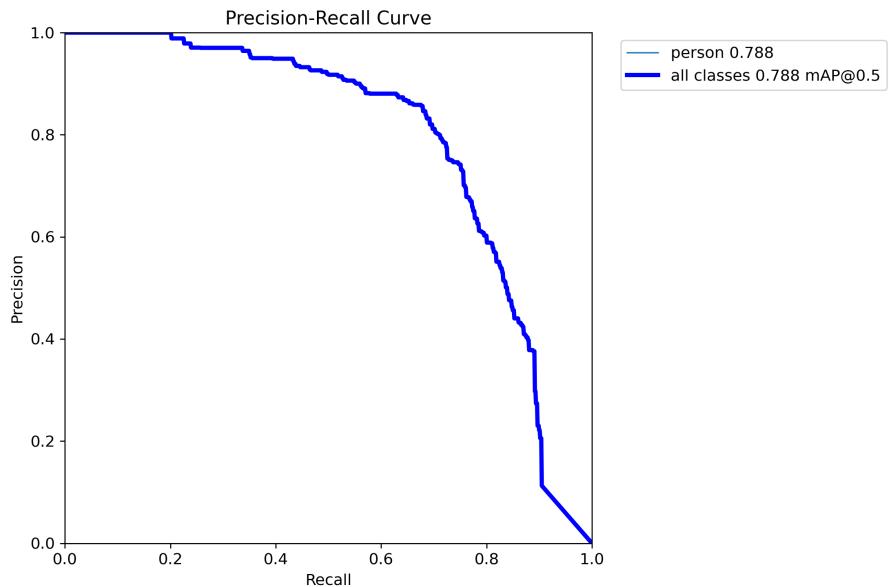


Figure s362. precision\_over\_confidence, yolov8n, pre-trained=True, epochs=50, data=duomo, hyperparameter-tuned=False

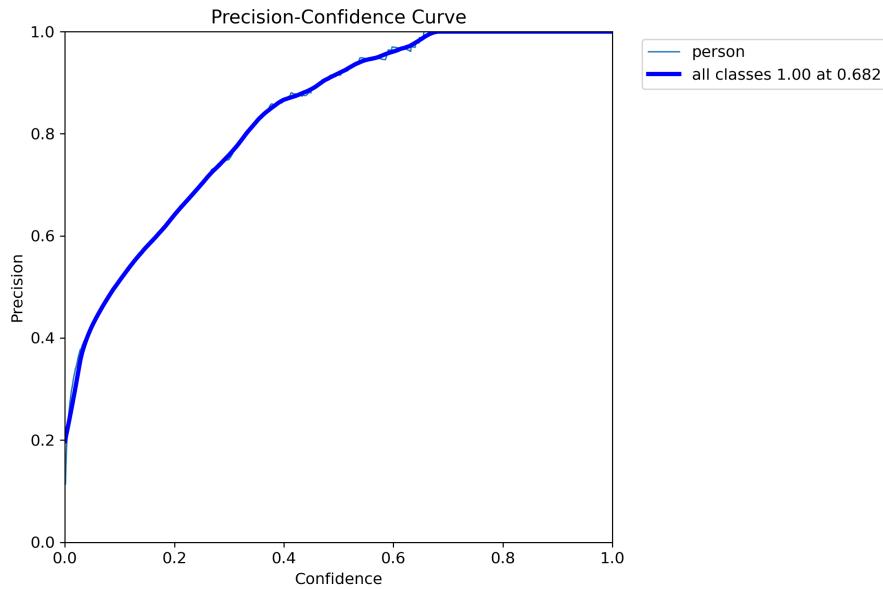


Figure s363. recall\_over\_confidence, yolov8n, pre-trained=True, epochs=50, data=duomo, hyperparameter-tuned=False

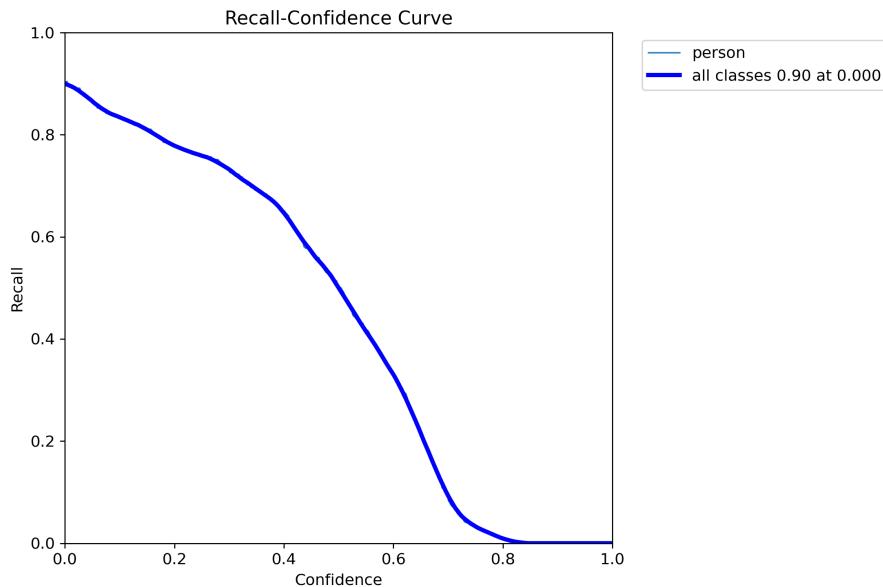


Figure s364. confusion\_matrix, yolov8n, pre-trained=True, epochs=50, data=duomo, hyperparameter-tuned=False

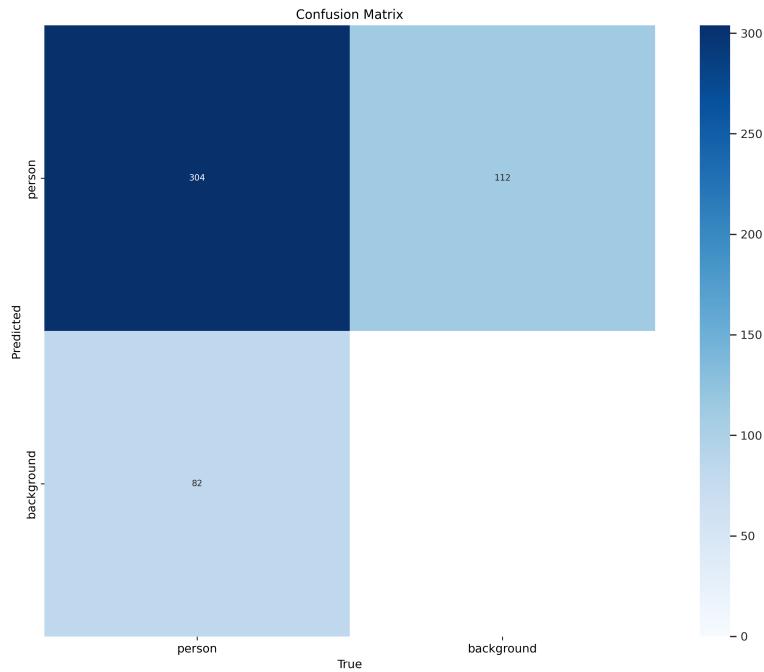


Figure s365. confusion\_matrix\_normalized, yolov8n, pre-trained=True, epochs=50, data=duomo, hyperparameter-tuned=False

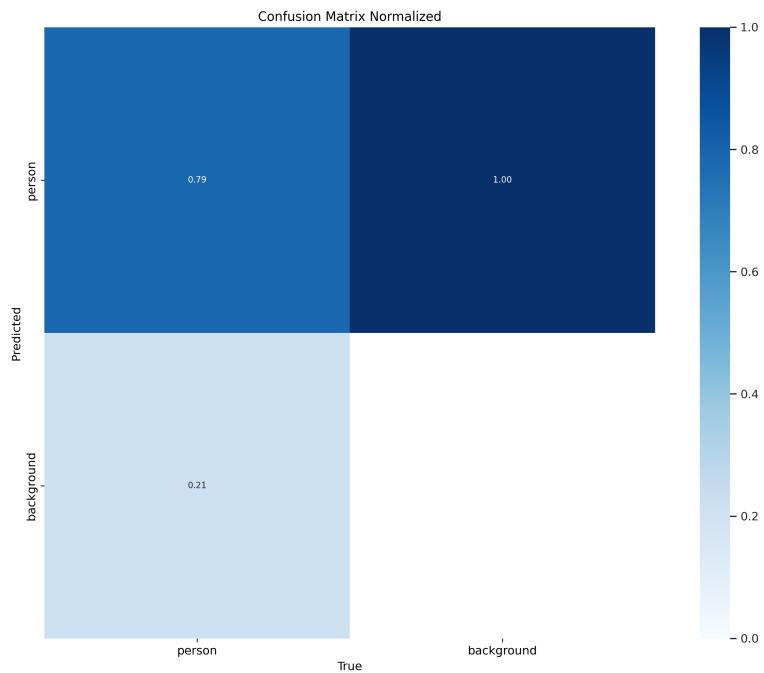


Figure s366. f1\_over\_confidence, yolov8n, pre-trained=True, epochs=100, data=duomo, hyperparameter-tuned=False

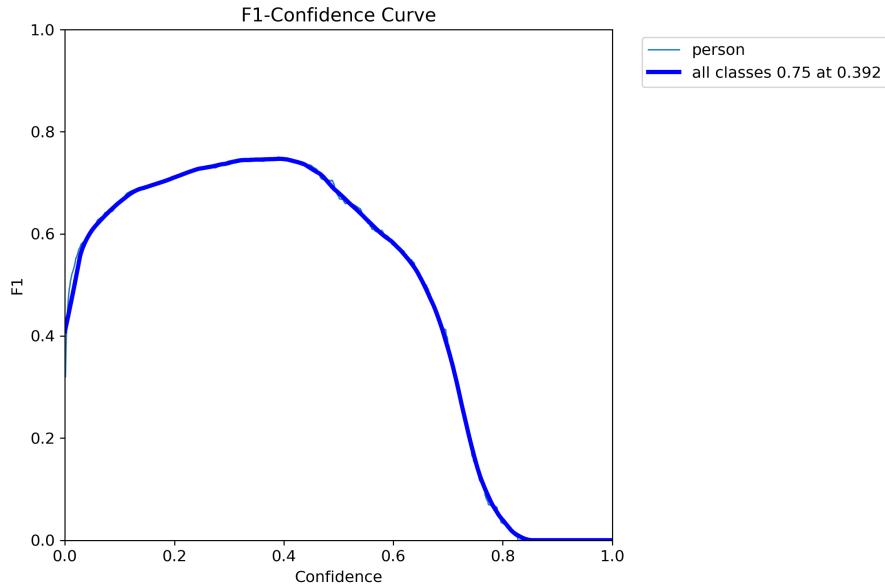


Figure s367. precision\_over\_recall, yolov8n, pre-trained=True, epochs=100, data=duomo, hyperparameter-tuned=False

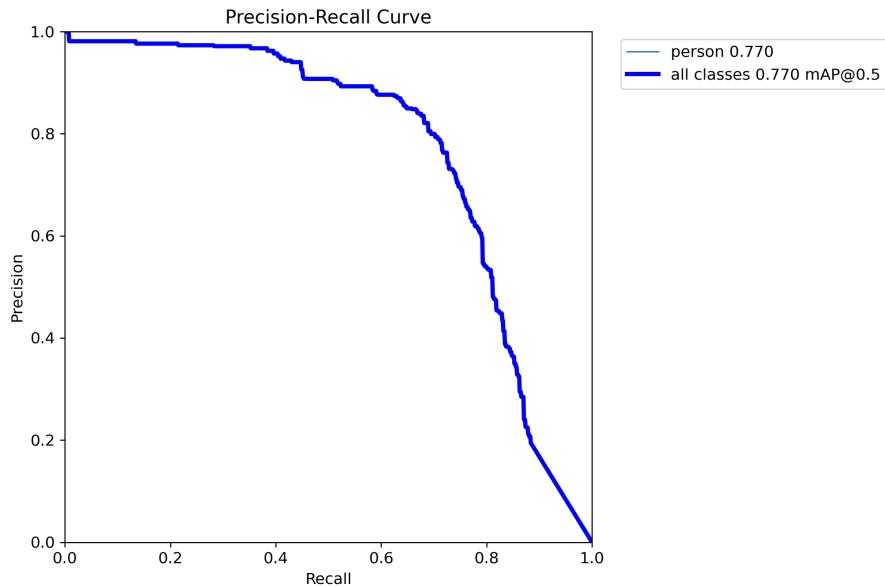


Figure s368. precision\_over\_confidence, yolov8n, pre-trained=True, epochs=100, data=duomo, hyperparameter-tuned=False

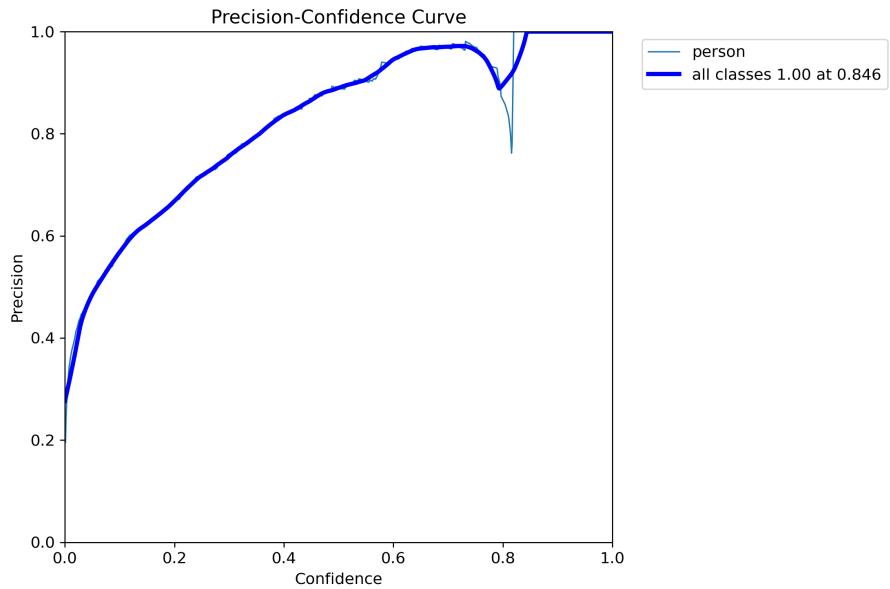


Figure s369. recall\_over\_confidence, yolov8n, pre-trained=True, epochs=100, data=duomo, hyperparameter-tuned=False

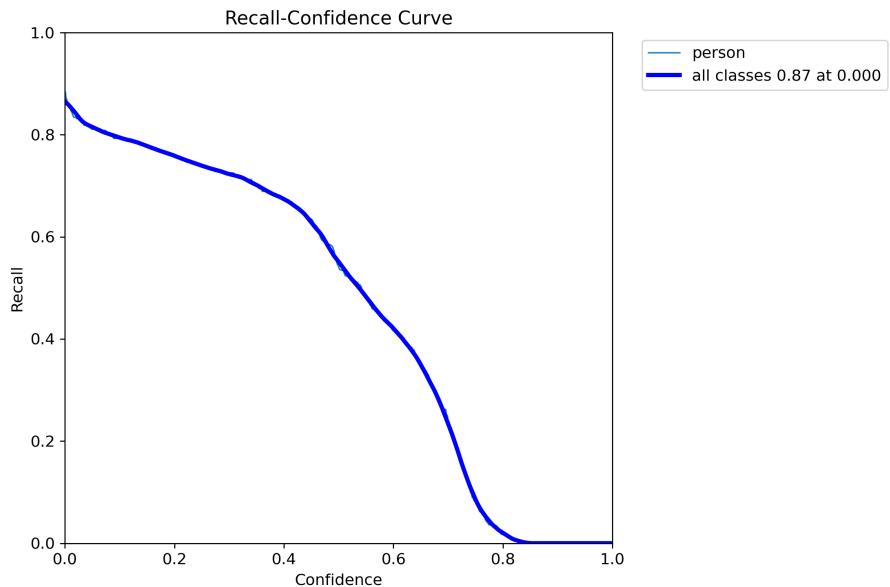


Figure s370. confusion\_matrix, yolov8n, pre-trained=True, epochs=100, data=duomo, hyperparameter-tuned=False

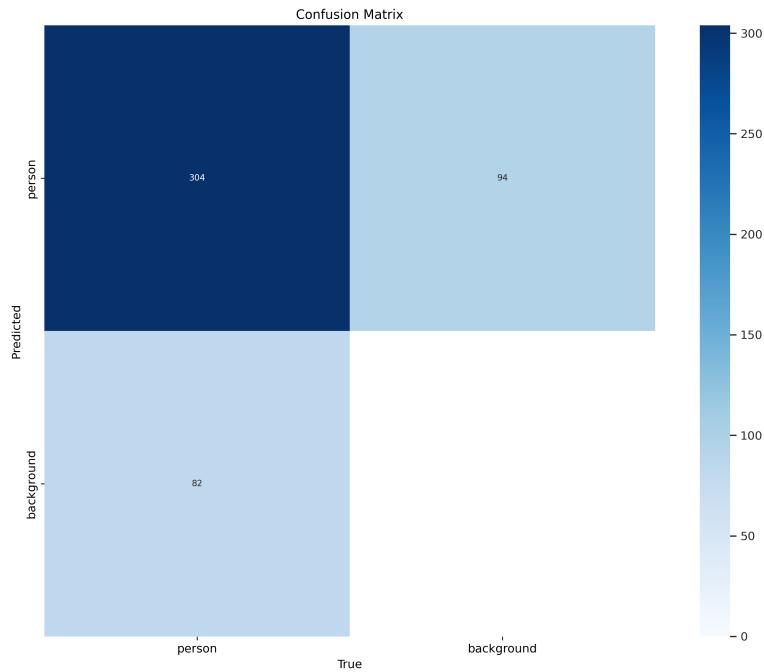


Figure s371. confusion\_matrix\_normalized, yolov8n, pre-trained=True, epochs=100, data=duomo, hyperparameter-tuned=False

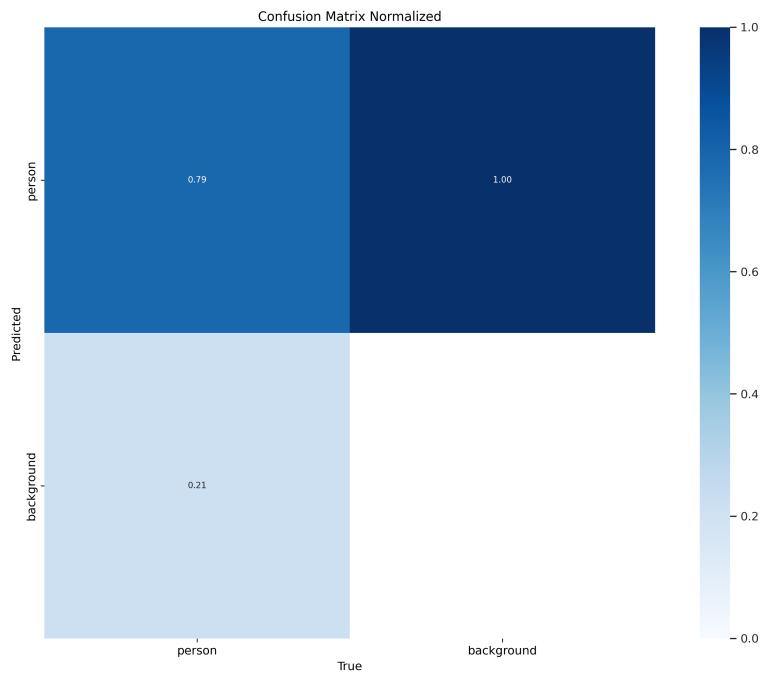


Figure s372. f1\_over\_confidence, yolov8n, pre-trained=True, epochs=150, data=duomo, hyperparameter-tuned=False

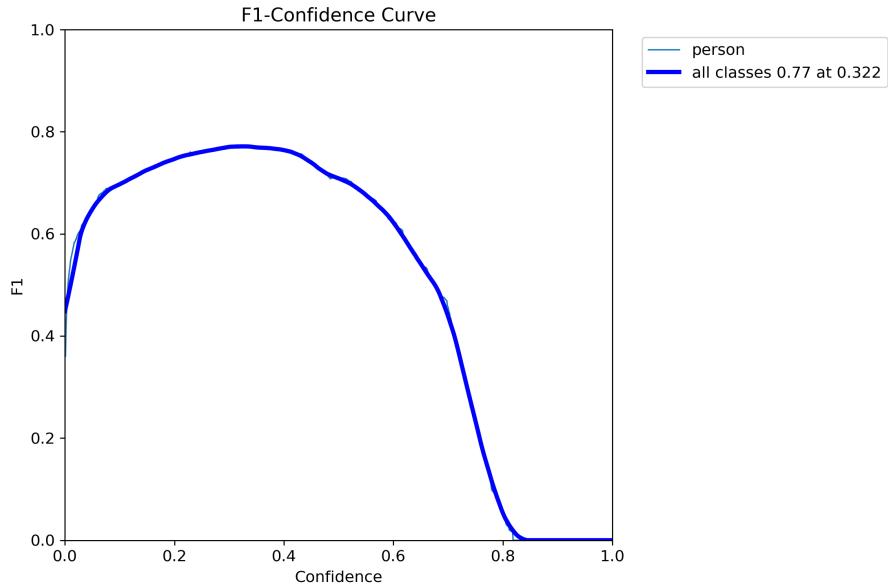


Figure s373. precision\_over\_recall, yolov8n, pre-trained=True, epochs=150, data=duomo, hyperparameter-tuned=False

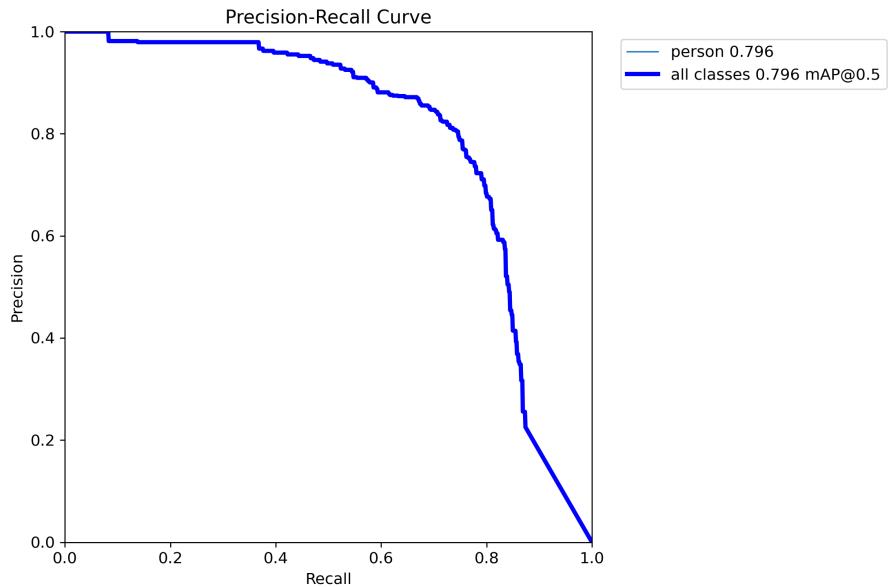


Figure s374. precision\_over\_confidence, yolov8n, pre-trained=True, epochs=150, data=duomo, hyperparameter-tuned=False

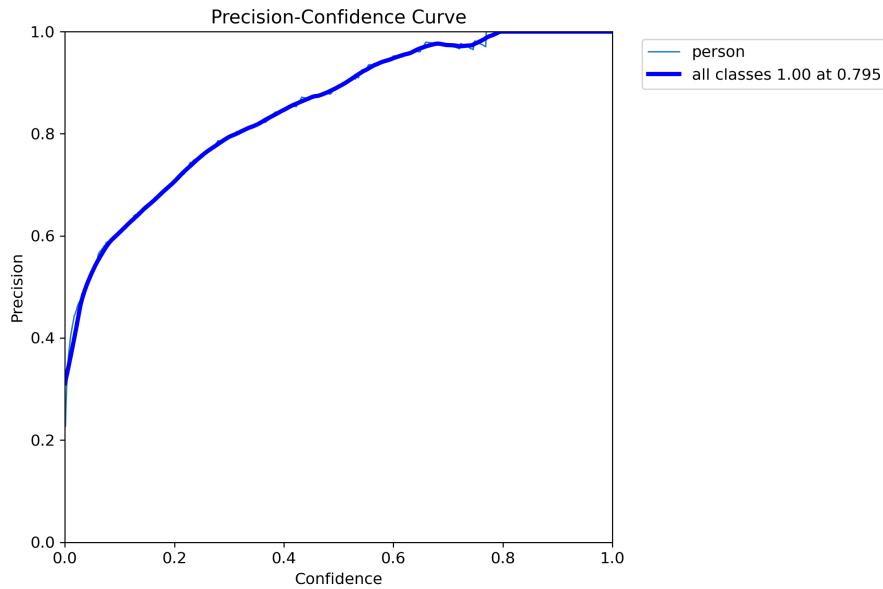


Figure s375. recall\_over\_confidence, yolov8n, pre-trained=True, epochs=150, data=duomo, hyperparameter-tuned=False

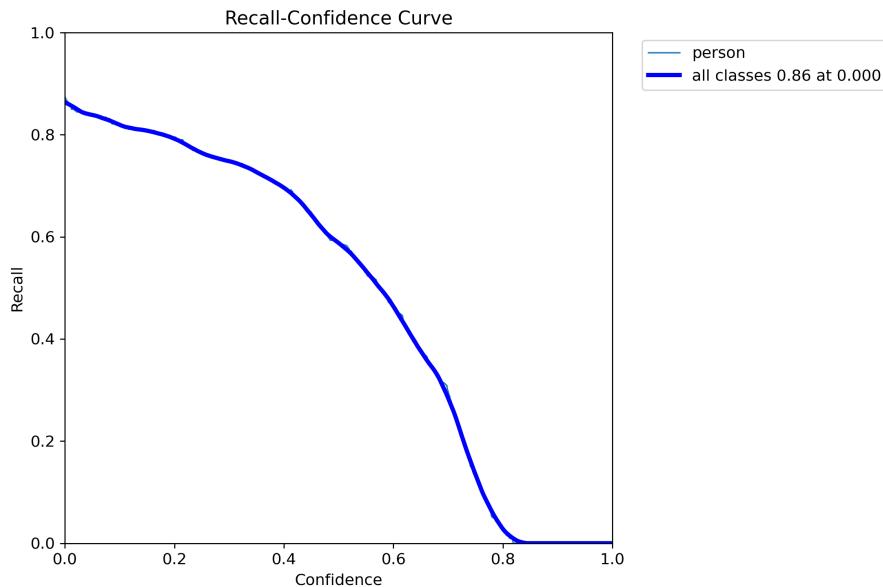


Figure s376. confusion\_matrix, yolov8n, pre-trained=True, epochs=150, data=duomo, hyperparameter-tuned=False

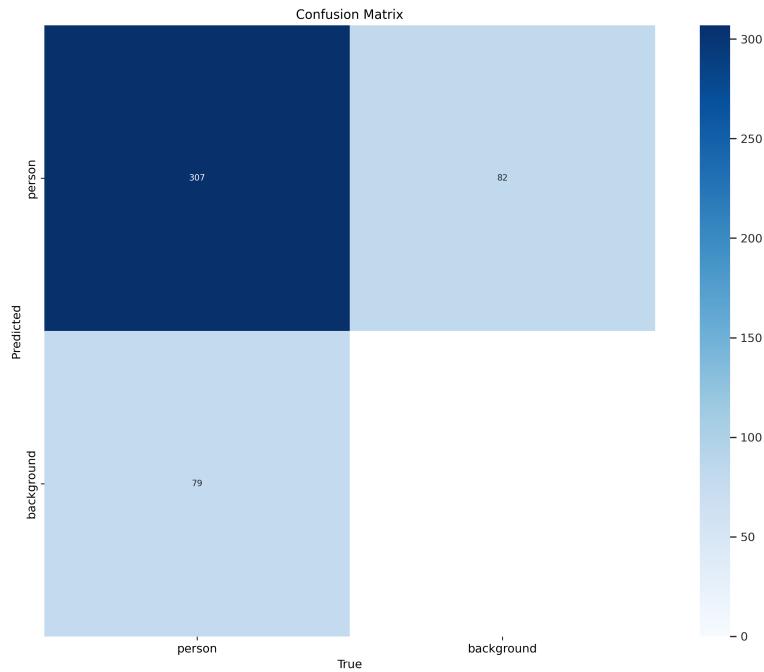


Figure s377. confusion\_matrix\_normalized, yolov8n, pre-trained=True, epochs=150, data=duomo, hyperparameter-tuned=False

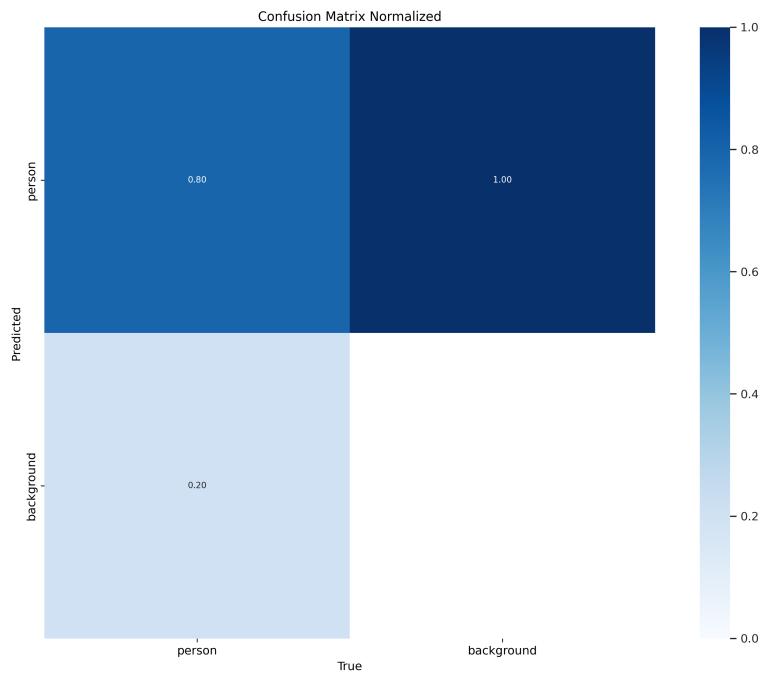


Figure s378. f1\_over\_confidence, yolov8n, pre-trained=True, epochs=50, data=hadji\_dimitar\_square, hyperparameter-tuned=False

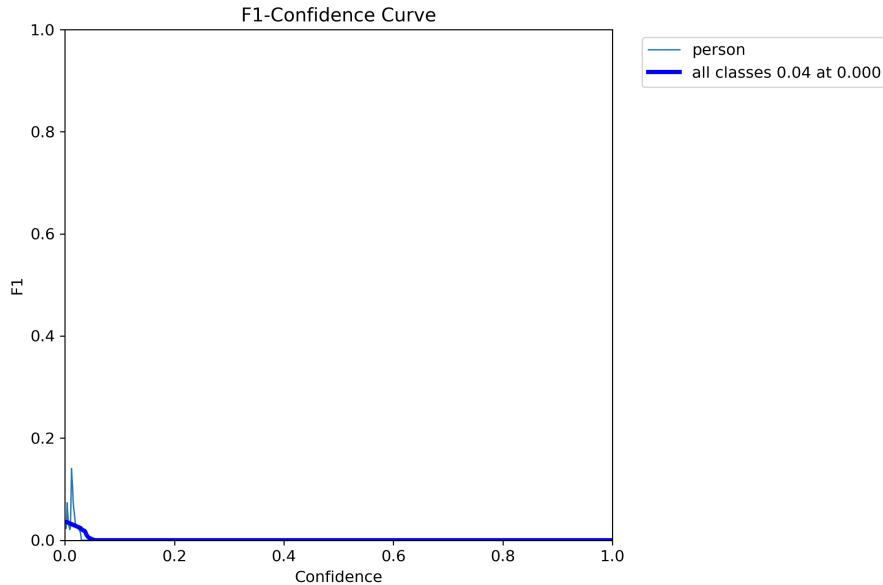


Figure s379. precision\_over\_recall, yolov8n, pre-trained=True, epochs=50, data=hadji\_dimitar\_square, hyperparameter-tuned=False

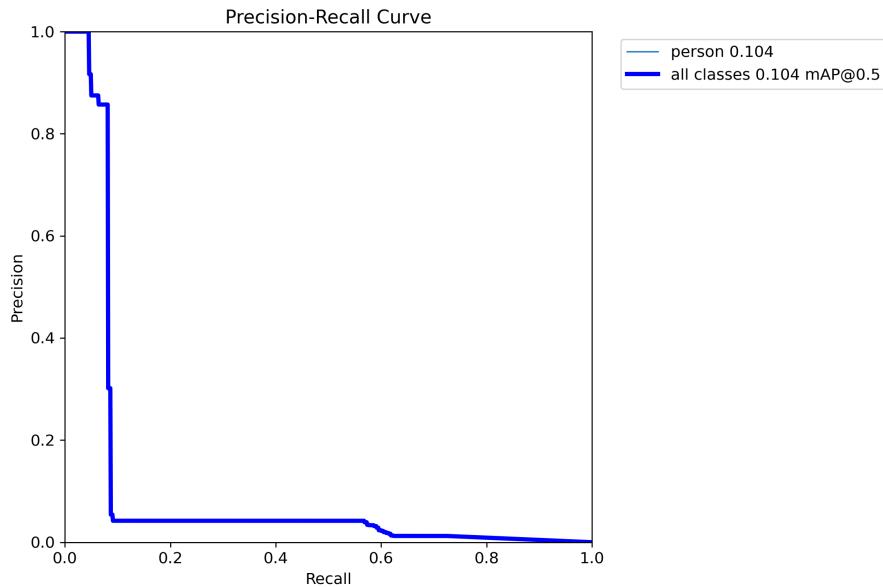


Figure s380. precision\_over\_confidence, yolov8n, pre-trained=True, epochs=50, data=hadji\_dimitar\_square, hyperparameter-tuned=False

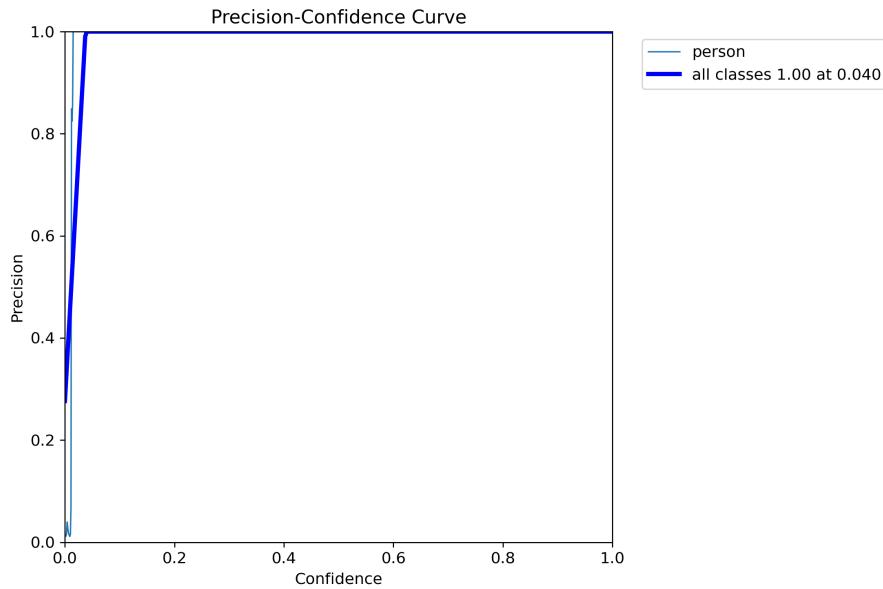


Figure s381. recall\_over\_confidence, yolov8n, pre-trained=True, epochs=50, data=hadji\_dimitar\_square, hyperparameter-tuned=False

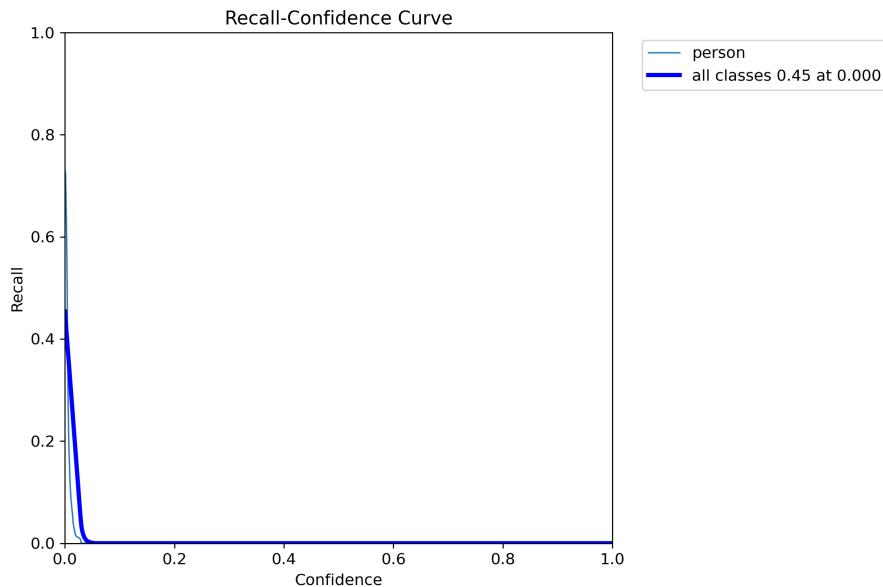


Figure s382. confusion\_matrix, yolov8n, pre-trained=True, epochs=50, data=hadji\_dimitar\_square, hyperparameter-tuned=False

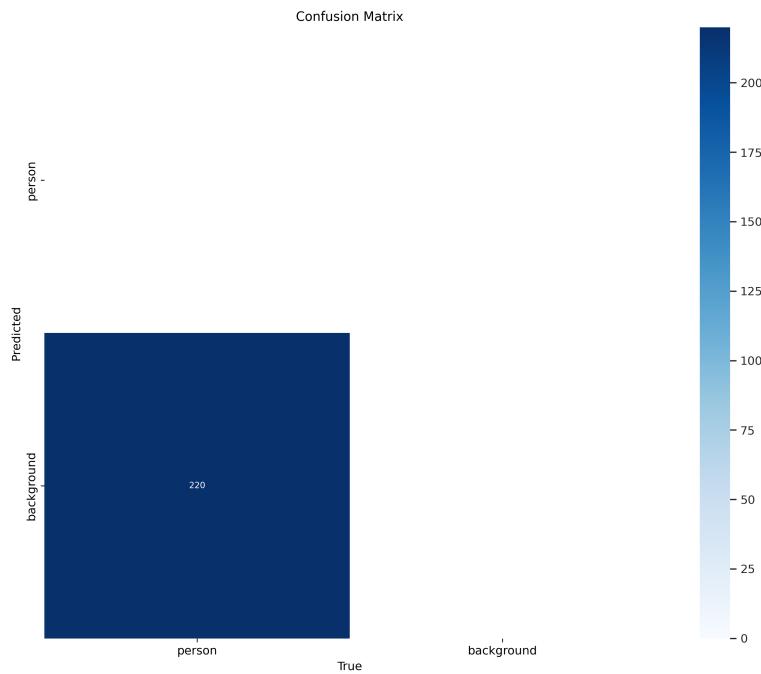


Figure s383. confusion\_matrix\_normalized, yolov8n, pre-trained=True, epochs=50, data=hadji\_dimitar\_square, hyperparameter-tuned=False

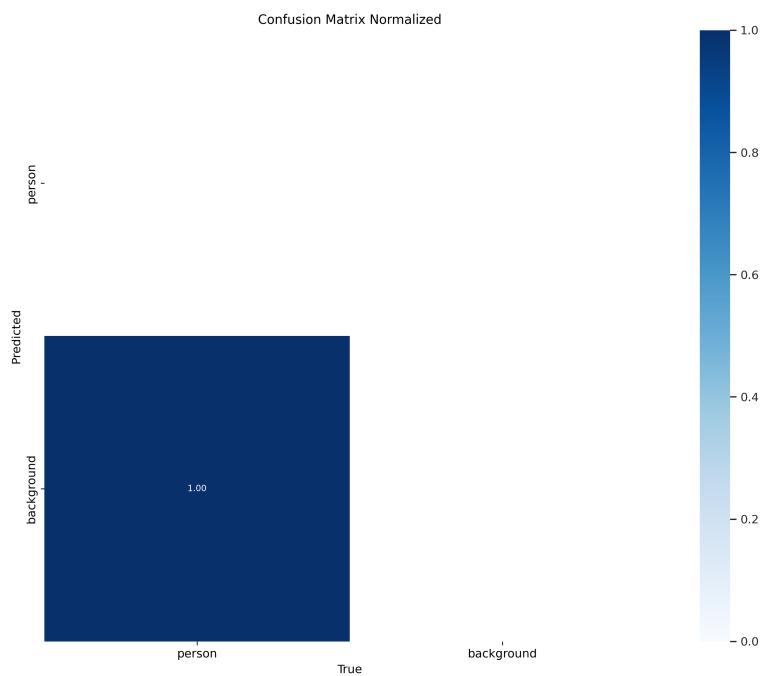


Figure s384. f1\_over\_confidence, yolov8n, pre-trained=True, epochs=100, data=hadji\_dimitar\_square, hyperparameter-tuned=False

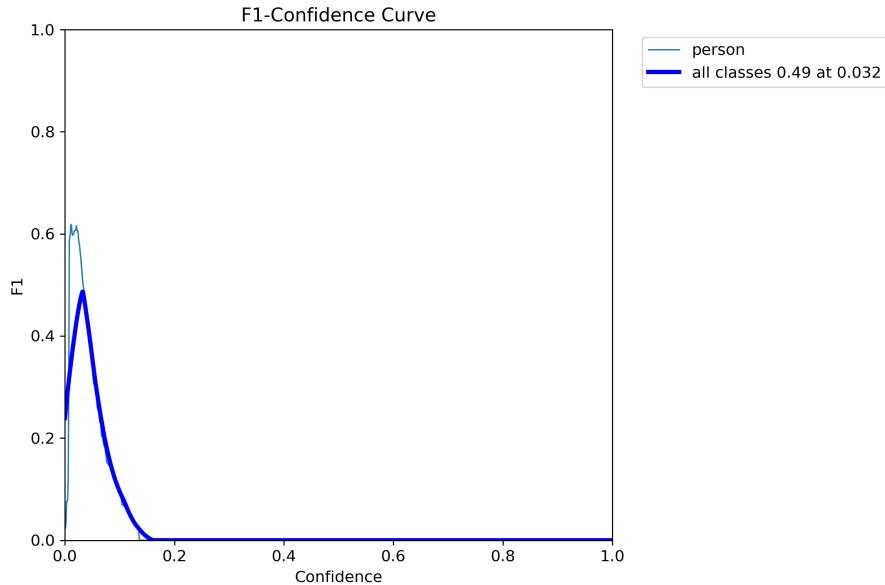


Figure s385. precision\_over\_recall, yolov8n, pre-trained=True, epochs=100, data=hadji\_dimitar\_square, hyperparameter-tuned=False

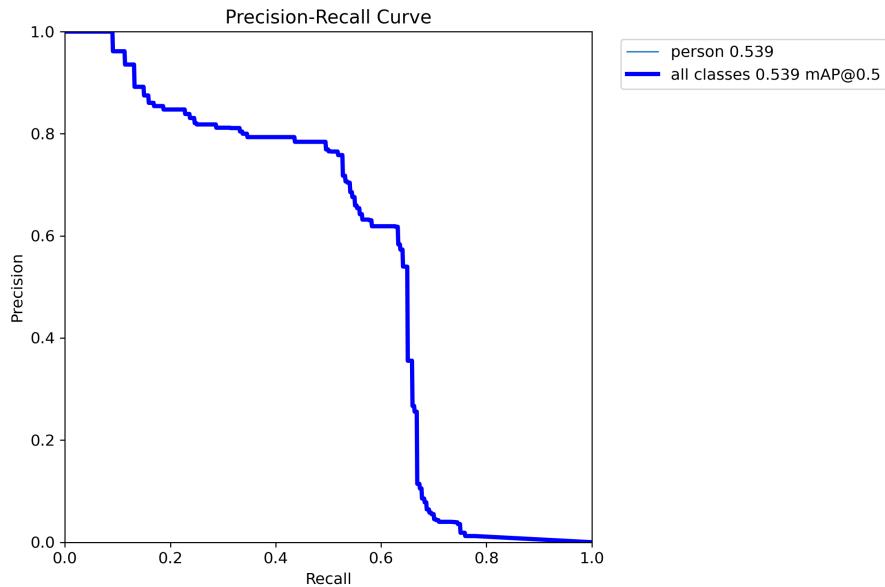


Figure s386. precision\_over\_confidence, yolov8n, pre-trained=True, epochs=100, data=hadji\_dimitar\_square, hyperparameter-tuned=False

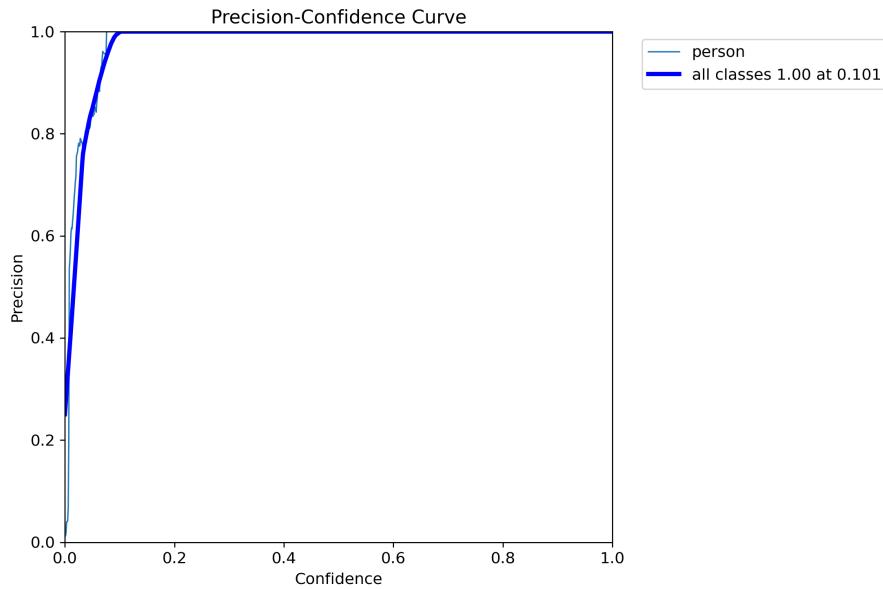


Figure s387. recall\_over\_confidence, yolov8n, pre-trained=True, epochs=100, data=hadji\_dimitar\_square, hyperparameter-tuned=False

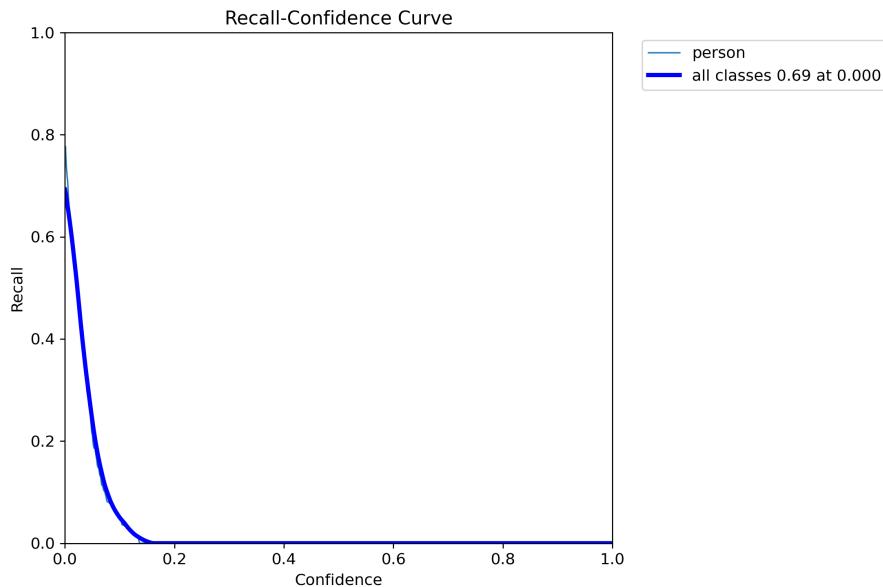


Figure s388. confusion\_matrix, yolov8n, pre-trained=True, epochs=100, data=hadji\_dimitar\_square, hyperparameter-tuned=False

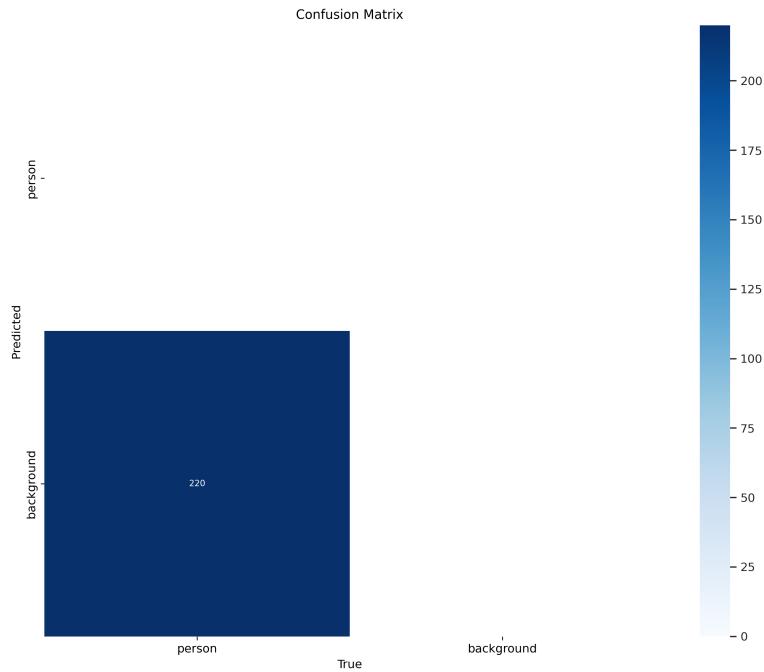


Figure s389. confusion\_matrix\_normalized, yolov8n, pre-trained=True, epochs=100, data=hadjidimitar\_square, hyperparameter-tuned=False

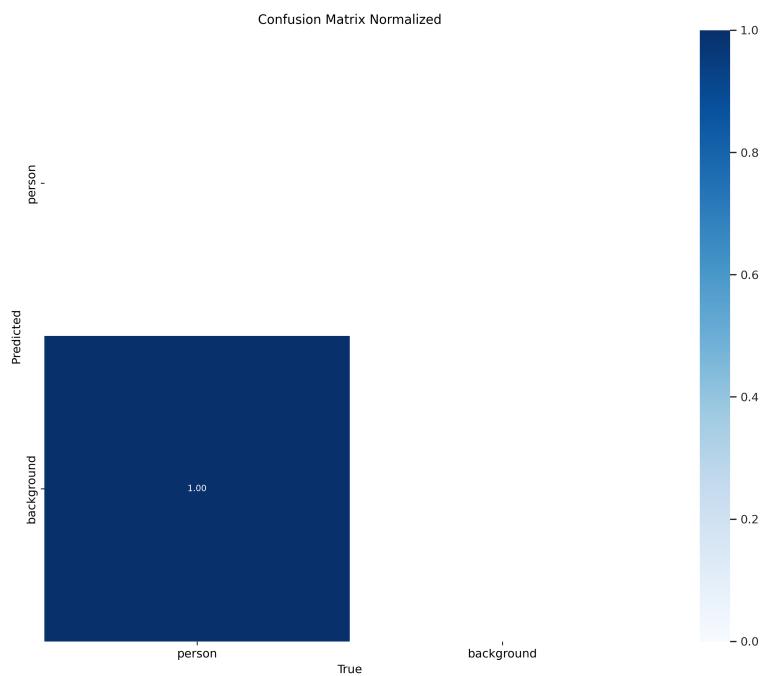


Figure s390. f1\_over\_confidence, yolov8n, pre-trained=True, epochs=150, data=hadji\_dimitar\_square, hyperparameter-tuned=False

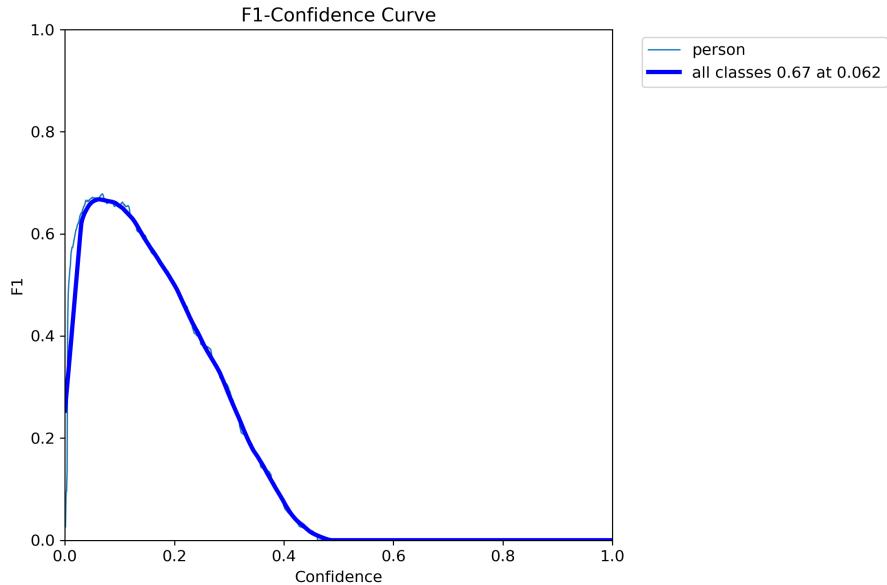


Figure s391. precision\_over\_recall, yolov8n, pre-trained=True, epochs=150, data=hadji\_dimitar\_square, hyperparameter-tuned=False

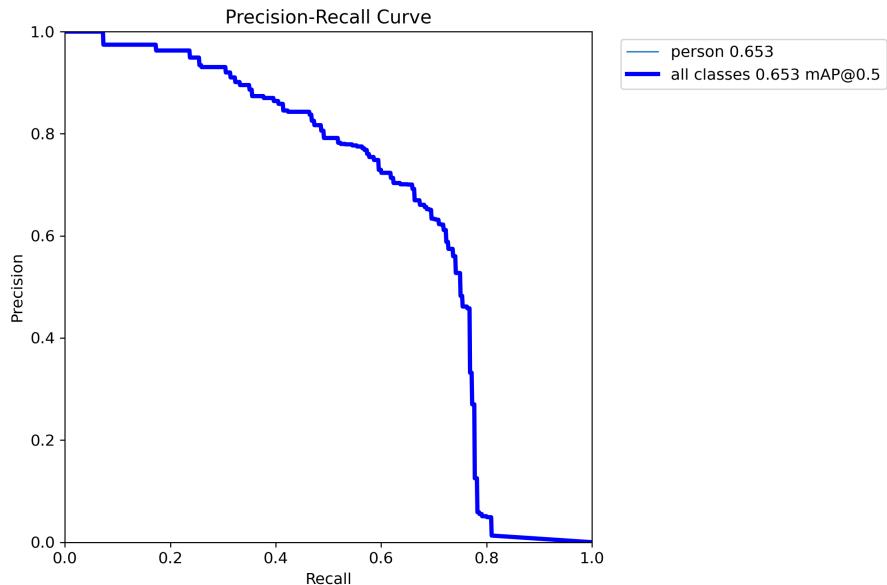


Figure s392. precision\_over\_confidence, yolov8n, pre-trained=True, epochs=150, data=hadji\_dimitar\_square, hyperparameter-tuned=False

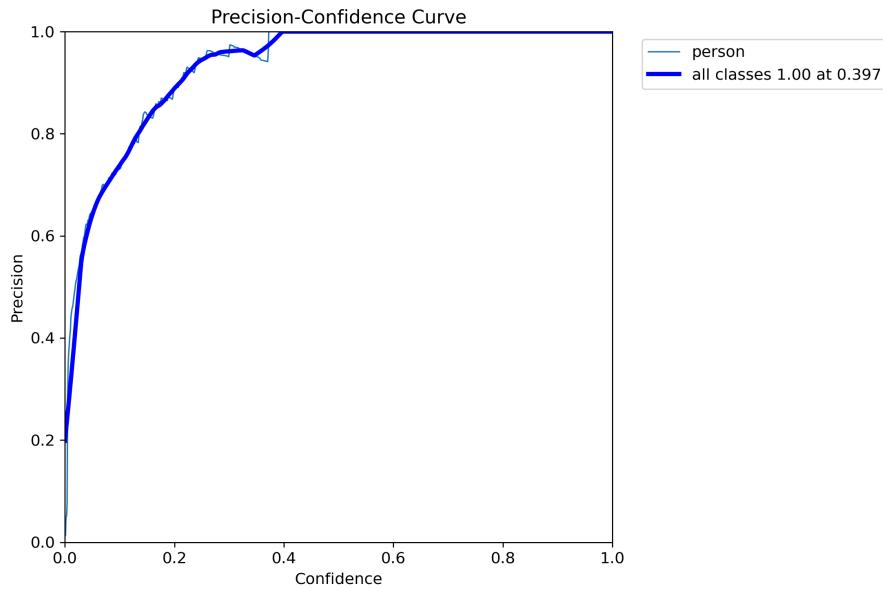


Figure s393. recall\_over\_confidence, yolov8n, pre-trained=True, epochs=150, data=hadji\_dimitar\_square, hyperparameter-tuned=False

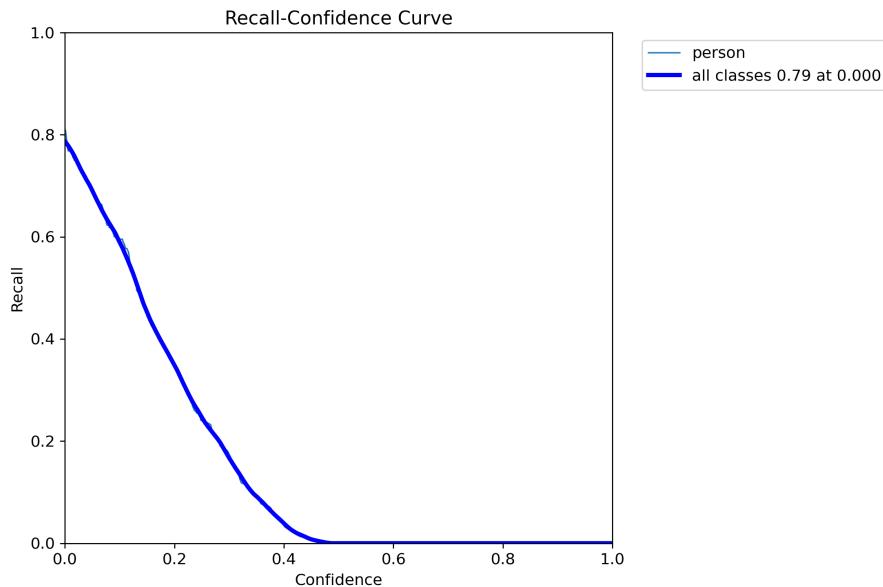


Figure s394. confusion\_matrix, yolov8n, pre-trained=True, epochs=150, data=hadji\_dimitar\_square, hyperparameter-tuned=False

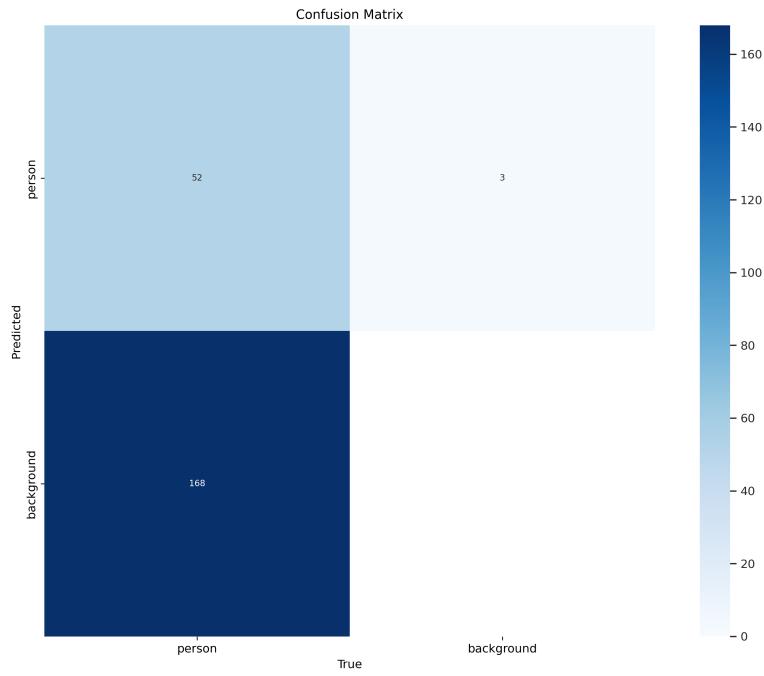


Figure s395. confusion\_matrix\_normalized, yolov8n, pre-trained=True, epochs=150, data=hadjidimitar\_square, hyperparameter-tuned=False

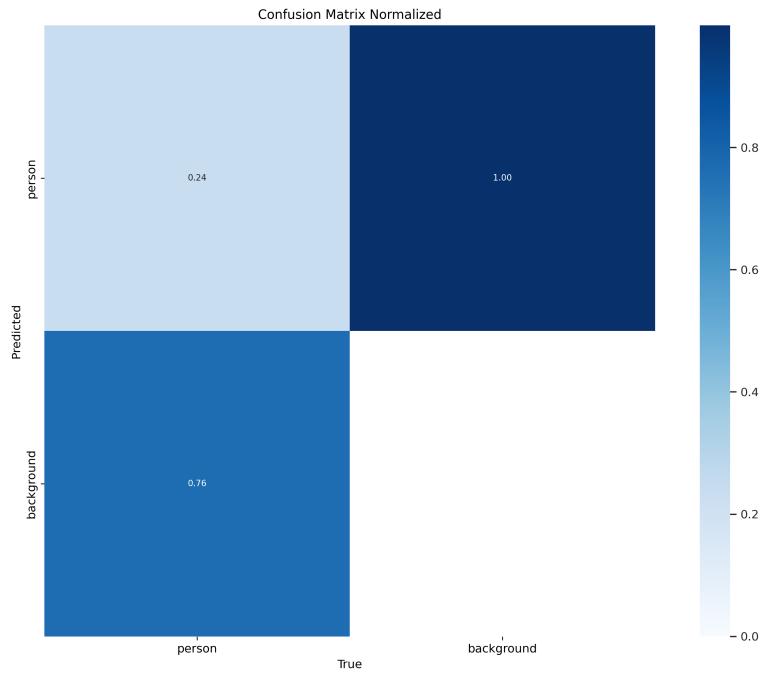


Figure s396. f1\_over\_confidence, yolov8n, pre-trained=True, epochs=50, data=keskvaljak, hyperparameter-tuned=False

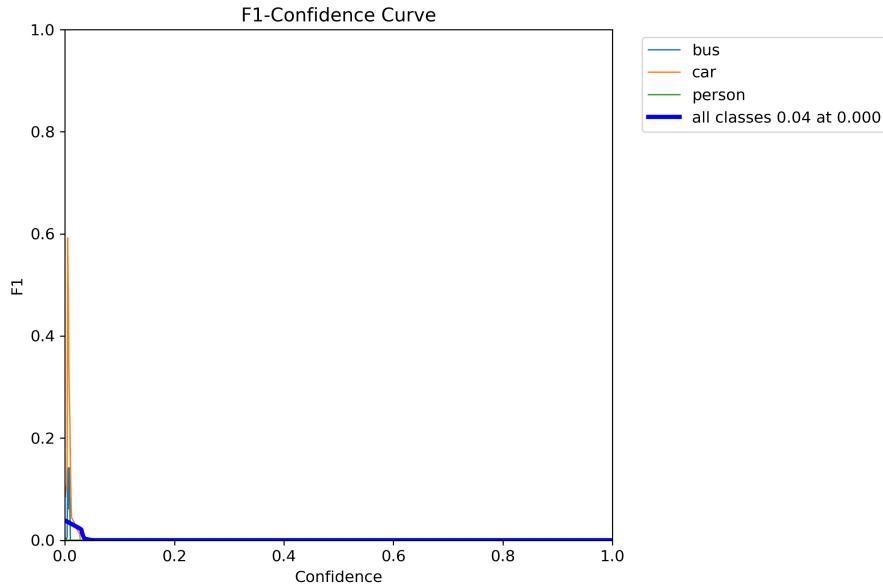


Figure s397. precision\_over\_recall, yolov8n, pre-trained=True, epochs=50, data=keskvaljak, hyperparameter-tuned=False

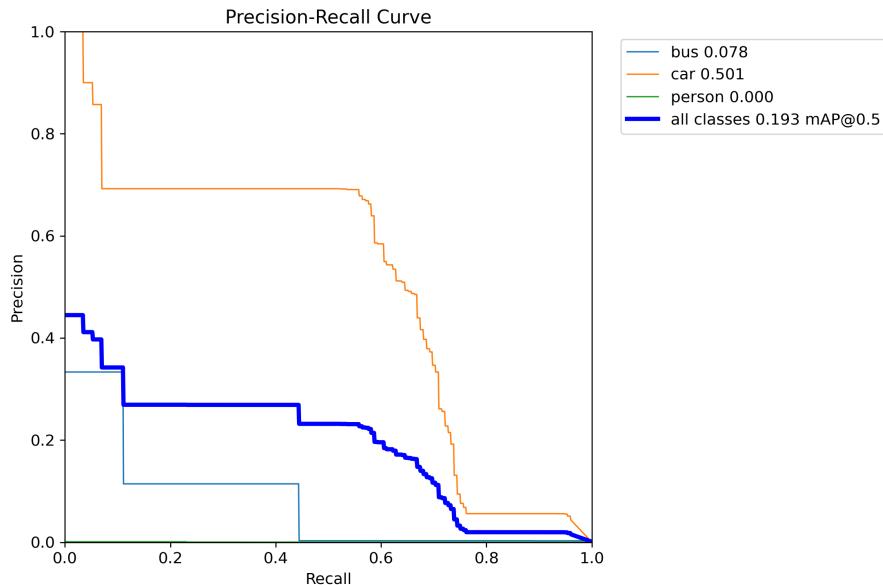


Figure s398. precision\_over\_confidence, yolov8n, pre-trained=True, epochs=50, data=keskvaljak, hyperparameter-tuned=False

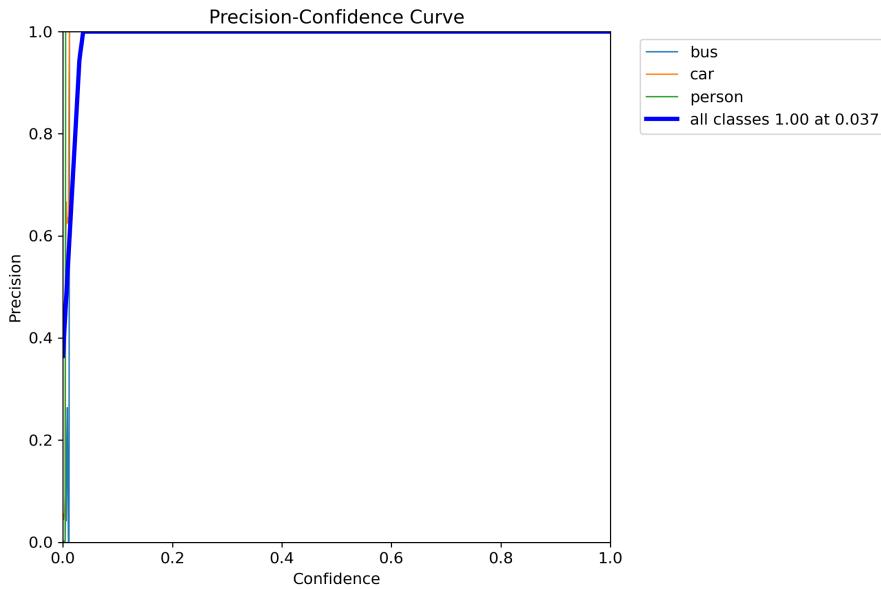


Figure s399. recall\_over\_confidence, yolov8n, pre-trained=True, epochs=50, data=keskvaljak, hyperparameter-tuned=False

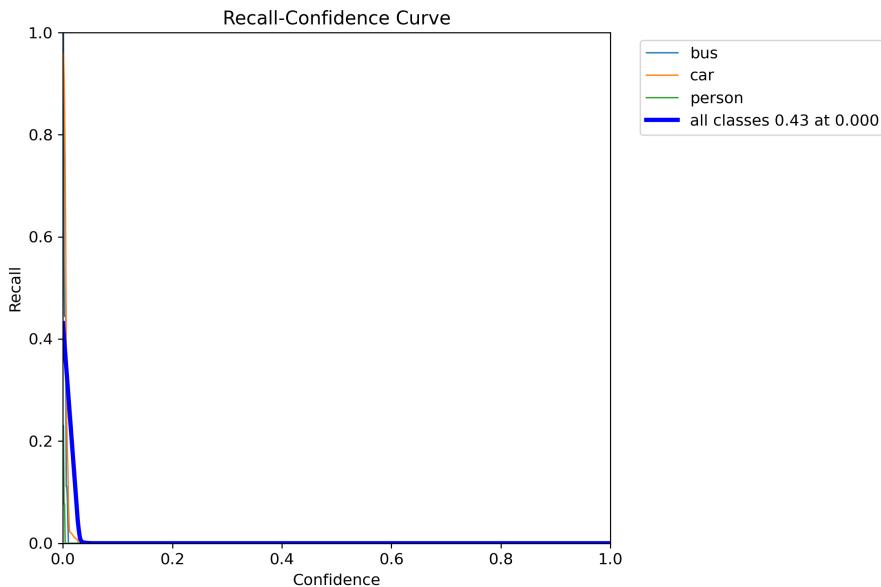


Figure s400. confusion\_matrix, yolov8n, pre-trained=True, epochs=50, data=keskvaljak, hyperparameter-tuned=False

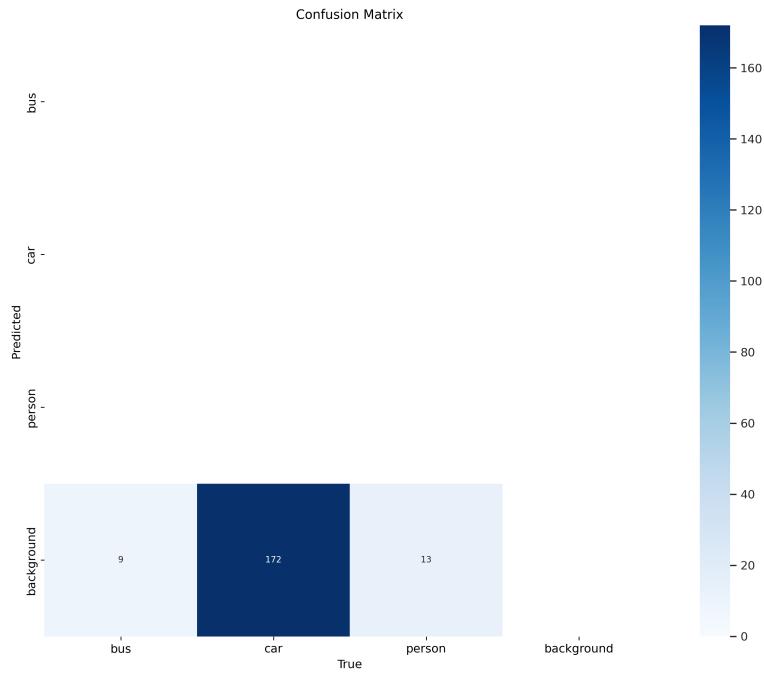


Figure s401. confusion\_matrix\_normalized, yolov8n, pre-trained=True, epochs=50, data=keskvaljak, hyperparameter-tuned=False

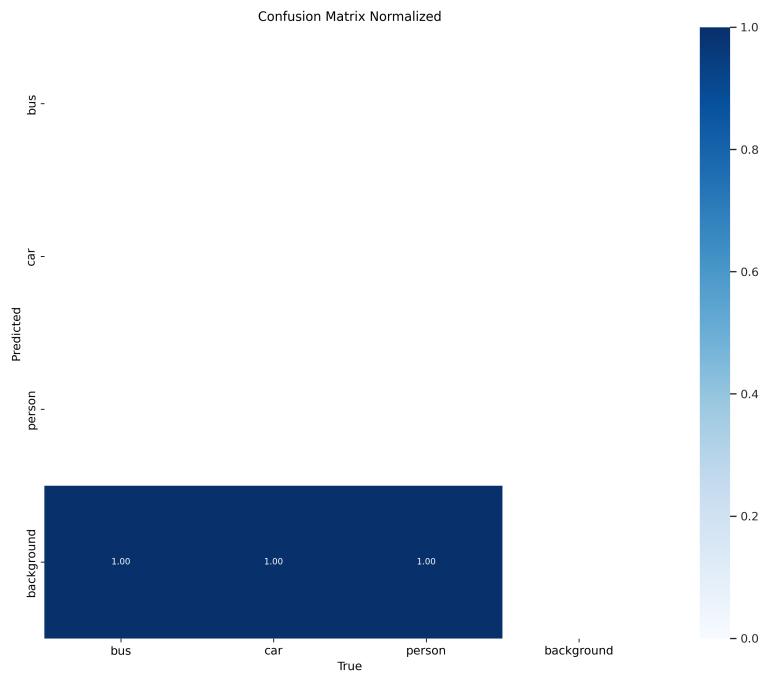


Figure s402. f1\_over\_confidence, yolov8n, pre-trained=True, epochs=100, data=keskvaljak, hyperparameter-tuned=False

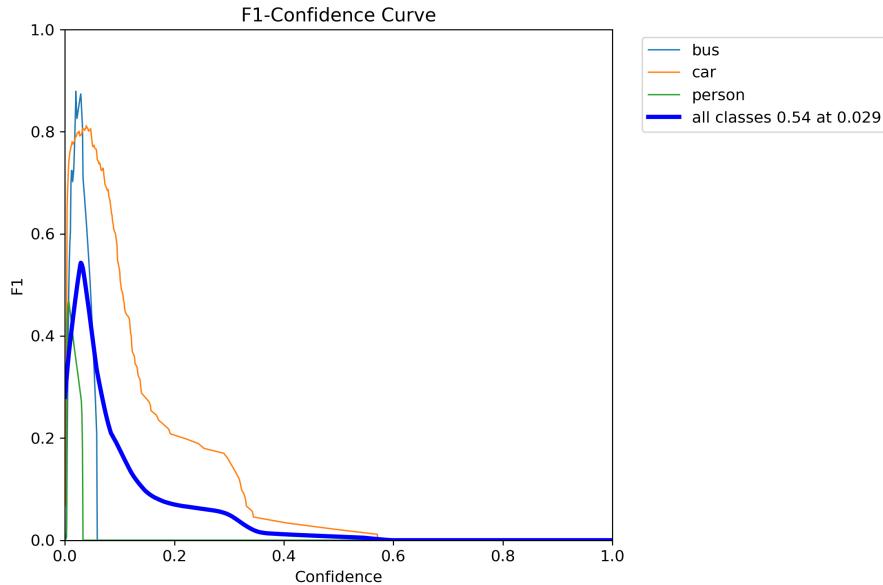


Figure s403. precision\_over\_recall, yolov8n, pre-trained=True, epochs=100, data=keskvaljak, hyperparameter-tuned=False

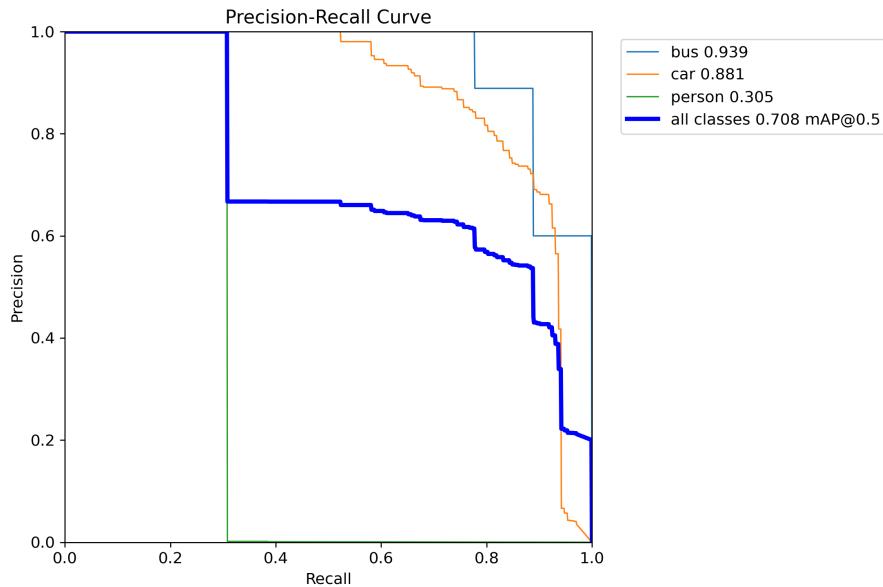


Figure s404. precision\_over\_confidence, yolov8n, pre-trained=True, epochs=100, data=keskvaljak, hyperparameter-tuned=False

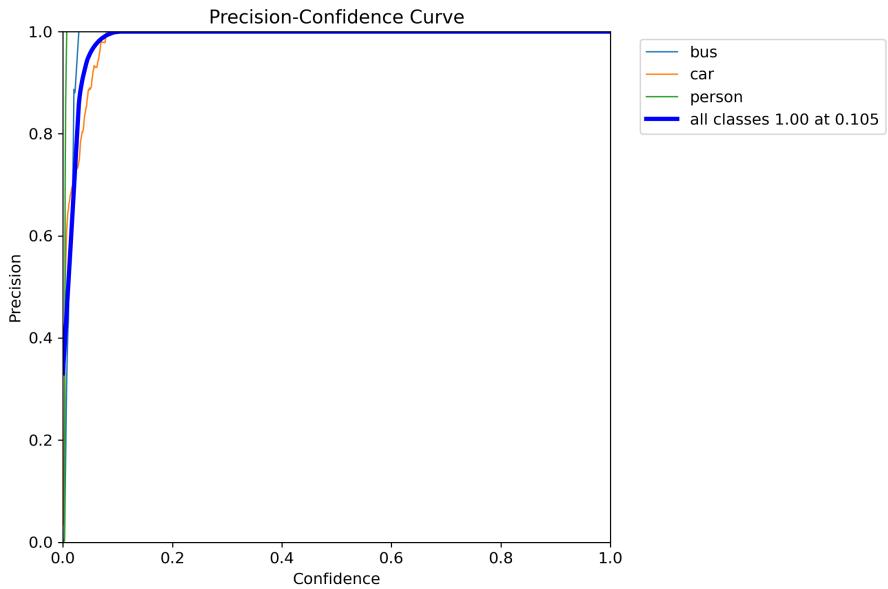


Figure s405. recall\_over\_confidence, yolov8n, pre-trained=True, epochs=100, data=keskvaljak, hyperparameter-tuned=False

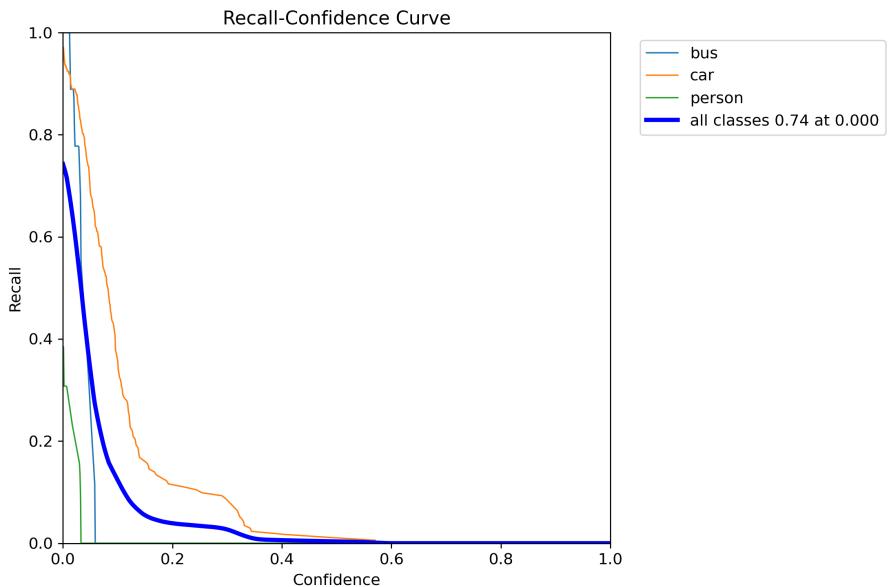


Figure s406. confusion\_matrix, yolov8n, pre-trained=True, epochs=100, data=keskvaljak, hyperparameter-tuned=False

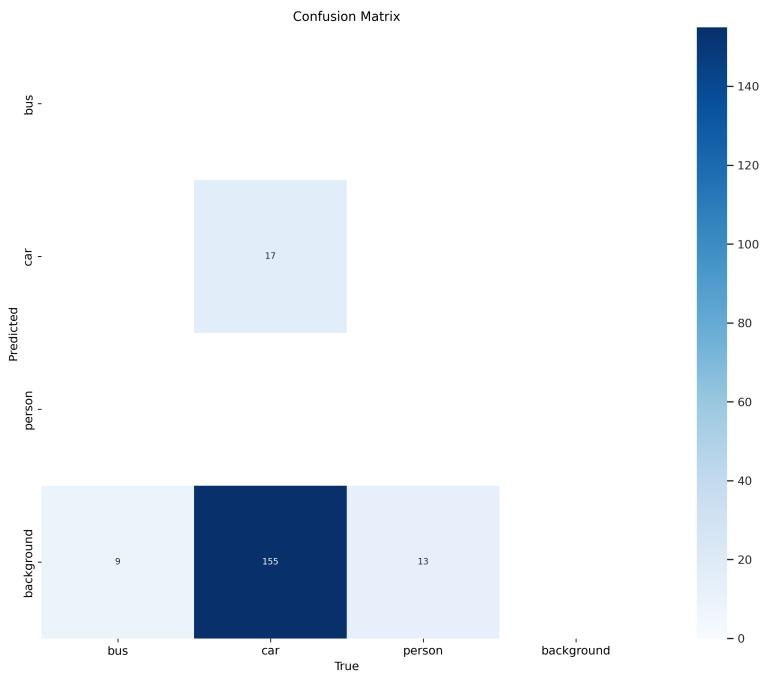


Figure s407. confusion\_matrix\_normalized, yolov8n, pre-trained=True, epochs=100, data=keskvaljak, hyperparameter-tuned=False

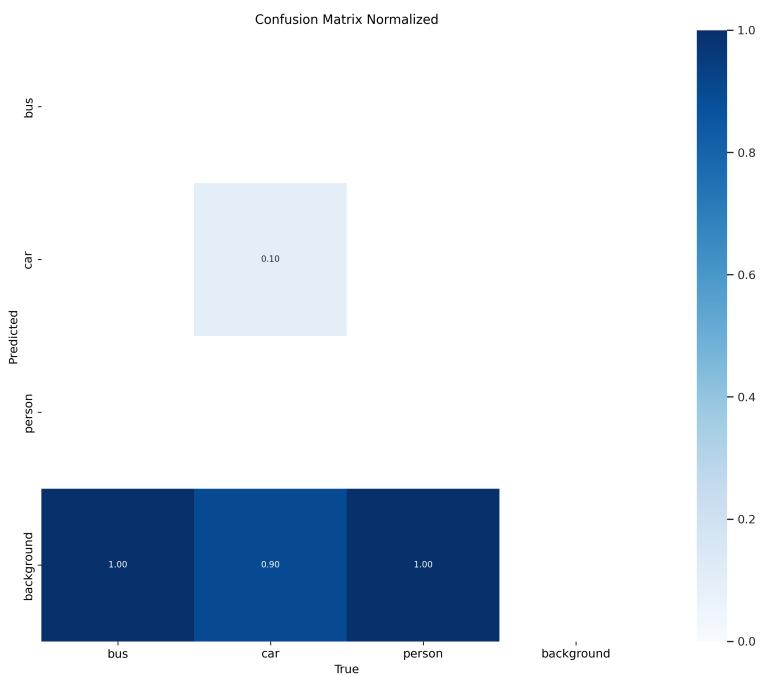


Figure s408. f1\_over\_confidence, yolov8n, pre-trained=True, epochs=150, data=keskvaljak, hyperparameter-tuned=False

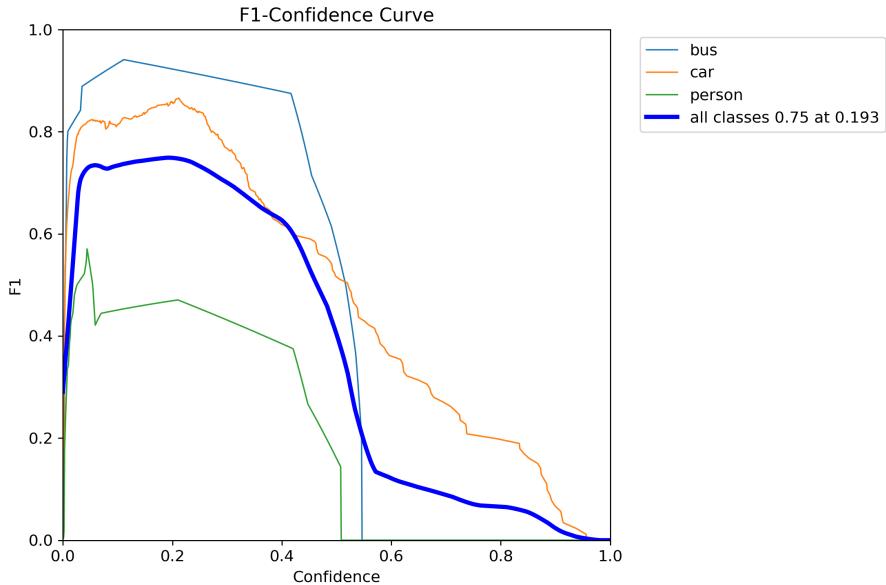


Figure s409. precision\_over\_recall, yolov8n, pre-trained=True, epochs=150, data=keskvaljak, hyperparameter-tuned=False

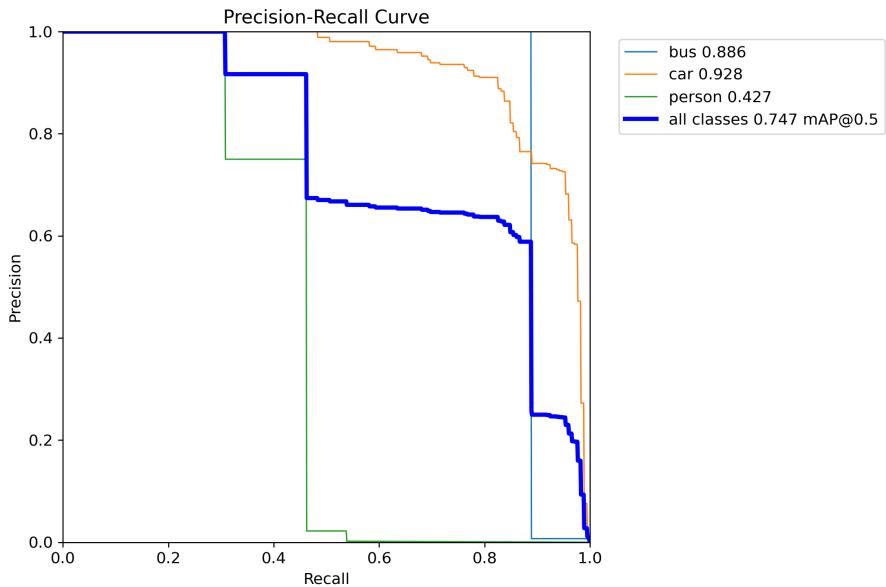


Figure s410. precision\_over\_confidence, yolov8n, pre-trained=True, epochs=150, data=keskvaljak, hyperparameter-tuned=False

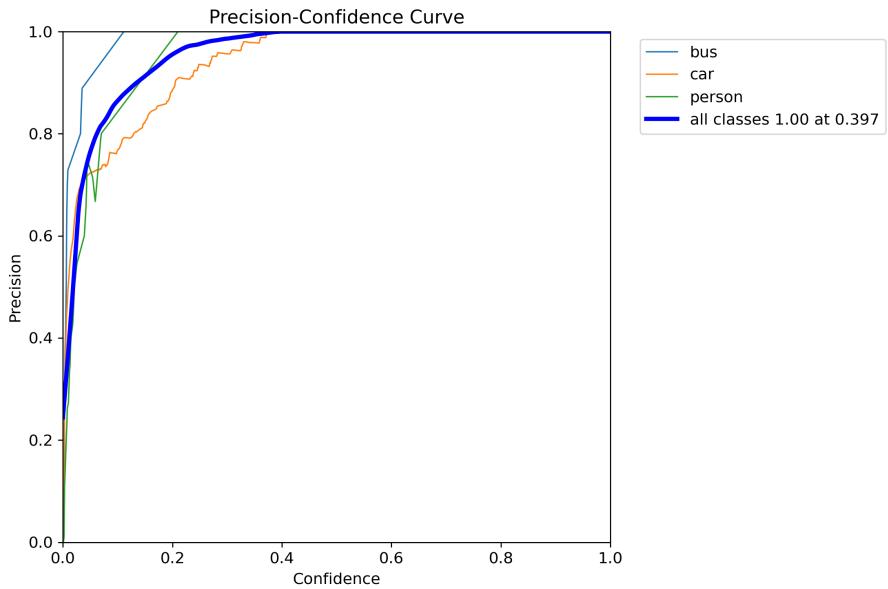


Figure s411. recall\_over\_confidence, yolov8n, pre-trained=True, epochs=150, data=keskvaljak, hyperparameter-tuned=False

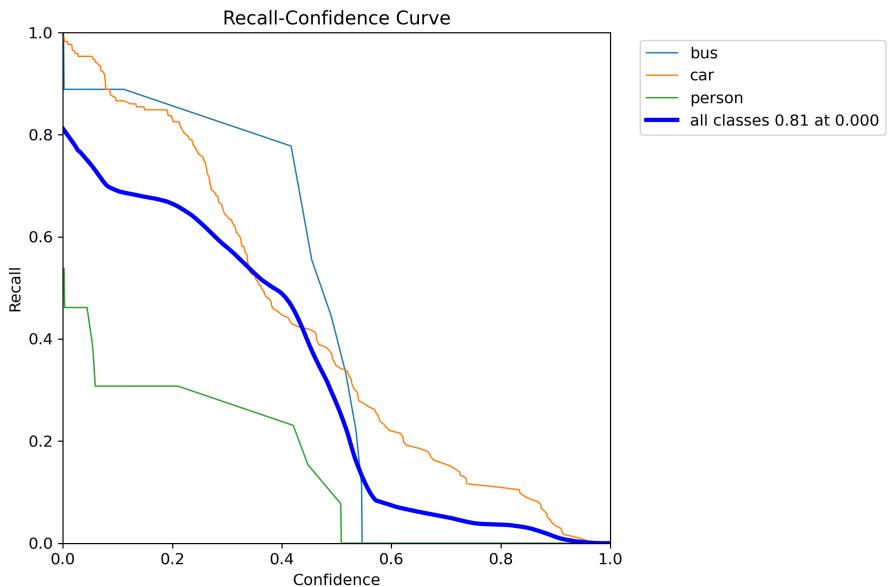


Figure s412. confusion\_matrix, yolov8n, pre-trained=True, epochs=150, data=keskvaljak, hyperparameter-tuned=False

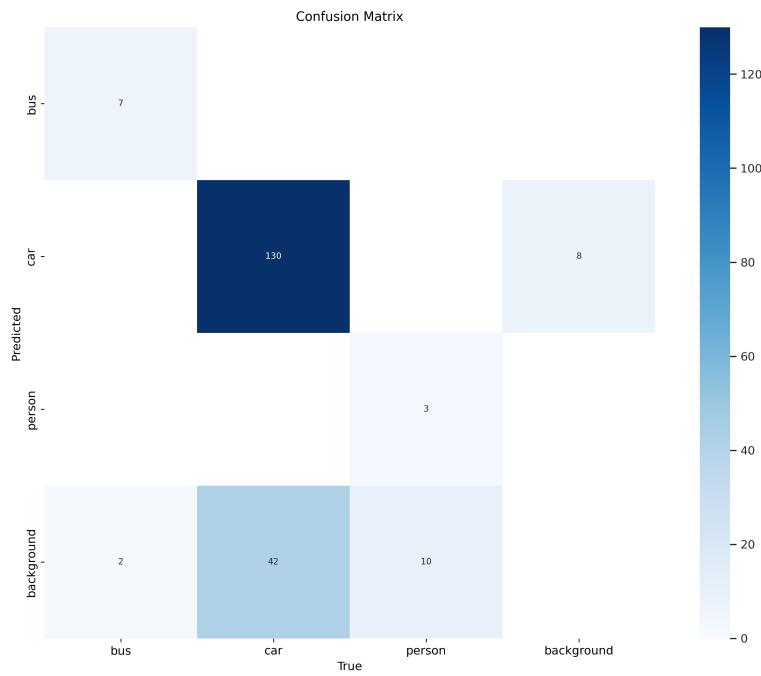


Figure s413. confusion\_matrix\_normalized, yolov8n, pre-trained=True, epochs=150, data=keskvaljak, hyperparameter-tuned=False

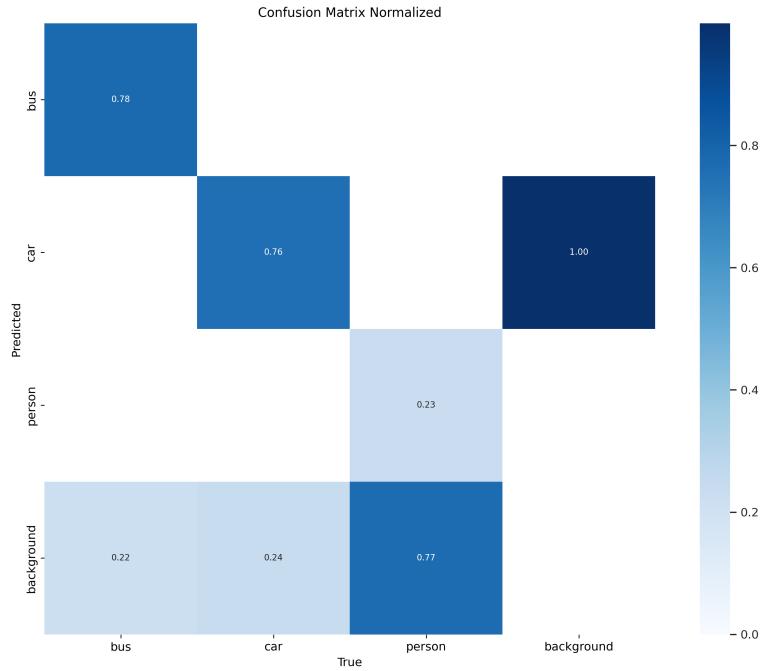


Figure s414. f1\_over\_confidence, yolov8n, pre-trained=True, epochs=50, data=kielce\_university\_of\_technology, hyperparameter-tuned=False

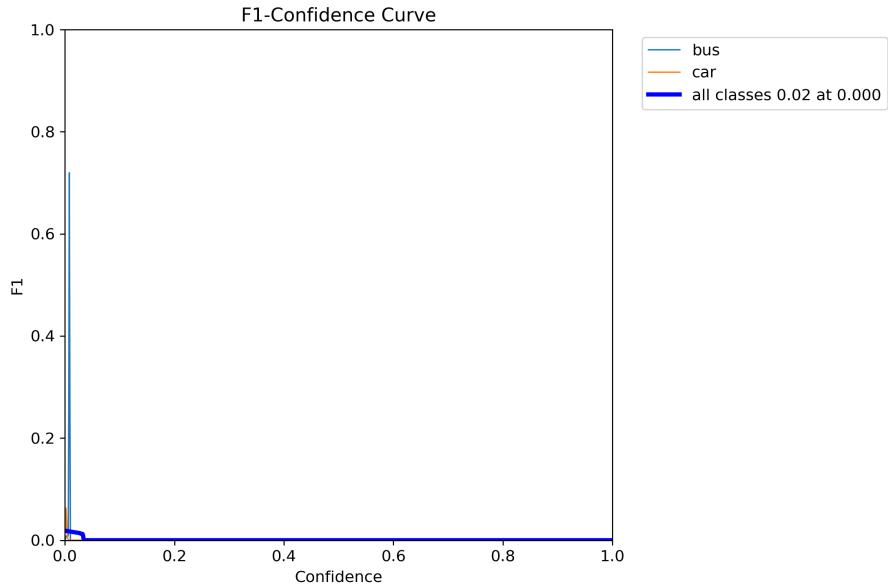


Figure s415. precision\_over\_recall, yolov8n, pre-trained=True, epochs=50, data=kielce\_university\_of\_technology, hyperparameter-tuned=False

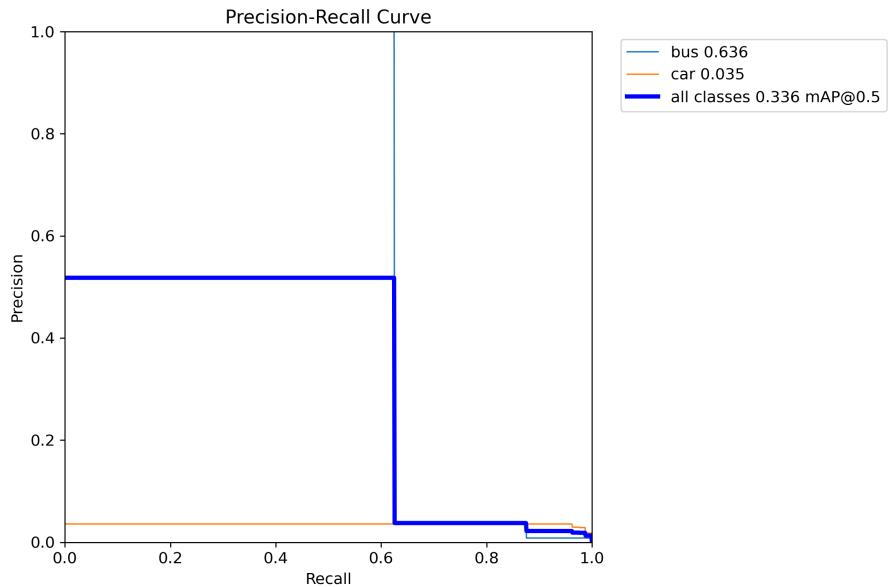


Figure s416. precision\_over\_confidence, yolov8n, pre-trained=True, epochs=50, data=kielce\_university\_of\_technology, hyperparameter-tuned=False

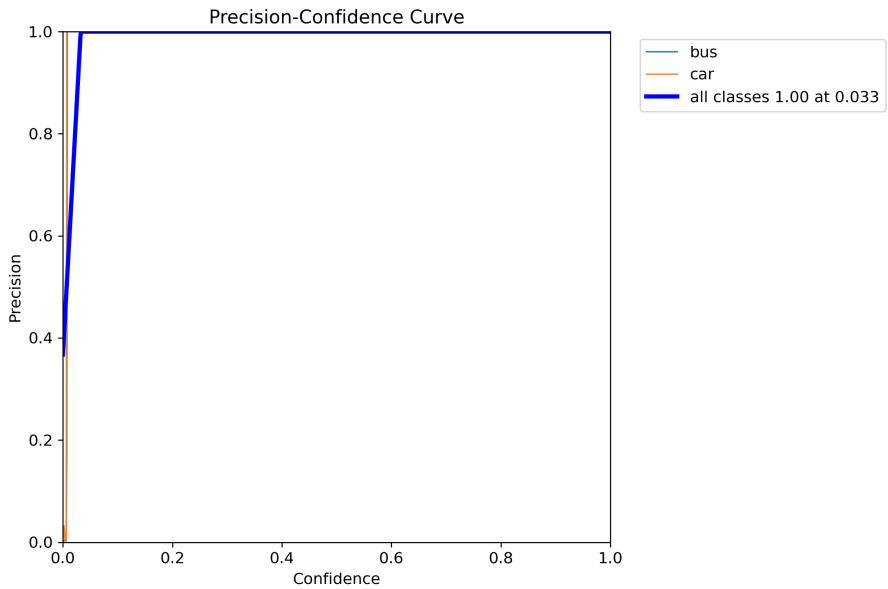


Figure s417. recall\_over\_confidence, yolov8n, pre-trained=True, epochs=50, data=kielce\_university\_of\_technology, hyperparameter-tuned=False

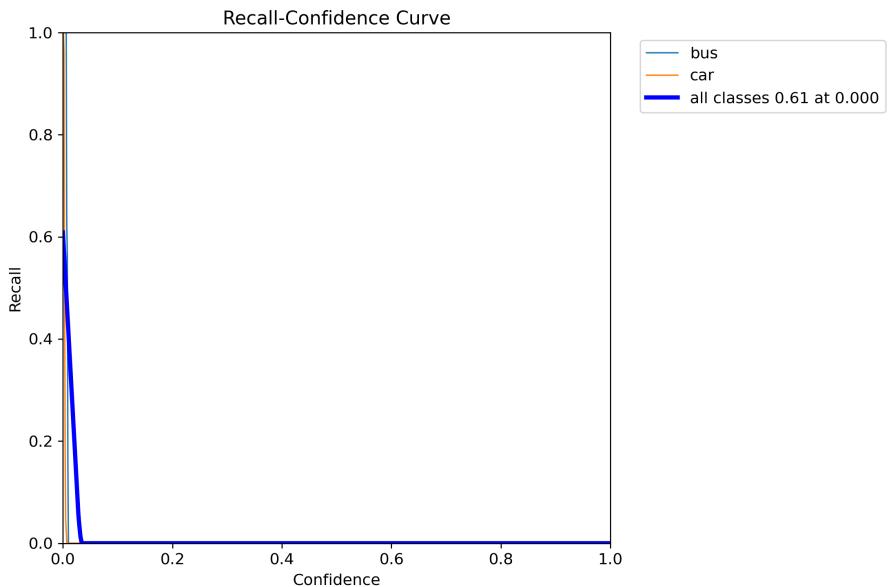


Figure s418. confusion\_matrix, yolov8n, pre-trained=True, epochs=50, data=kielce\_university\_of\_technology, hyperparameter-tuned=False

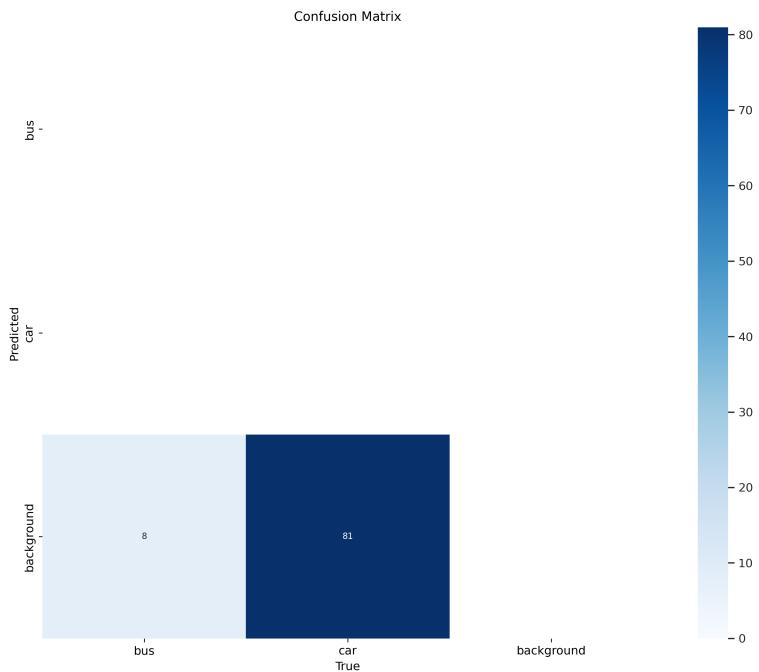


Figure s419. confusion\_matrix\_normalized, yolov8n, pre-trained=True, epochs=50, data=kielce\_university\_of\_technology, hyperparameter-tuned=False

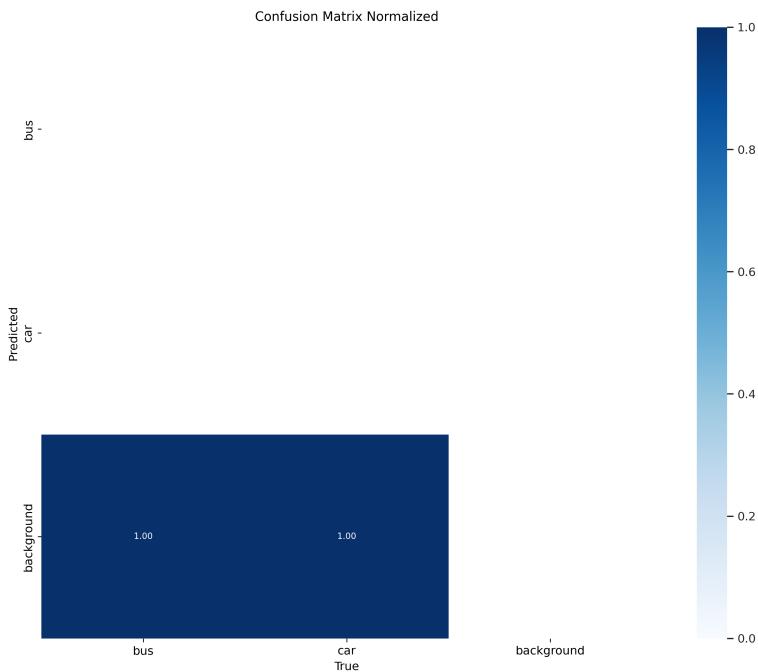


Figure s420. f1\_over\_confidence, yolov8n, pre-trained=True, epochs=100, data=kielce\_university\_of\_technology, hyperparameter-tuned=False

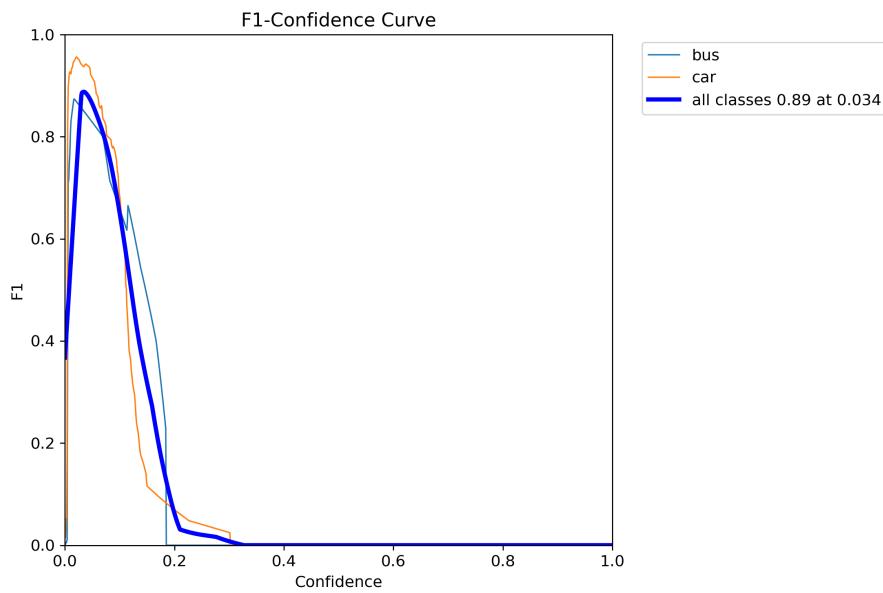


Figure s421. precision\_over\_recall, yolov8n, pre-trained=True, epochs=100, data=kielce\_university\_of\_technology, hyperparameter-tuned=False

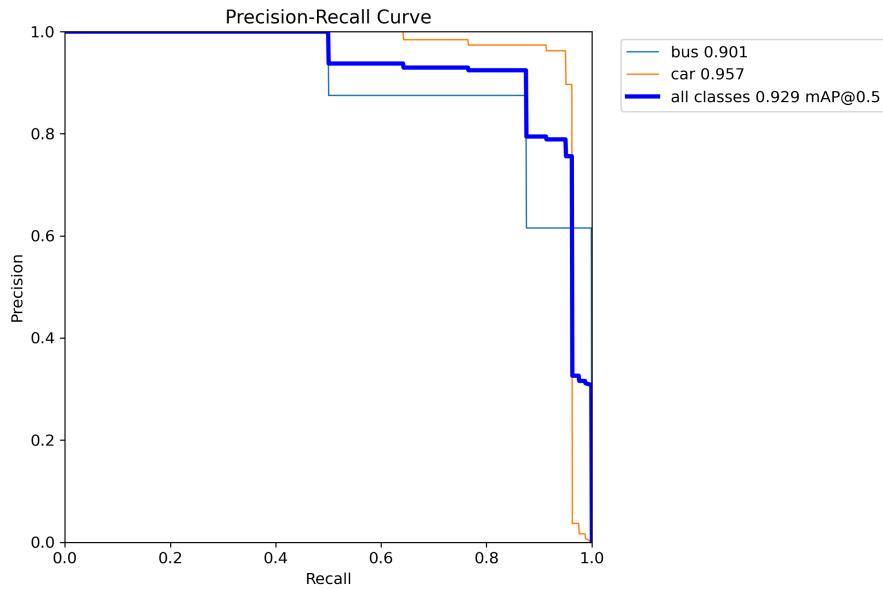


Figure s422. precision\_over\_confidence, yolov8n, pre-trained=True, epochs=100, data=kielce\_university\_of\_technology, hyperparameter-tuned=False

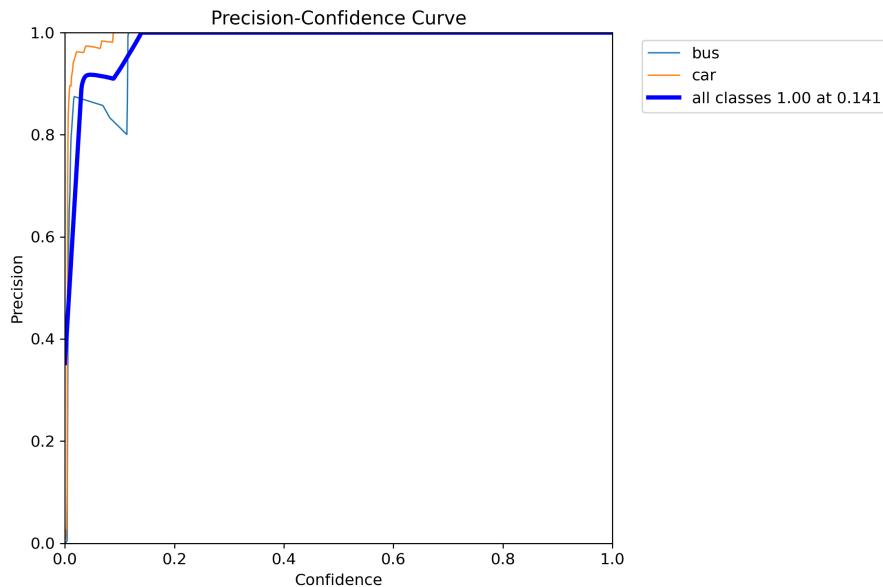


Figure s423. recall\_over\_confidence, yolov8n, pre-trained=True, epochs=100, data=kielce\_university\_of\_technology, hyperparameter-tuned=False

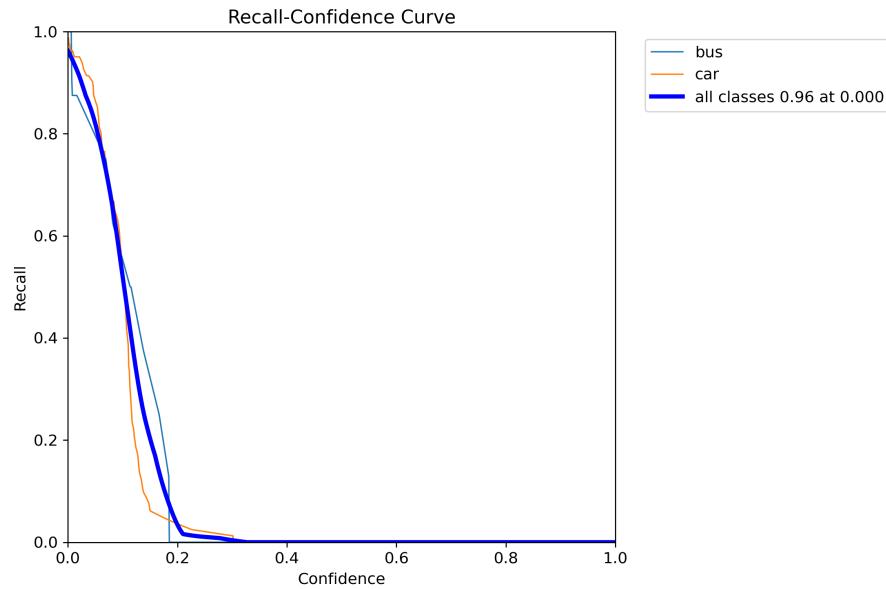


Figure s424. confusion\_matrix, yolov8n, pre-trained=True, epochs=100, data=kielce\_university\_of\_technology, hyperparameter-tuned=False

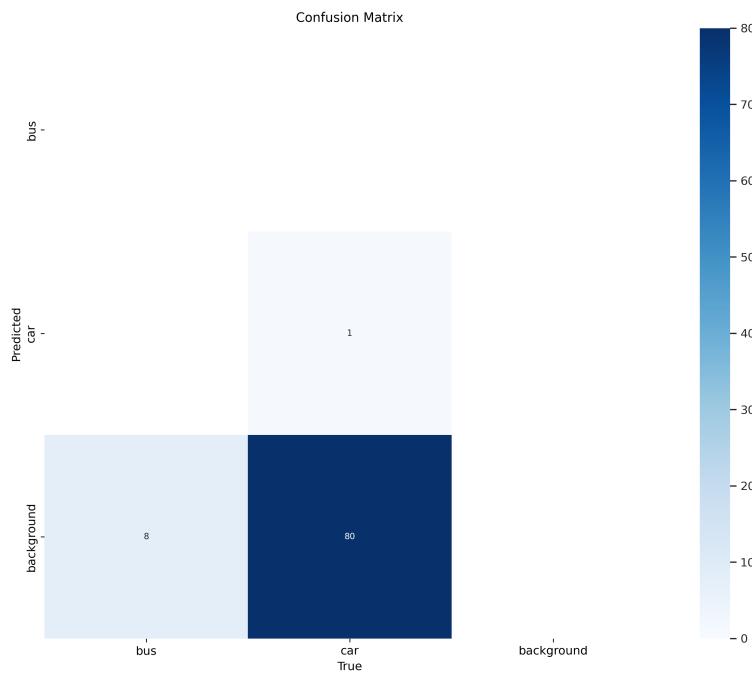


Figure s425. confusion\_matrix\_normalized, yolov8n, pre-trained=True, epochs=100, data=kielce\_university\_of\_technology, hyperparameter-

tuned=False

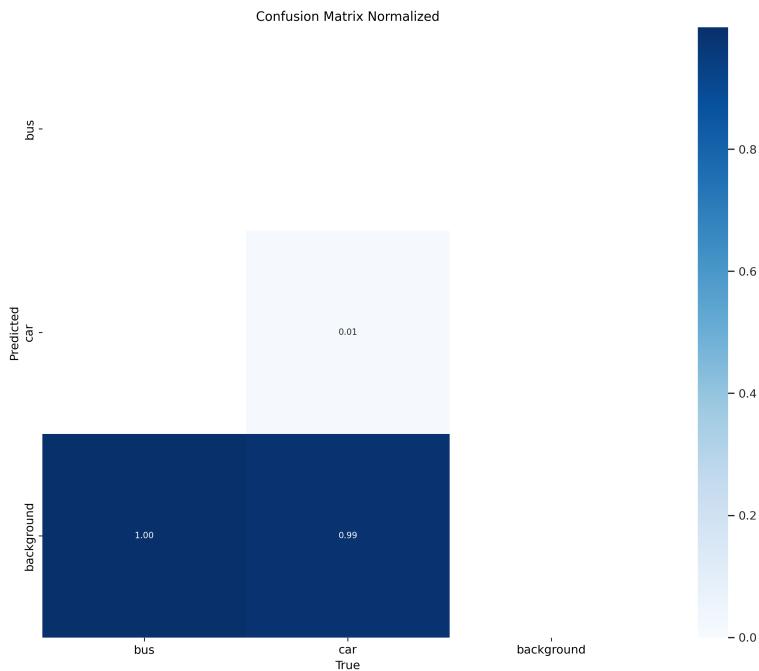


Figure s426. f1\_over\_confidence, yolov8n, pre-trained=True, epochs=150, data=kielce\_university\_of\_technology, hyperparameter-tuned=False

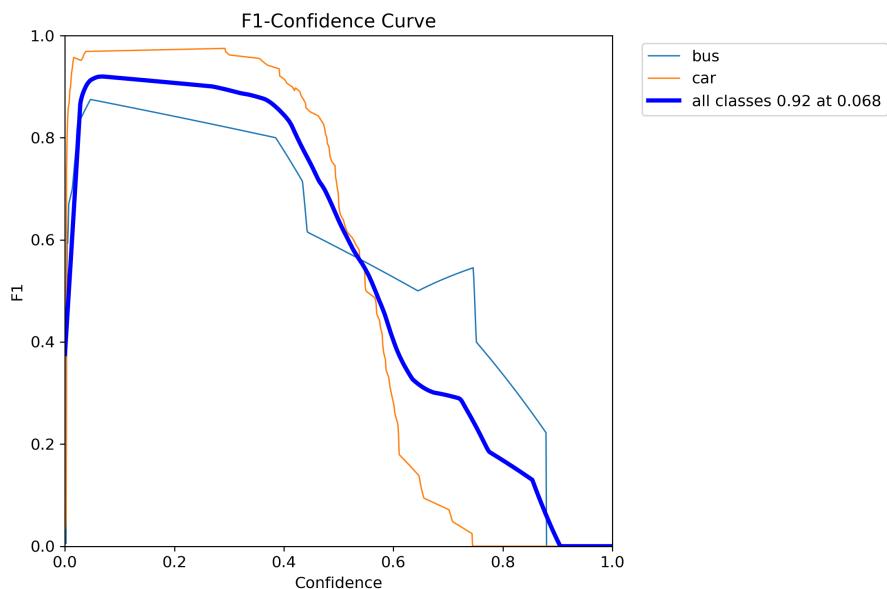


Figure s427. precision\_over\_recall, yolov8n, pre-trained=True, epochs=150,

data=kielce\_university\_of\_technology, hyperparameter-tuned=False

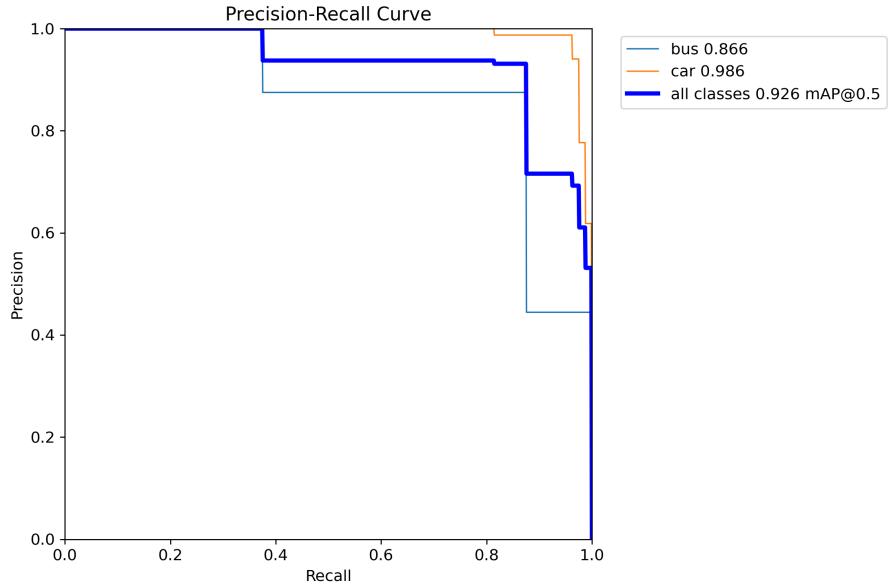


Figure s428. precision\_over\_confidence, yolov8n, pre-trained=True, epochs=150, data=kielce\_university\_of\_technology, hyperparameter-tuned=False

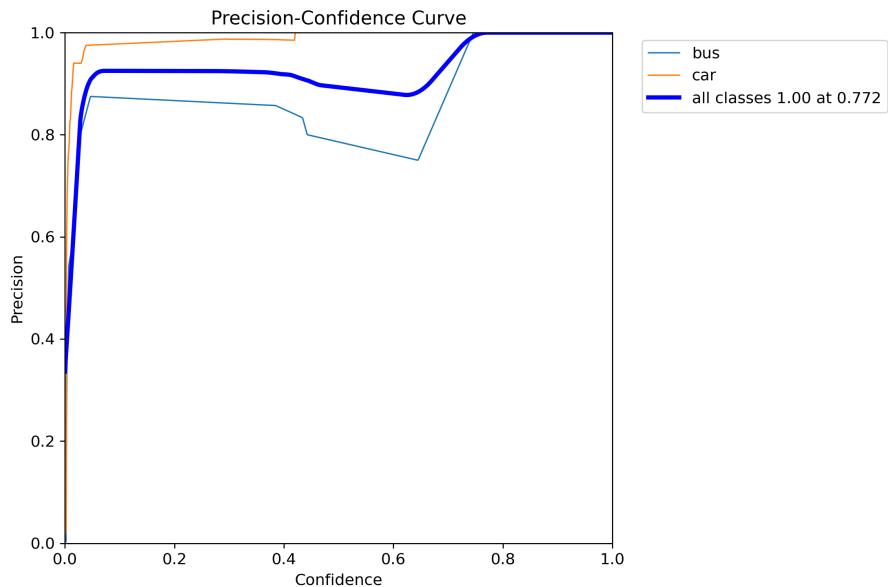


Figure s429. recall\_over\_confidence, yolov8n, pre-trained=True, epochs=150, data=kielce\_university\_of\_technology, hyperparameter-tuned=False

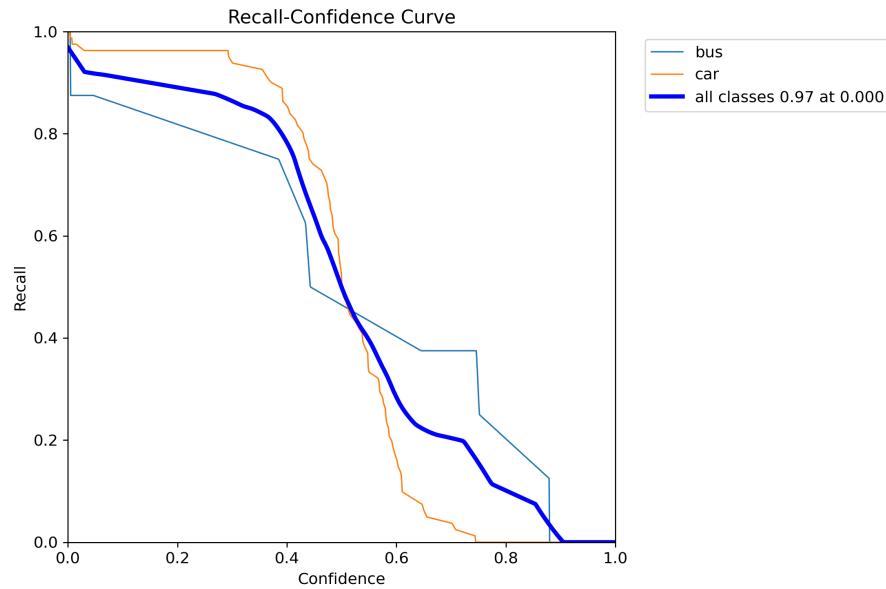


Figure s430. confusion\_matrix, yolov8n, pre-trained=True, epochs=150, data=kielce\_university\_of\_technology, hyperparameter-tuned=False

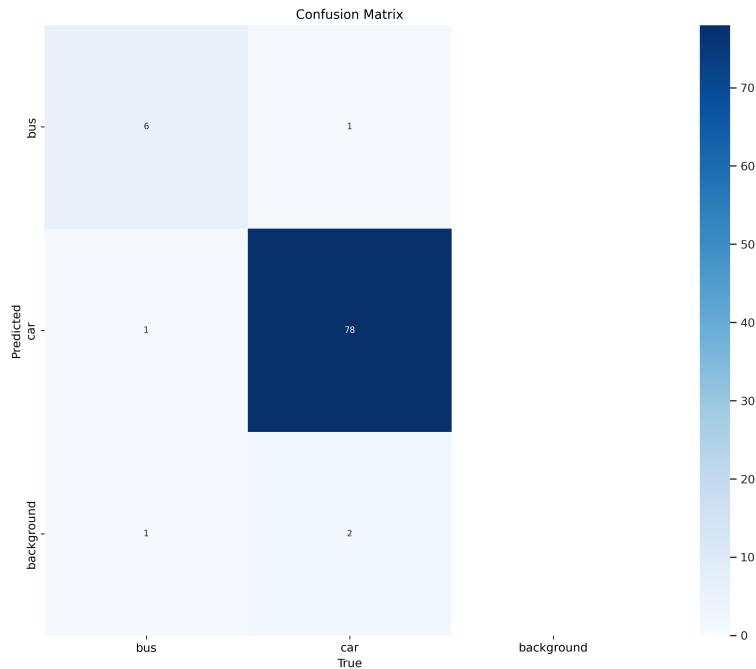


Figure s431. confusion\_matrix\_normalized, yolov8n, pre-trained=True, epochs=150, data=kielce\_university\_of\_technology, hyperparameter-

tuned=False

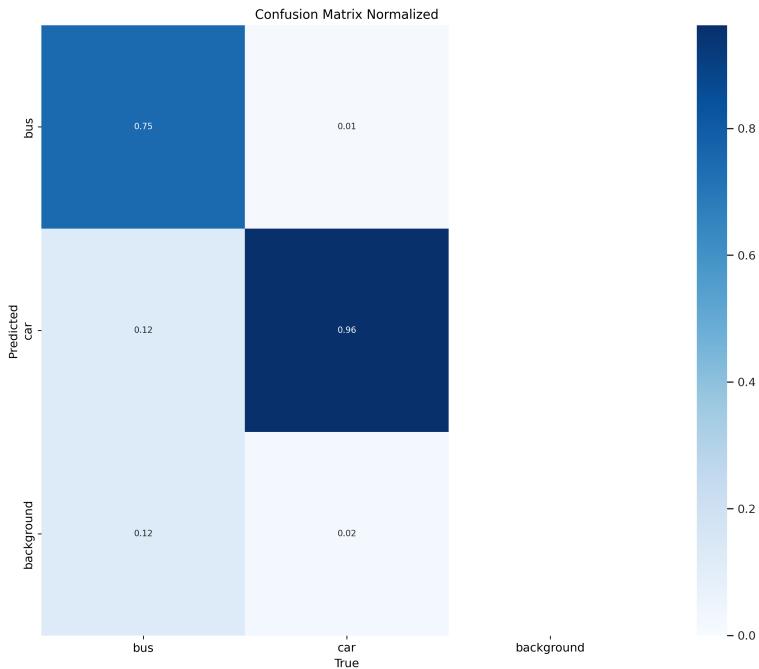


Figure s432. f1\_over\_confidence, yolov8n, pre-trained=True, epochs=50, data=toggenburg\_alpaca\_ranch, hyperparameter-tuned=False

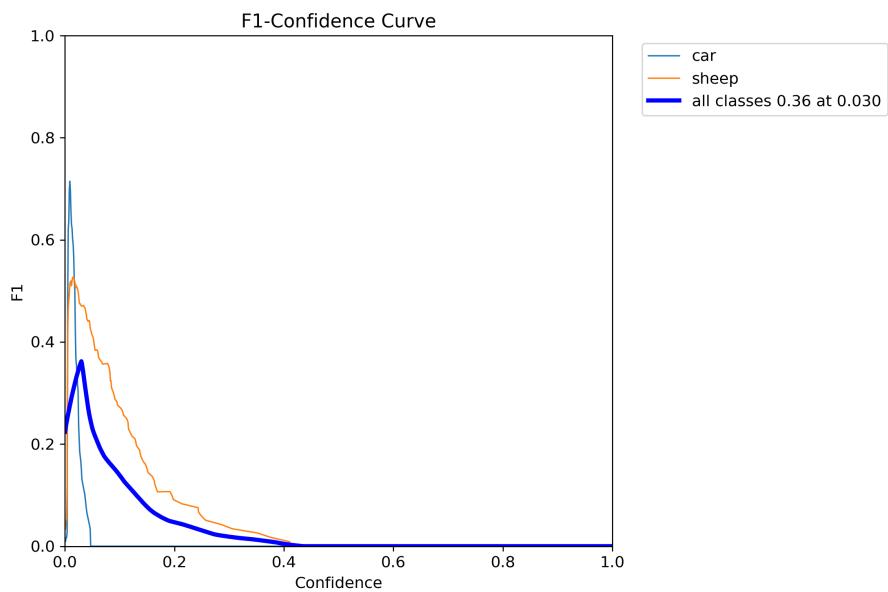


Figure s433. precision\_over\_recall, yolov8n, pre-trained=True, epochs=50,

data=toggenburg\_alpaca\_ranch, hyperparameter-tuned=False

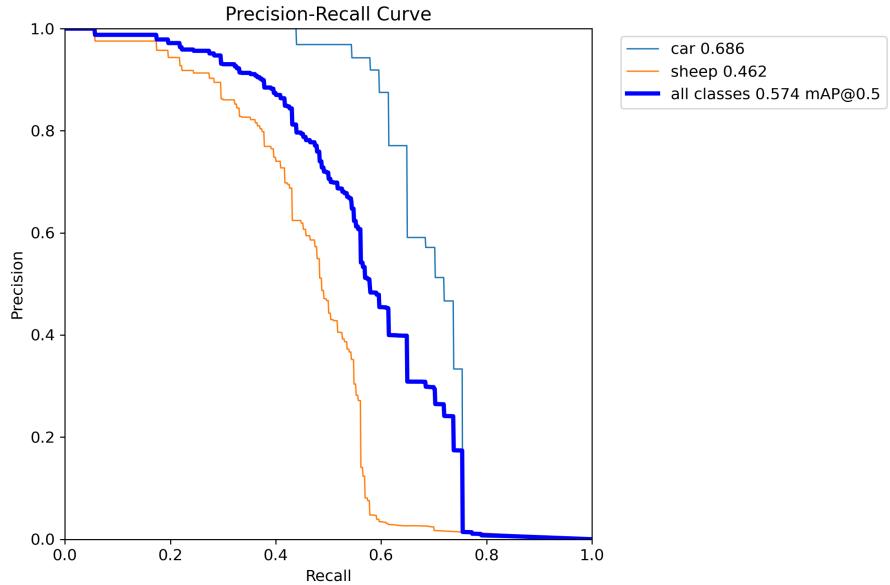


Figure s434. precision\_over\_confidence, yolov8n, pre-trained=True, epochs=50, data=toggenburg\_alpaca\_ranch, hyperparameter-tuned=False

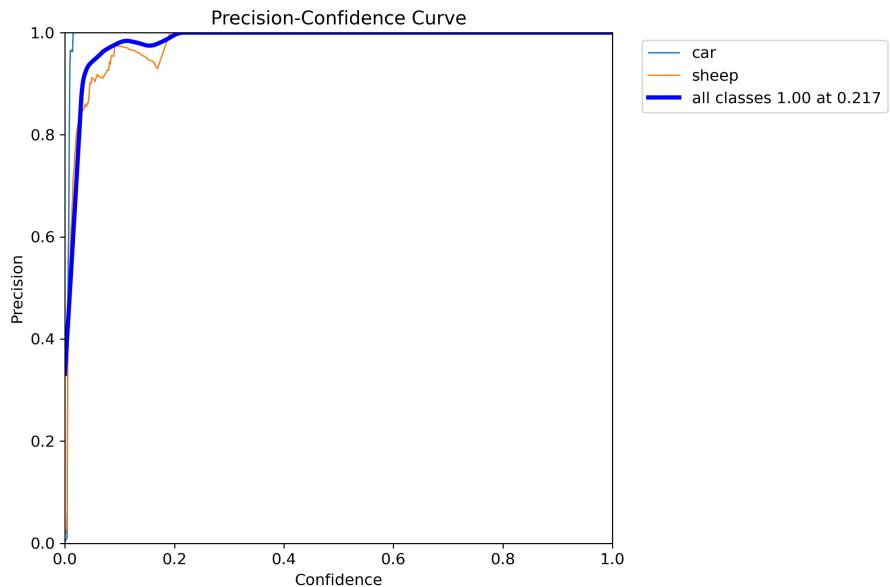


Figure s435. recall\_over\_confidence, yolov8n, pre-trained=True, epochs=50, data=toggenburg\_alpaca\_ranch, hyperparameter-tuned=False

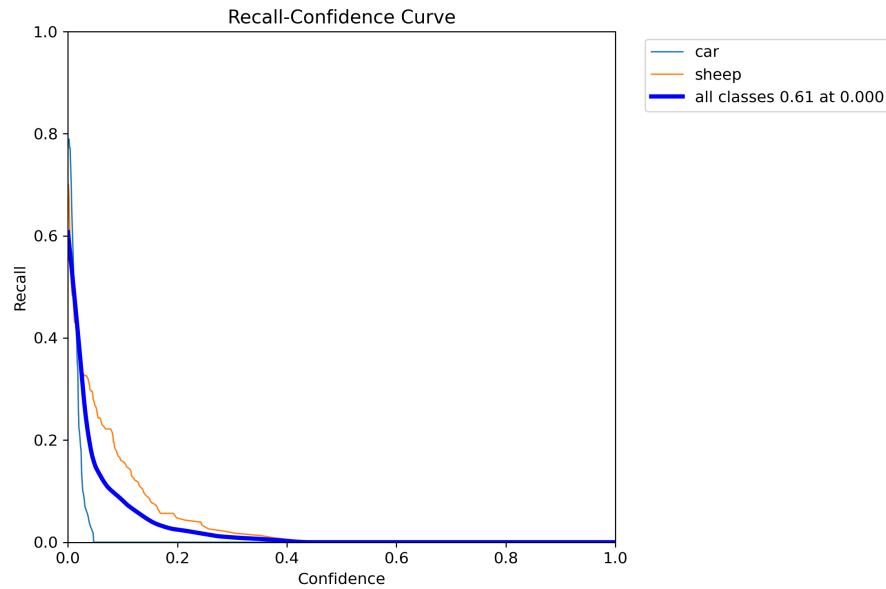


Figure s436. confusion\_matrix, yolov8n, pre-trained=True, epochs=50, data=toggenburg\_alpaca\_ranch, hyperparameter-tuned=False

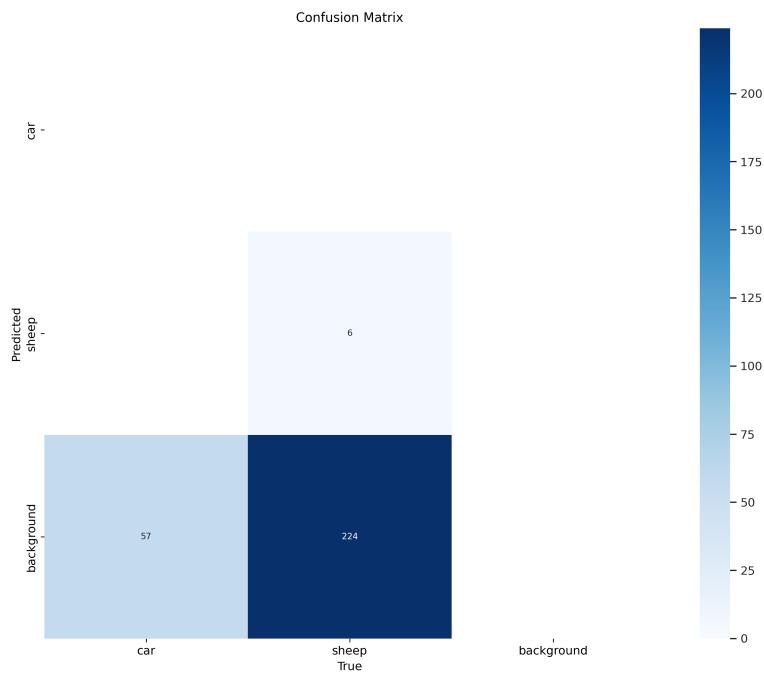


Figure s437. confusion\_matrix\_normalized, yolov8n, pre-trained=True, epochs=50, data=toggenburg\_alpaca\_ranch, hyperparameter-tuned=False

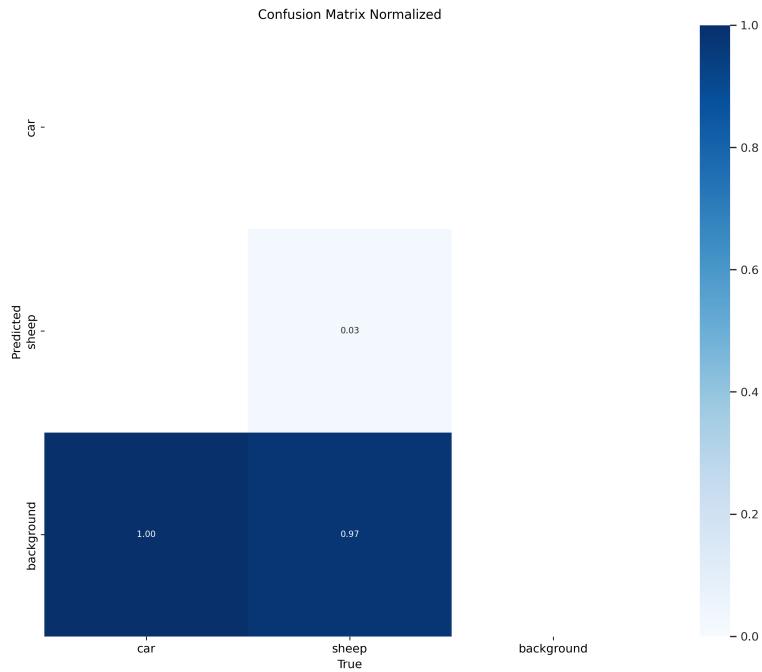


Figure s438. f1\_over\_confidence, yolov8n, pre-trained=True, epochs=100, data=toggenburg\_alpaca\_ranch, hyperparameter-tuned=False

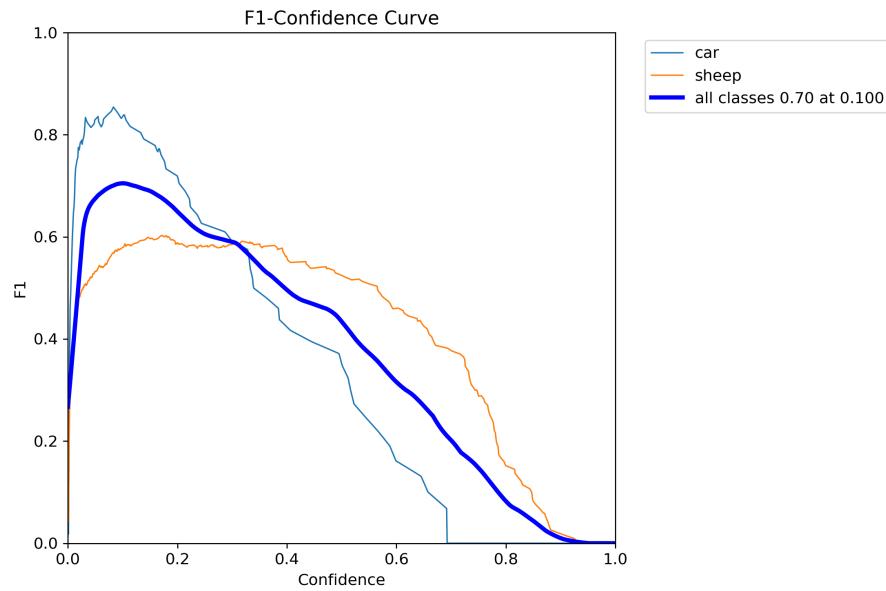


Figure s439. precision\_over\_recall, yolov8n, pre-trained=True, epochs=100, data=toggenburg\_alpaca\_ranch, hyperparameter-tuned=False

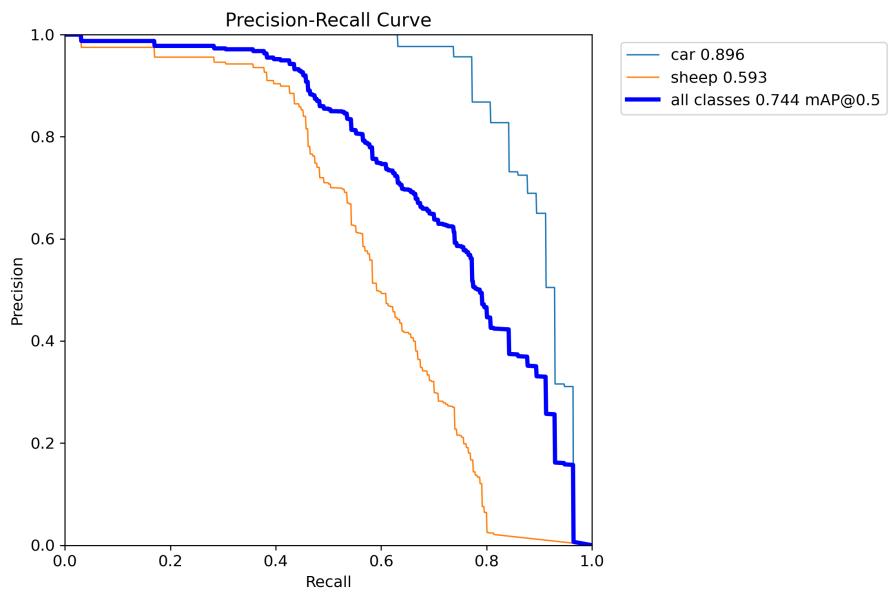


Figure s440. precision\_over\_confidence, yolov8n, pre-trained=True, epochs=100, data=toggenburg\_alpaca\_ranch, hyperparameter-tuned=False

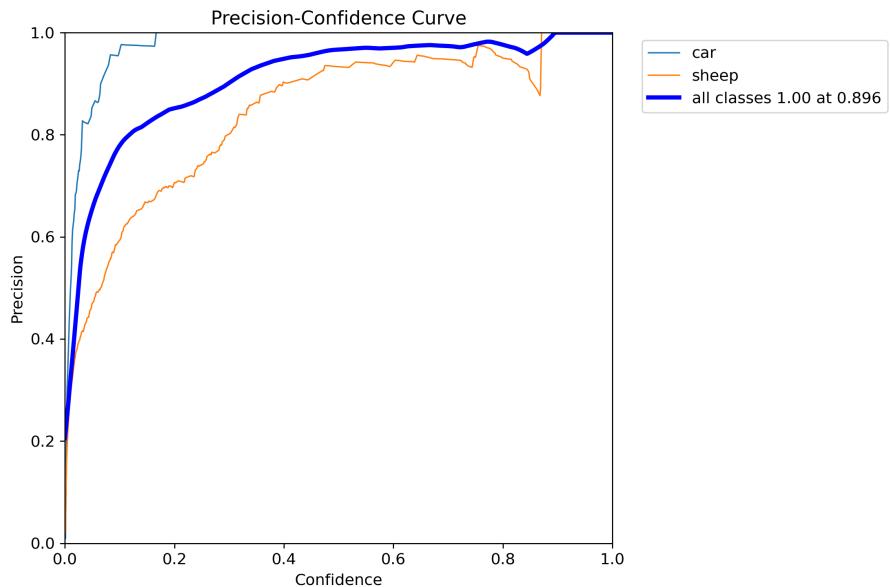


Figure s441. recall\_over\_confidence, yolov8n, pre-trained=True, epochs=100, data=toggenburg\_alpaca\_ranch, hyperparameter-tuned=False

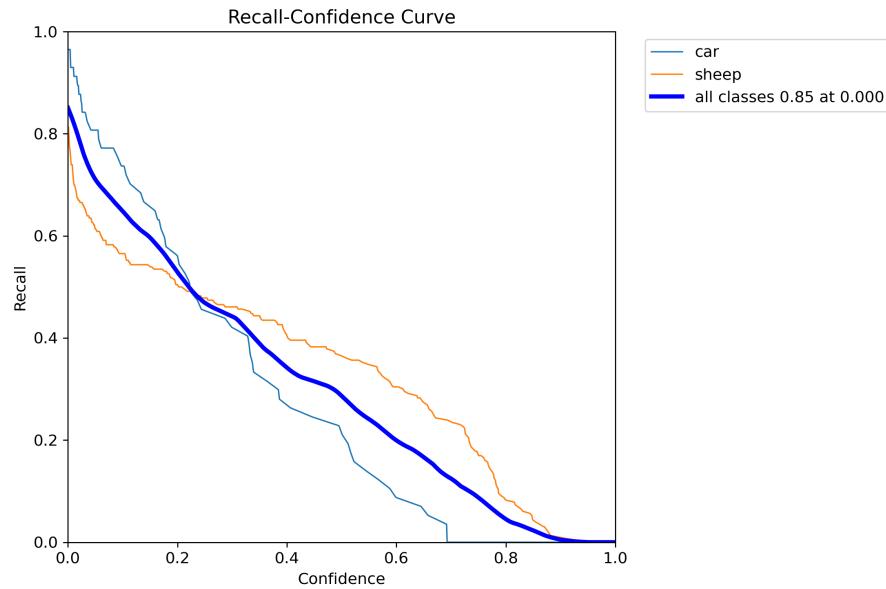


Figure s442. confusion\_matrix, yolov8n, pre-trained=True, epochs=100, data=toggenburg\_alpaca\_ranch, hyperparameter-tuned=False

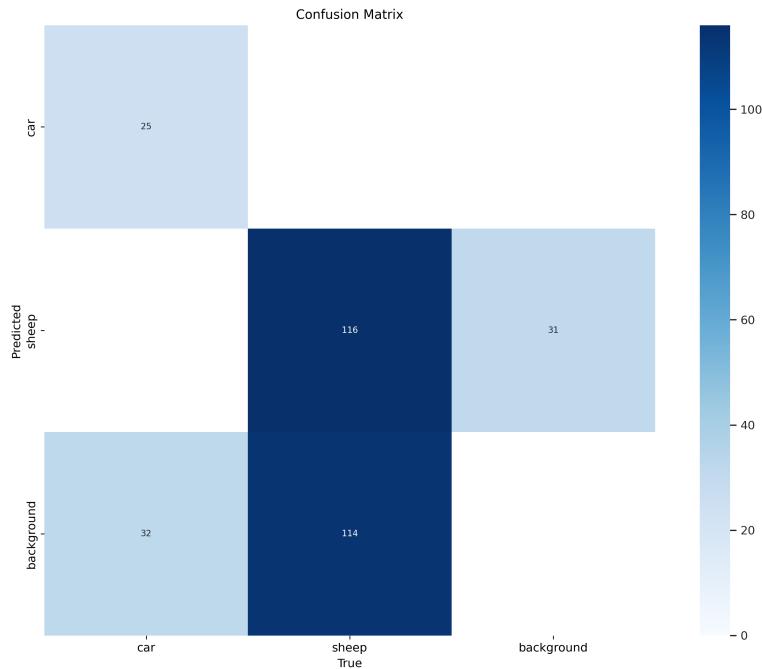


Figure s443. confusion\_matrix\_normalized, yolov8n, pre-trained=True, epochs=100, data=toggenburg\_alpaca\_ranch, hyperparameter-tuned=False

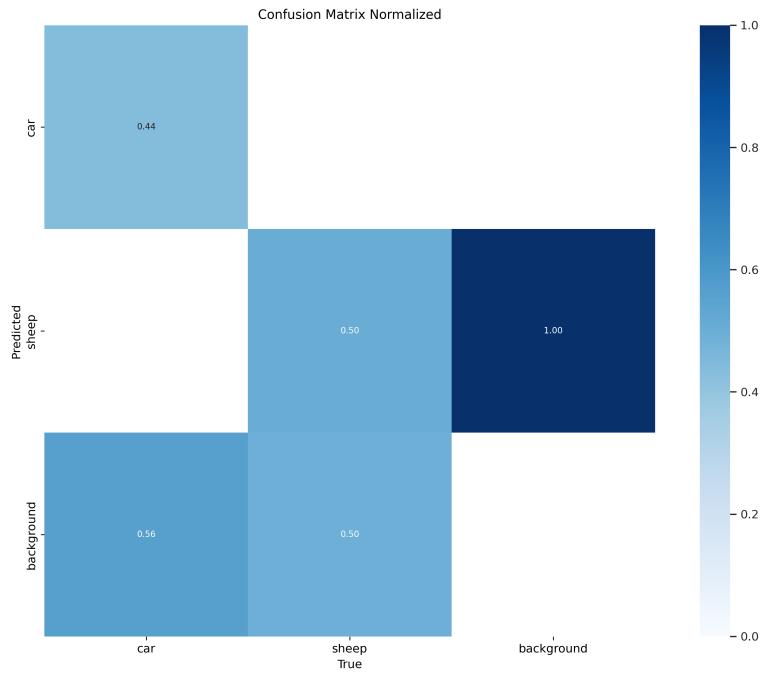


Figure s444. f1\_over\_confidence, yolov8n, pre-trained=True, epochs=150, data=toggenburg\_alpaca\_ranch, hyperparameter-tuned=False

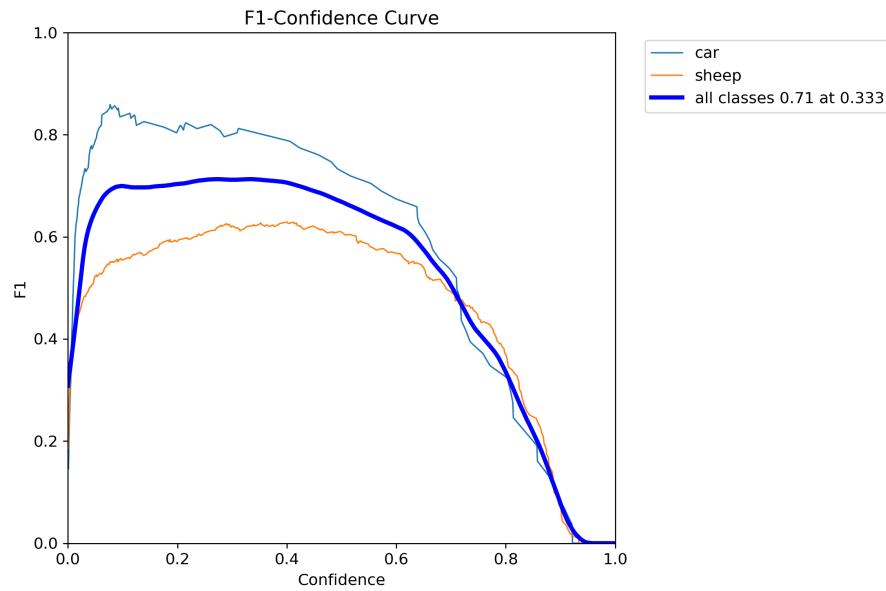


Figure s445. precision\_over\_recall, yolov8n, pre-trained=True, epochs=150, data=toggenburg\_alpaca\_ranch, hyperparameter-tuned=False

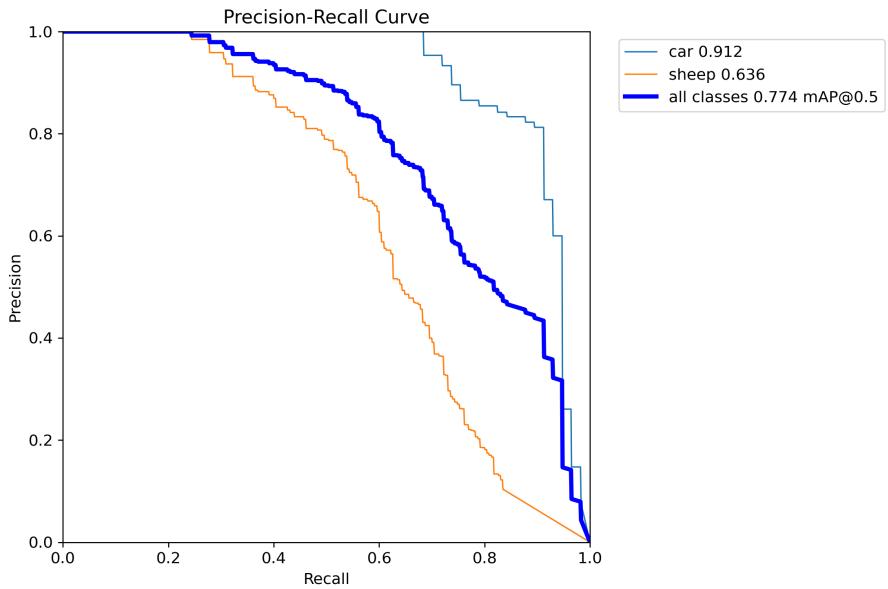


Figure s446. precision\_over\_confidence, yolov8n, pre-trained=True, epochs=150, data=toggenburg\_alpaca\_ranch, hyperparameter-tuned=False

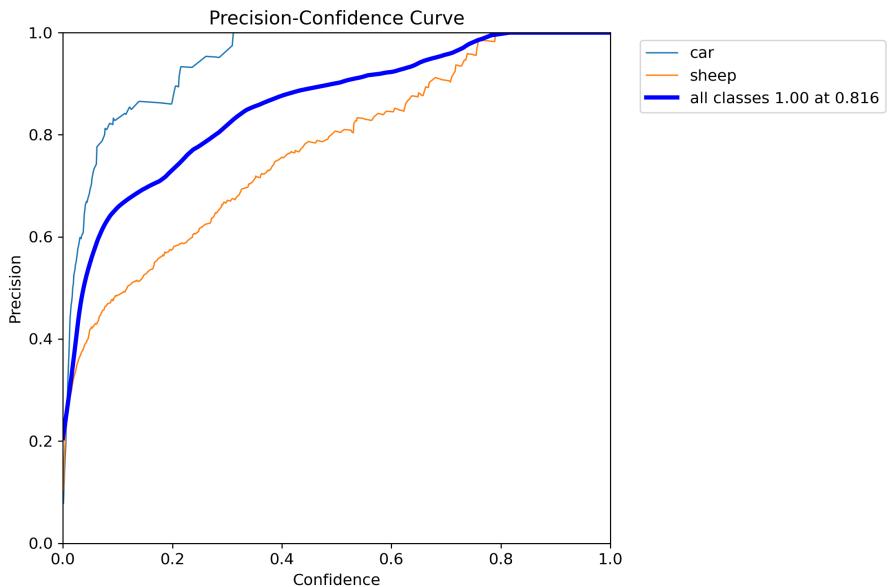


Figure s447. recall\_over\_confidence, yolov8n, pre-trained=True, epochs=150, data=toggenburg\_alpaca\_ranch, hyperparameter-tuned=False

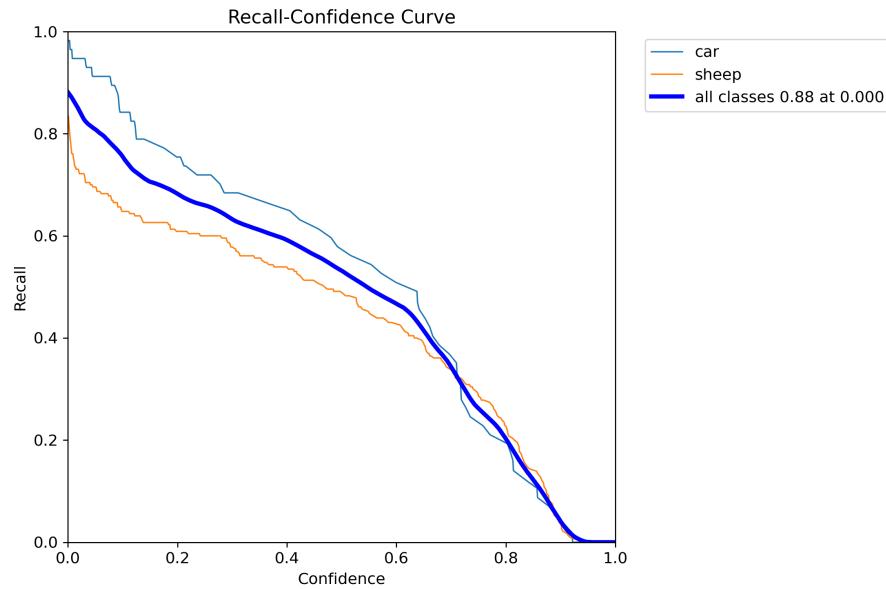


Figure s448. confusion\_matrix, yolov8n, pre-trained=True, epochs=150, data=toggenburg\_alpaca\_ranch, hyperparameter-tuned=False

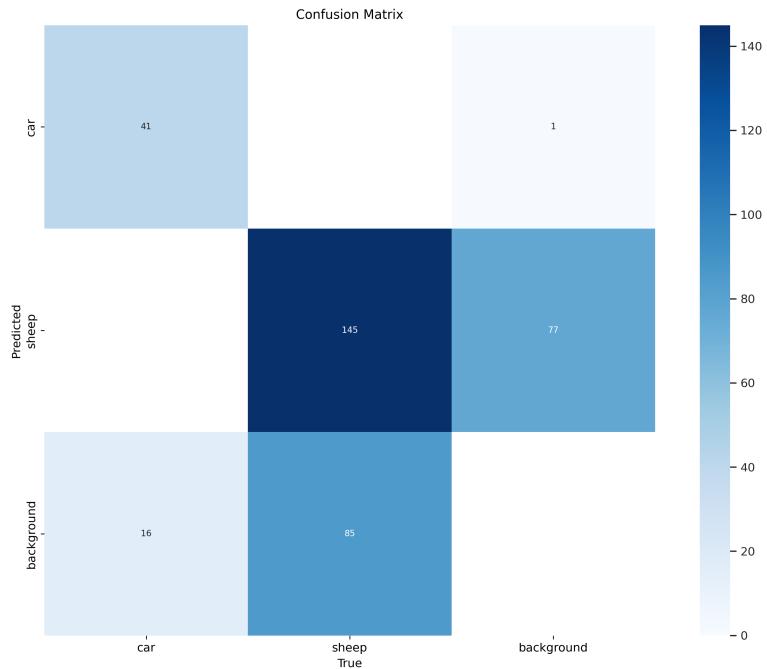


Figure s449. confusion\_matrix\_normalized, yolov8n, pre-trained=True, epochs=150, data=toggenburg\_alpaca\_ranch, hyperparameter-tuned=False

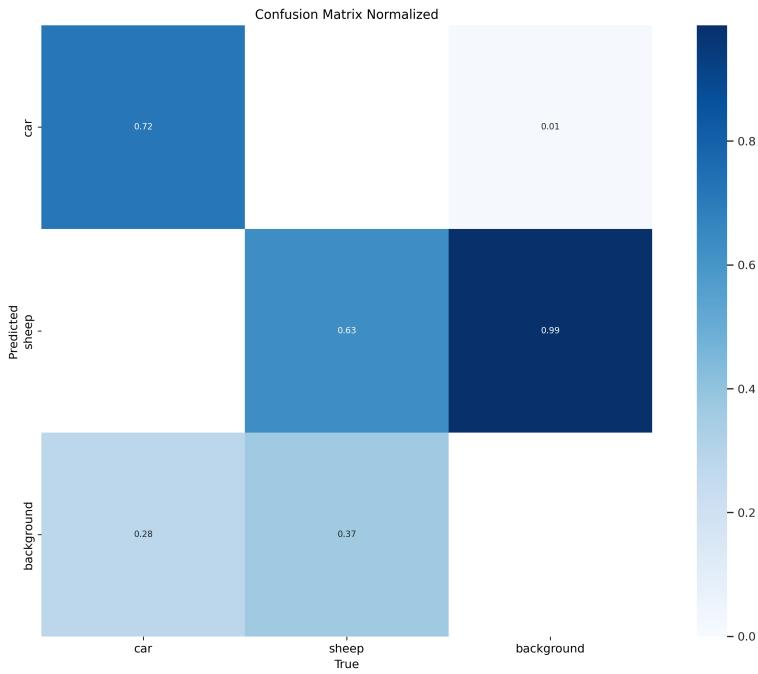


Figure s450. f1\_over\_confidence, yolov8n, pre-trained=False, epochs=50, data=duomo, hyperparameter-tuned=False

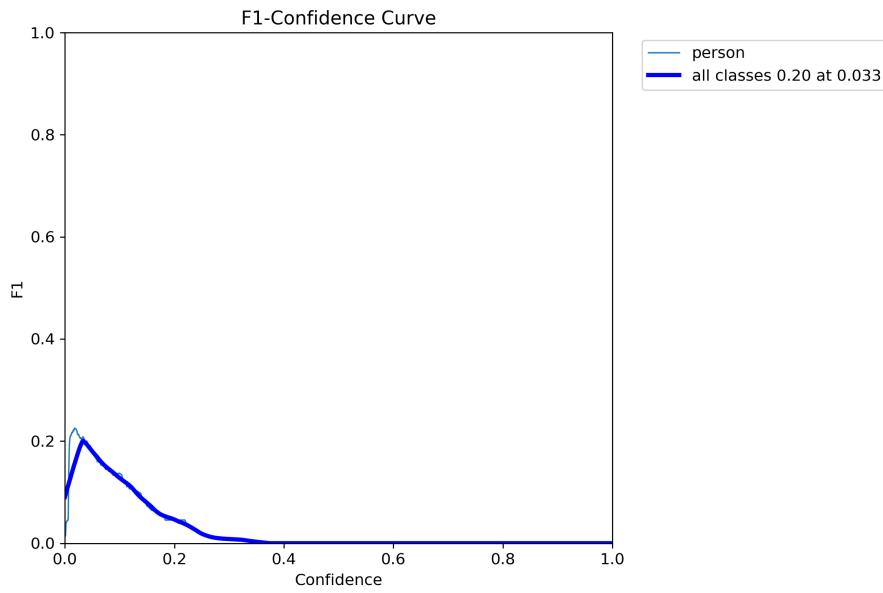


Figure s451. precision\_over\_recall, yolov8n, pre-trained=False, epochs=50, data=duomo, hyperparameter-tuned=False

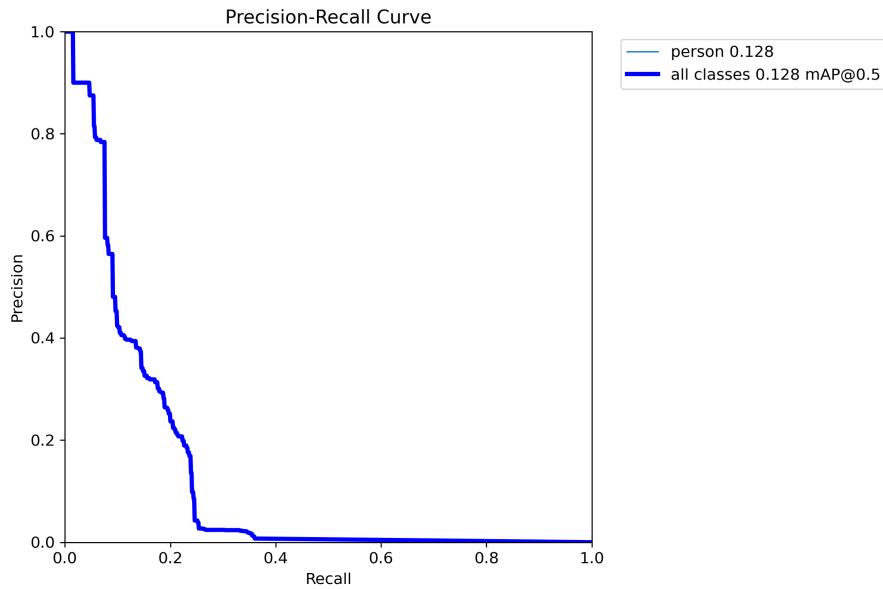


Figure s452. precision\_over\_confidence, yolov8n, pre-trained=False, epochs=50, data=duomo, hyperparameter-tuned=False

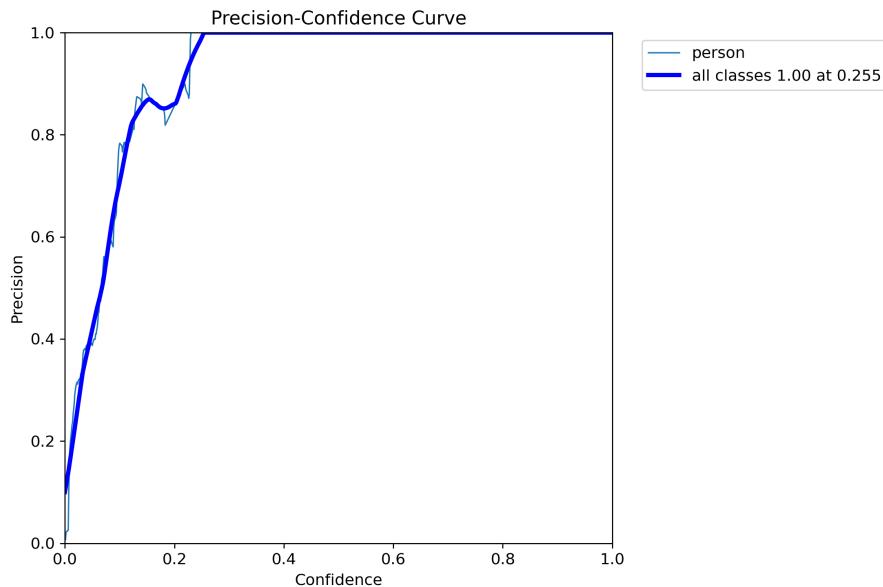


Figure s453. recall\_over\_confidence, yolov8n, pre-trained=False, epochs=50, data=duomo, hyperparameter-tuned=False

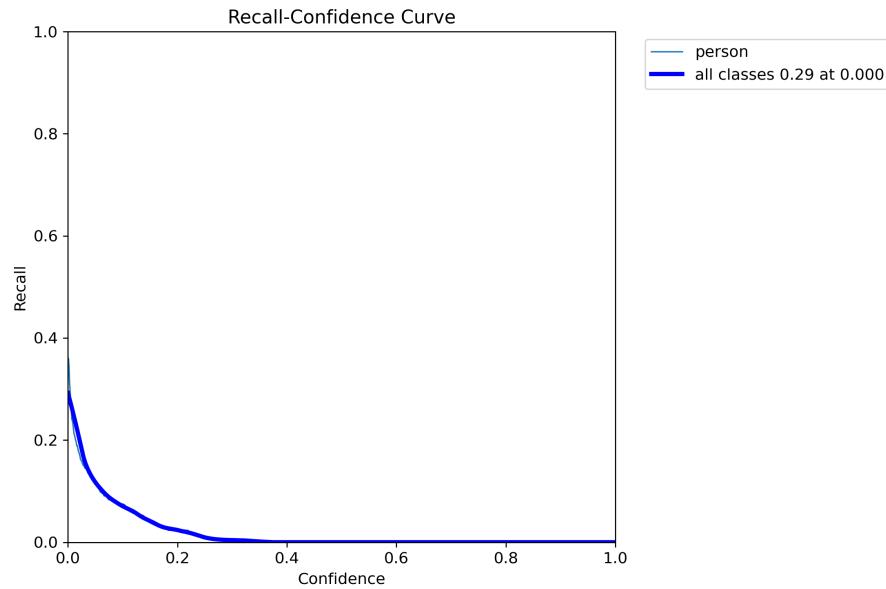


Figure s454. confusion\_matrix, yolov8n, pre-trained=False, epochs=50, data=duomo, hyperparameter-tuned=False

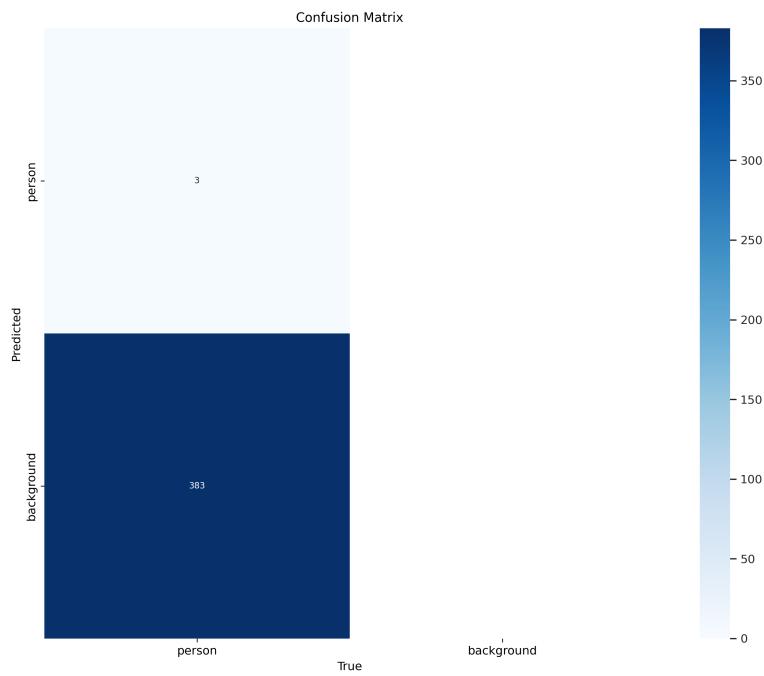


Figure s455. confusion\_matrix\_normalized, yolov8n, pre-trained=False, epochs=50, data=duomo, hyperparameter-tuned=False

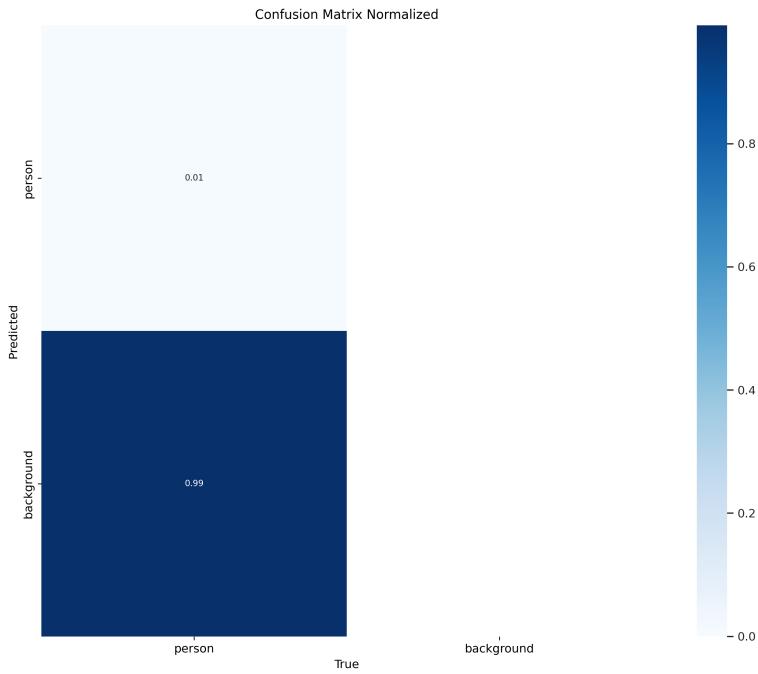


Figure s456. f1\_over\_confidence, yolov8n, pre-trained=False, epochs=100, data=duomo, hyperparameter-tuned=False

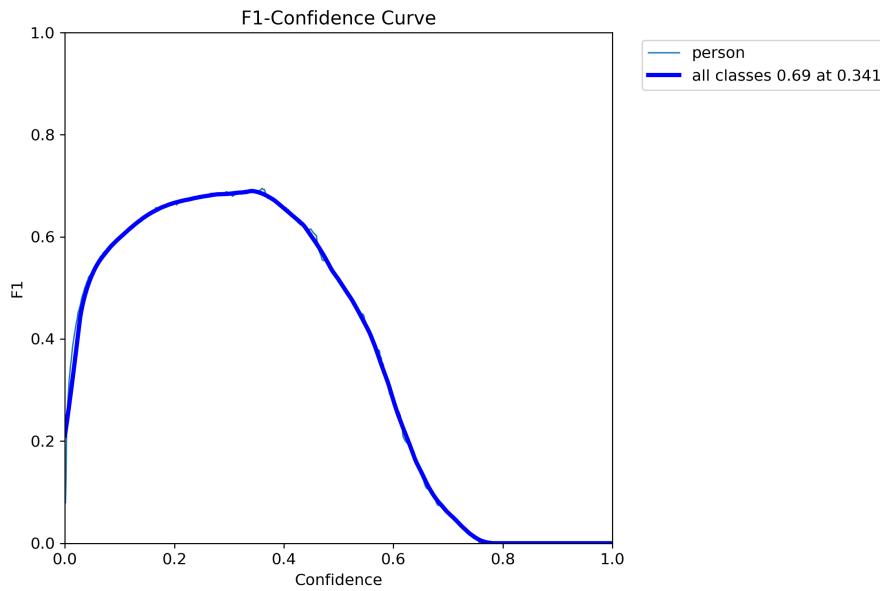


Figure s457. precision\_over\_recall, yolov8n, pre-trained=False, epochs=100, data=duomo, hyperparameter-tuned=False

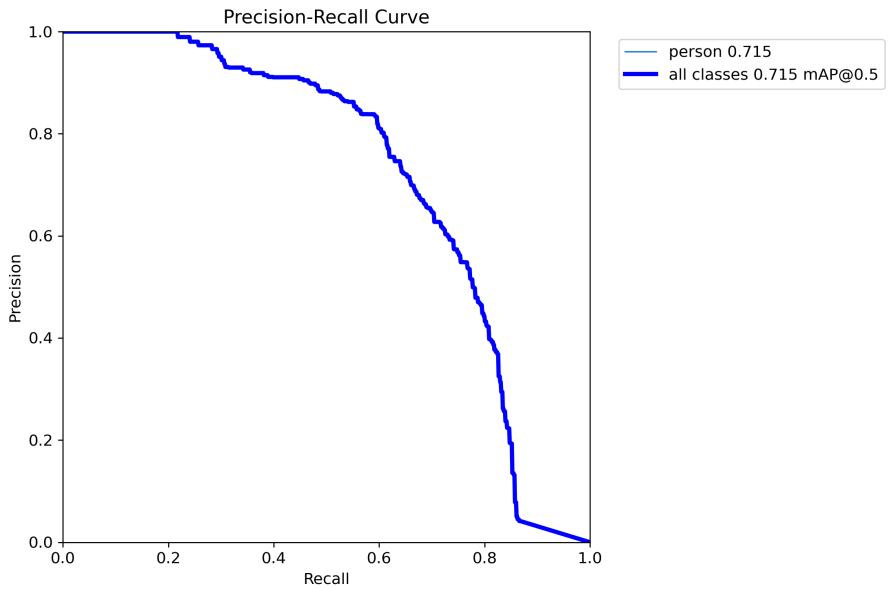


Figure s458. precision\_over\_confidence, yolov8n, pre-trained=False, epochs=100, data=duomo, hyperparameter-tuned=False

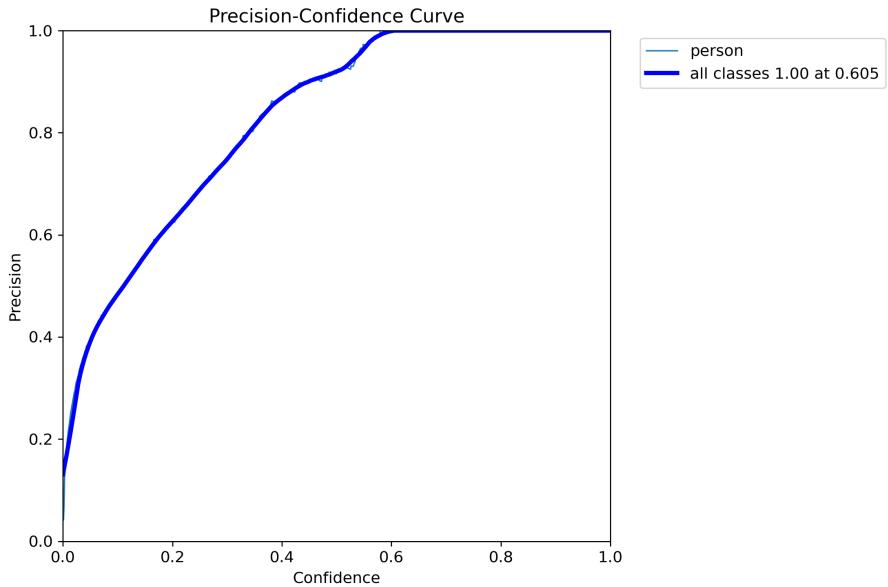


Figure s459. recall\_over\_confidence, yolov8n, pre-trained=False, epochs=100, data=duomo, hyperparameter-tuned=False

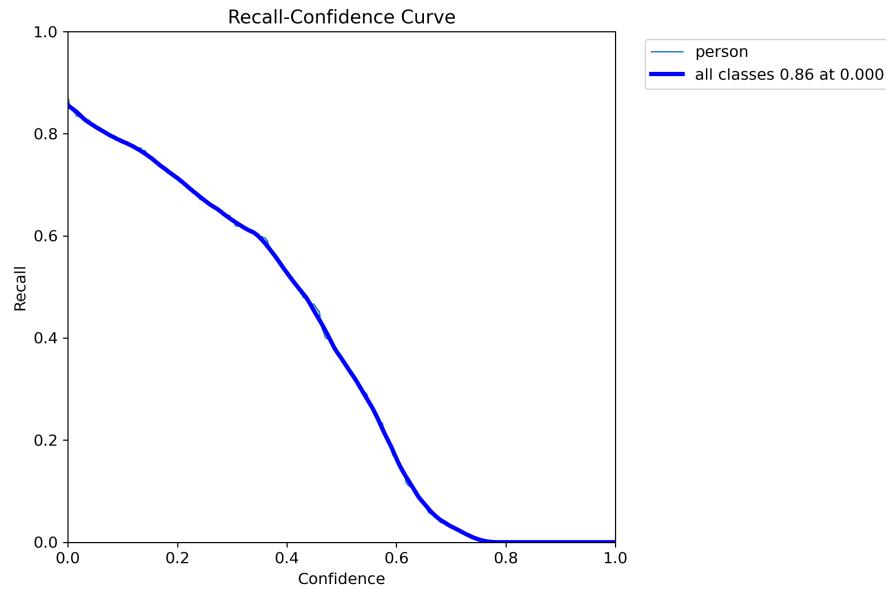


Figure s460. confusion\_matrix, yolov8n, pre-trained=False, epochs=100, data=duomo, hyperparameter-tuned=False

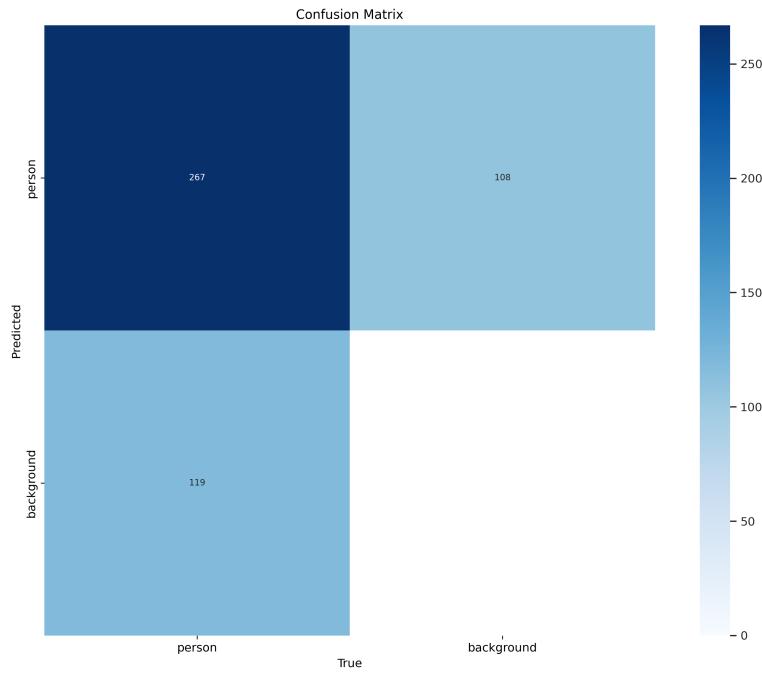


Figure s461. confusion\_matrix\_normalized, yolov8n, pre-trained=False, epochs=100, data=duomo, hyperparameter-tuned=False

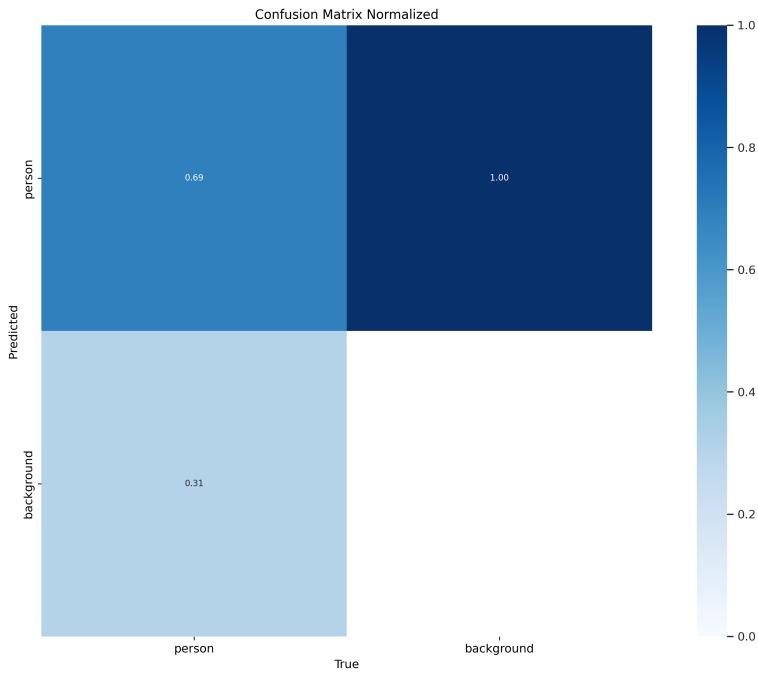


Figure s462. f1\_over\_confidence, yolov8n, pre-trained=False, epochs=150, data=duomo, hyperparameter-tuned=False

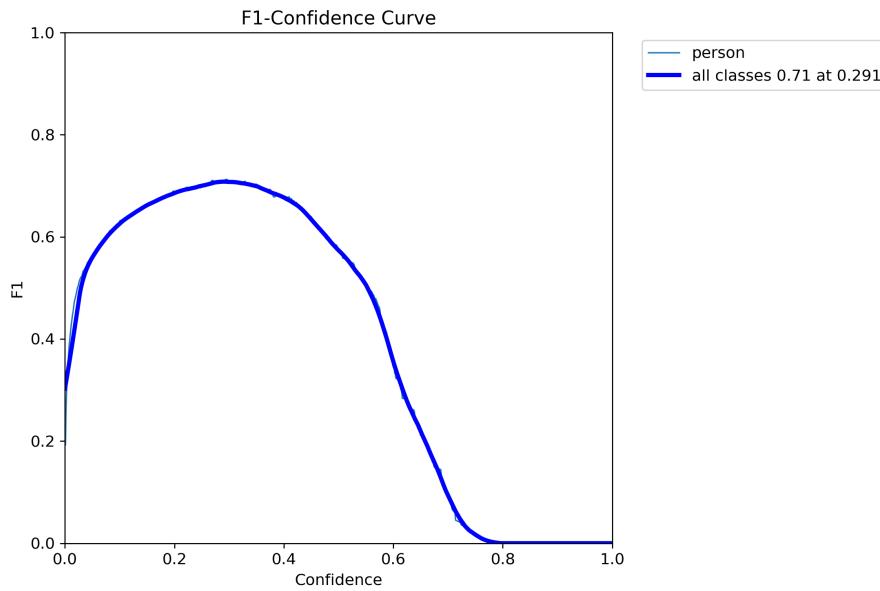


Figure s463. precision\_over\_recall, yolov8n, pre-trained=False, epochs=150, data=duomo, hyperparameter-tuned=False

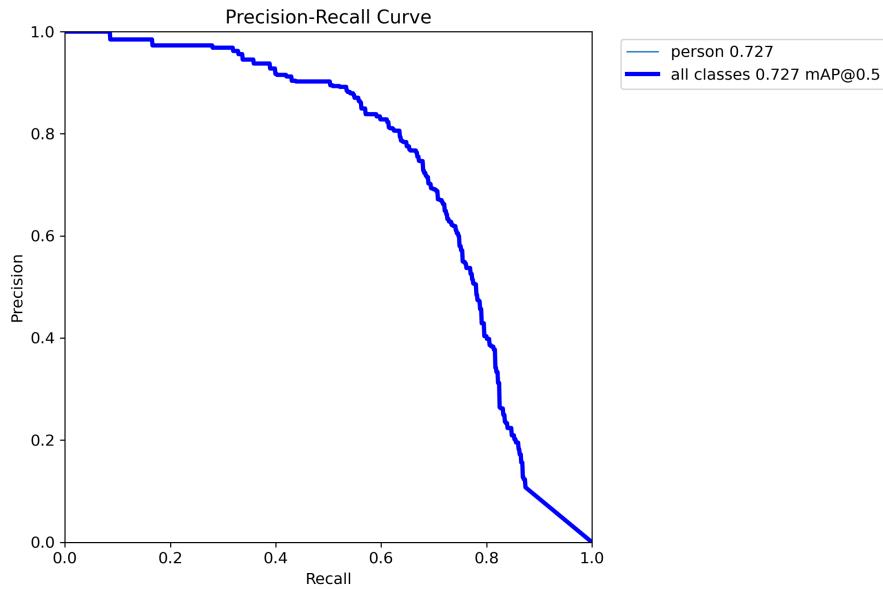


Figure s464. precision\_over\_confidence, yolov8n, pre-trained=False, epochs=150, data=duomo, hyperparameter-tuned=False

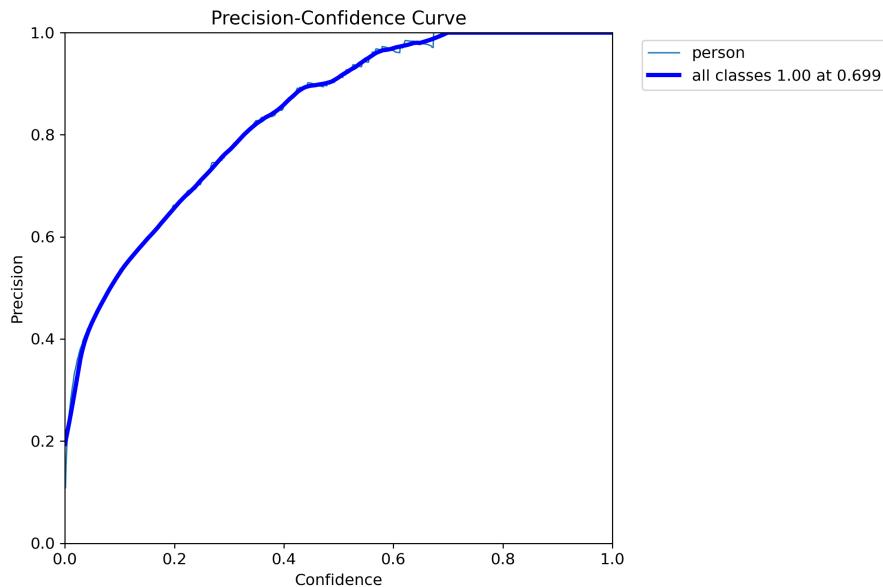


Figure s465. recall\_over\_confidence, yolov8n, pre-trained=False, epochs=150, data=duomo, hyperparameter-tuned=False

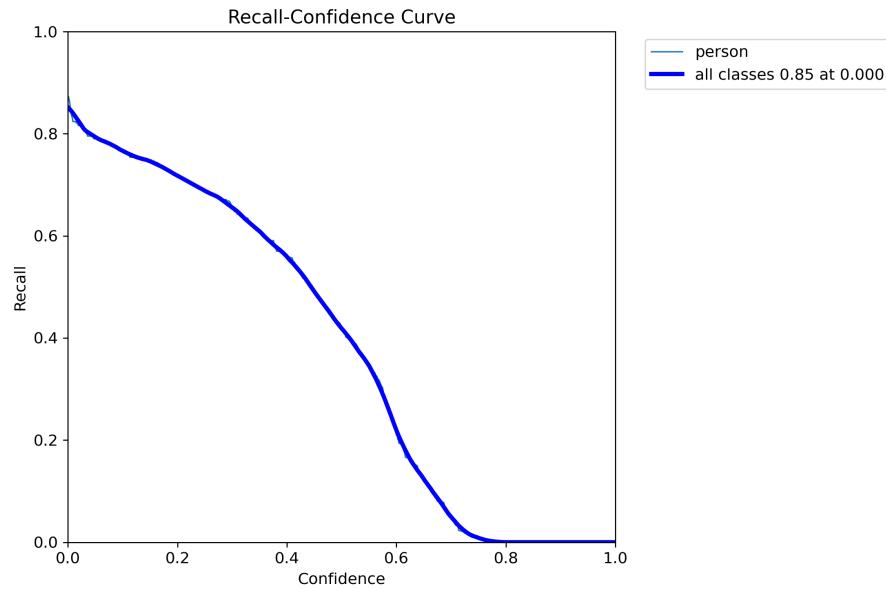


Figure s466. confusion\_matrix, yolov8n, pre-trained=False, epochs=150, data=duomo, hyperparameter-tuned=False

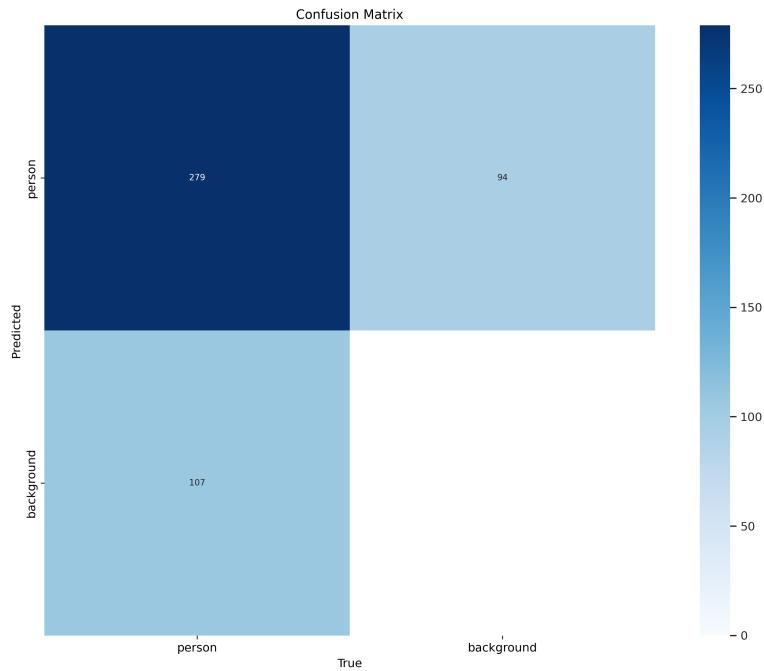


Figure s467. confusion\_matrix\_normalized, yolov8n, pre-trained=False, epochs=150, data=duomo, hyperparameter-tuned=False

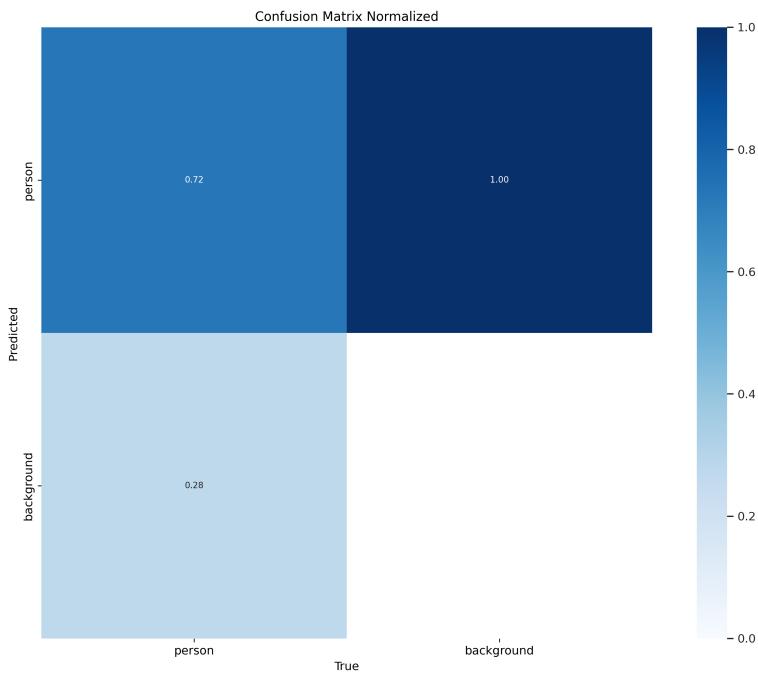


Figure s468. f1\_over\_confidence, yolov8n, pre-trained=False, epochs=50, data=hadji\_dimitar\_square, hyperparameter-tuned=False

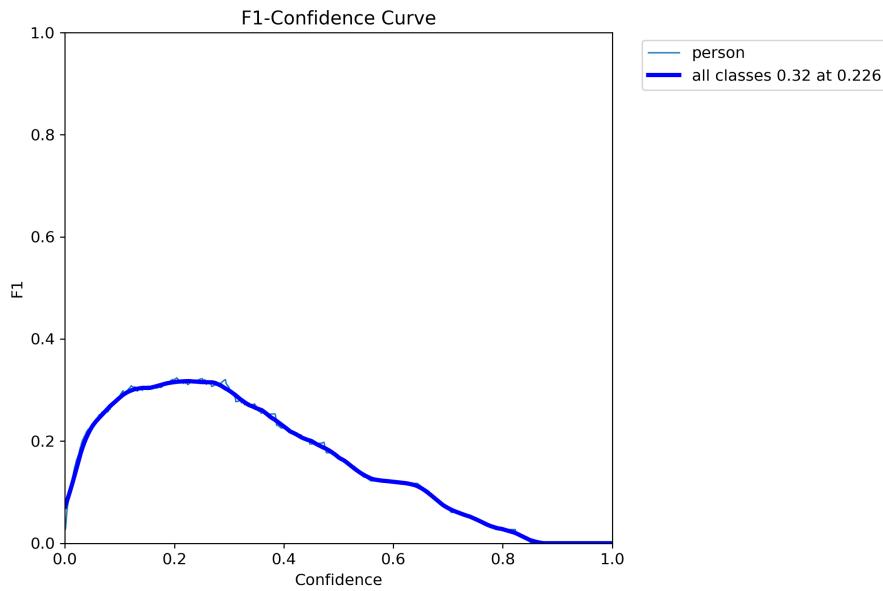


Figure s469. precision\_over\_recall, yolov8n, pre-trained=False, epochs=50, data=hadji\_dimitar\_square, hyperparameter-tuned=False

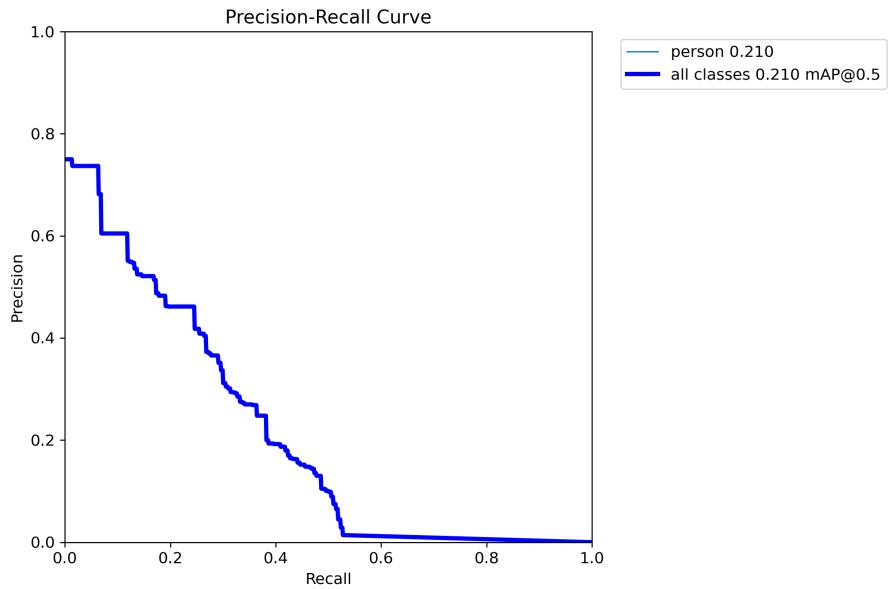


Figure s470. precision\_over\_confidence, yolov8n, pre-trained=False, epochs=50, data=hadji\_dimitar\_square, hyperparameter-tuned=False

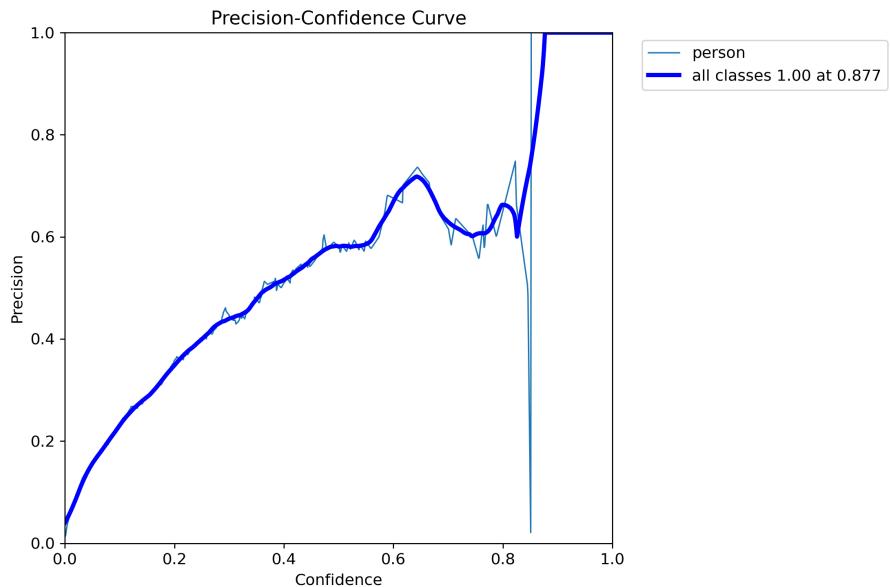


Figure s471. recall\_over\_confidence, yolov8n, pre-trained=False, epochs=50, data=hadji\_dimitar\_square, hyperparameter-tuned=False

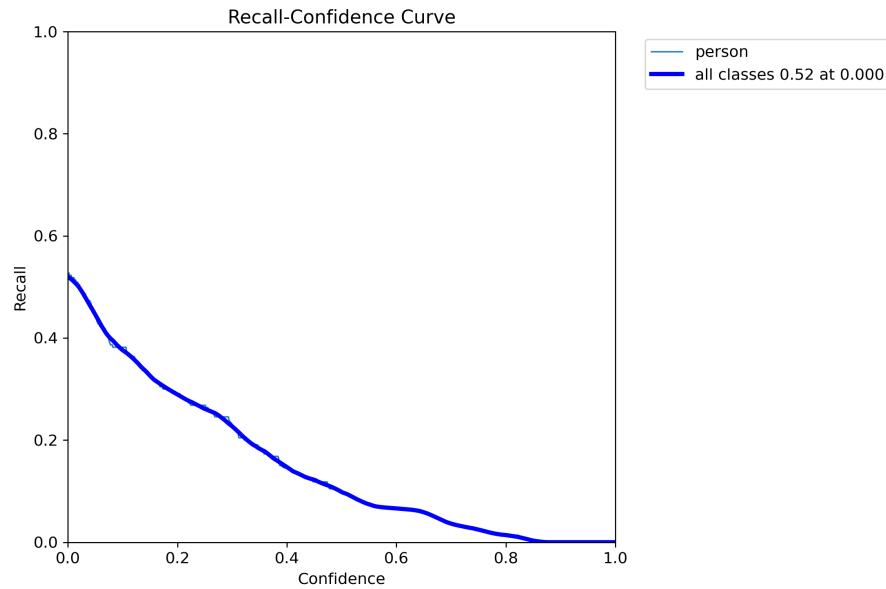


Figure s472. confusion\_matrix, yolov8n, pre-trained=False, epochs=50, data=hadji\_dimitar\_square, hyperparameter-tuned=False

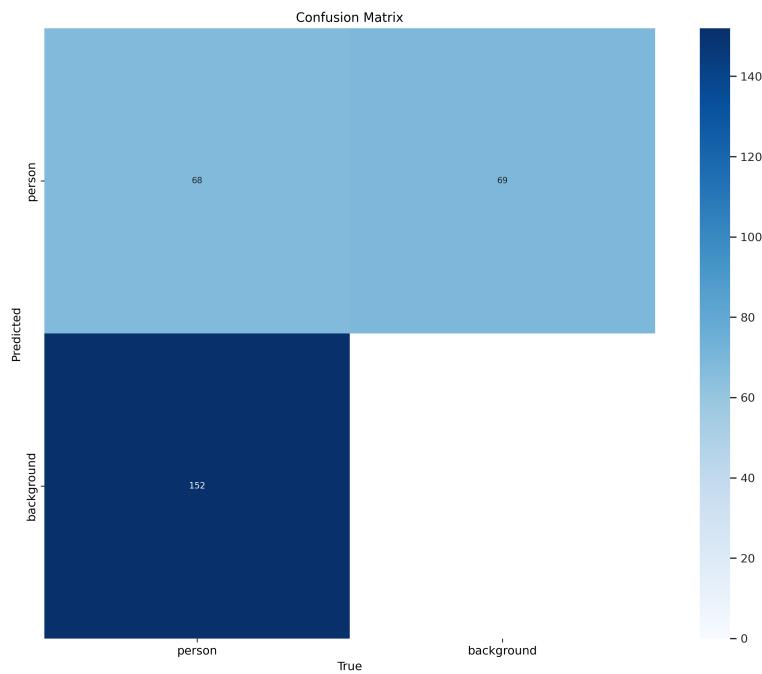


Figure s473. confusion\_matrix\_normalized, yolov8n, pre-trained=False, epochs=50, data=hadji\_dimitar\_square, hyperparameter-tuned=False

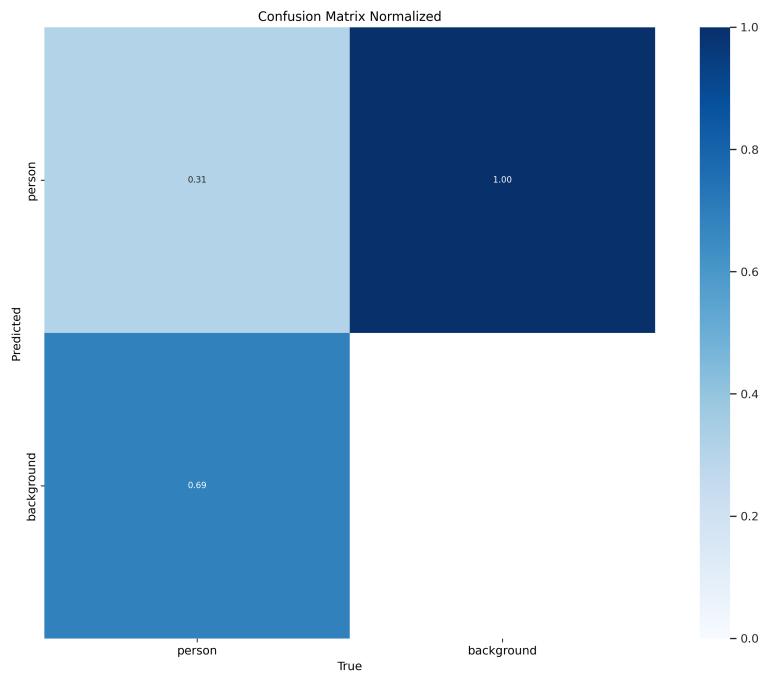


Figure s478. `confusion_matrix`, `yolov8n`, `pre-trained=False`, `epochs=100`,  
`data=hadji_dimitar_square`, `hyperparameter-tuned=False`

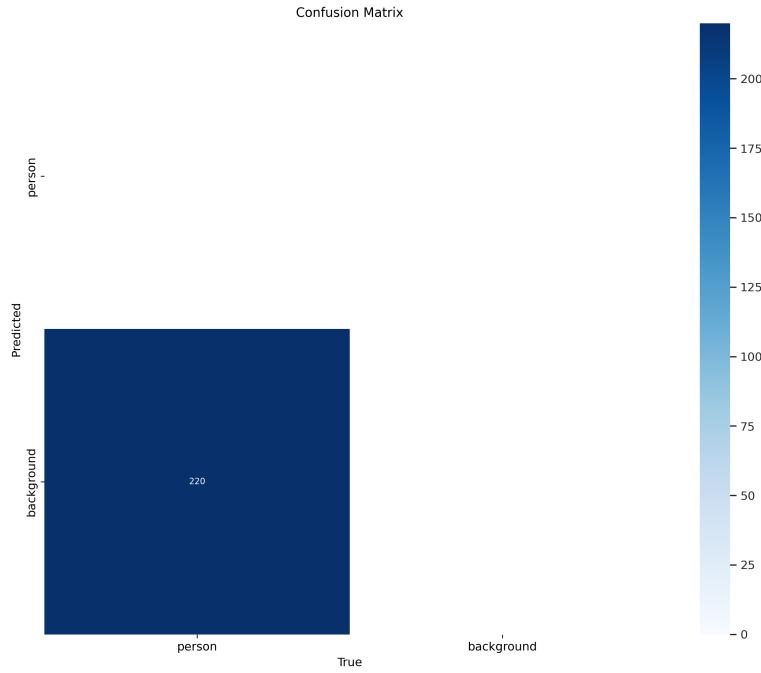


Figure s479. confusion\_matrix\_normalized, yolov8n, pre-trained=False, epochs=100, data=hadji\_dimitar\_square, hyperparameter-tuned=False

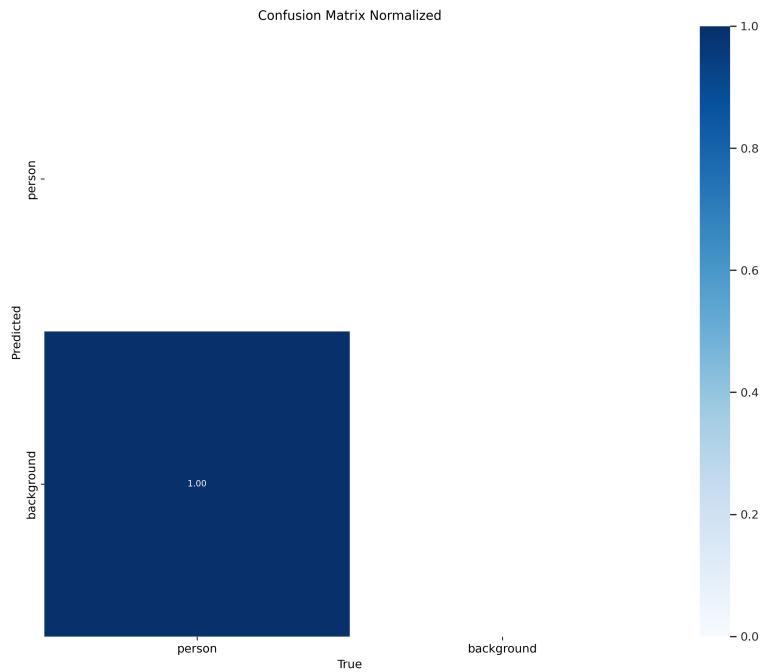


Figure s480. f1\_over\_confidence, yolov8n, pre-trained=False, epochs=150, data=hadji\_dimitar\_square, hyperparameter-tuned=False

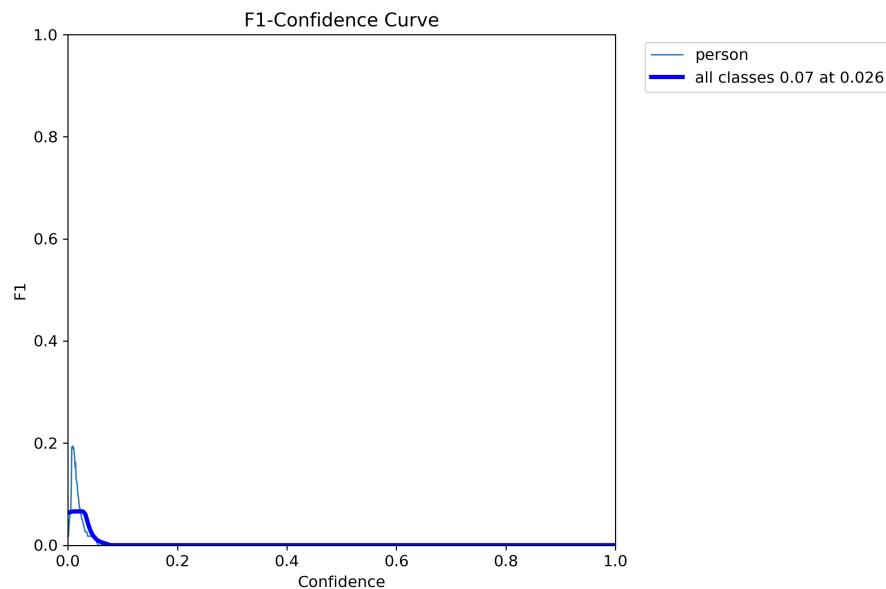


Figure s481. precision\_over\_recall, yolov8n, pre-trained=False, epochs=150, data=hadji\_dimitar\_square, hyperparameter-tuned=False

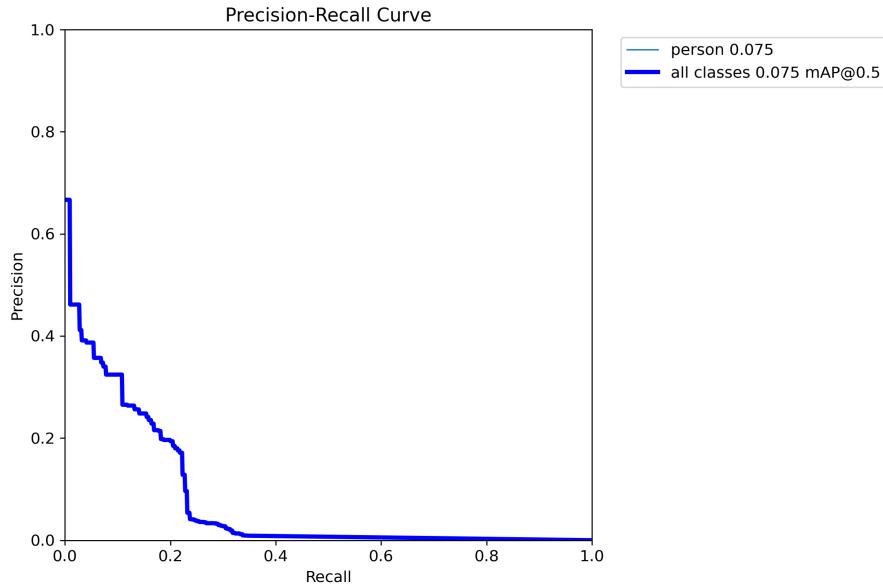


Figure s482. precision\_over\_confidence, yolov8n, pre-trained=False, epochs=150, data=hadji\_dimitar\_square, hyperparameter-tuned=False

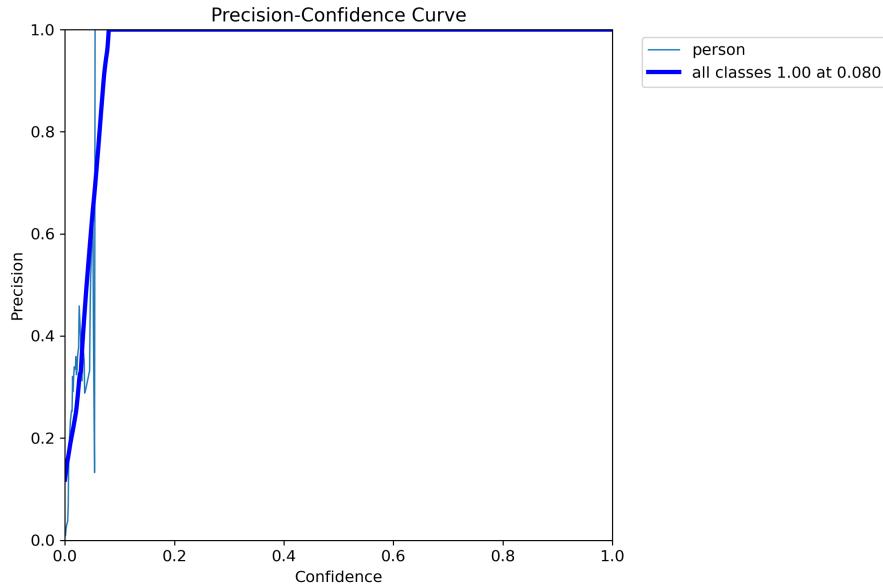


Figure s483. recall\_over\_confidence, yolov8n, pre-trained=False, epochs=150, data=hadji\_dimitar\_square, hyperparameter-tuned=False

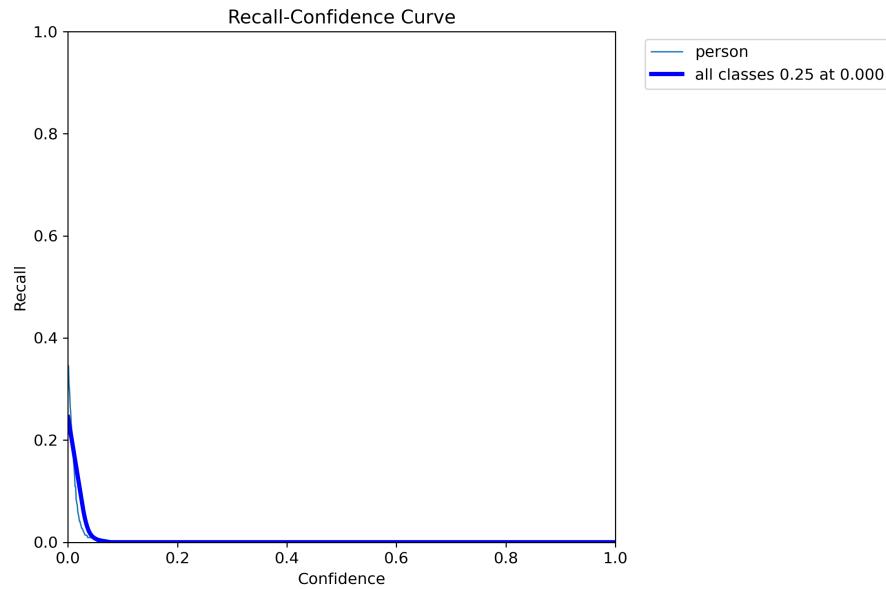


Figure s484. confusion\_matrix, yolov8n, pre-trained=False, epochs=150, data=hadji\_dimitar\_square, hyperparameter-tuned=False

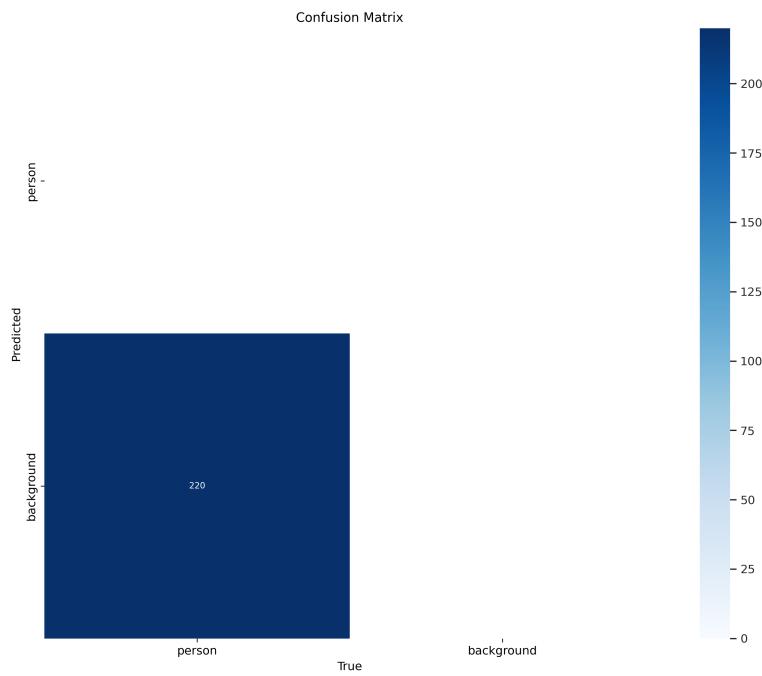


Figure s485. confusion\_matrix\_normalized, yolov8n, pre-trained=False, epochs=150, data=hadji\_dimitar\_square, hyperparameter-tuned=False

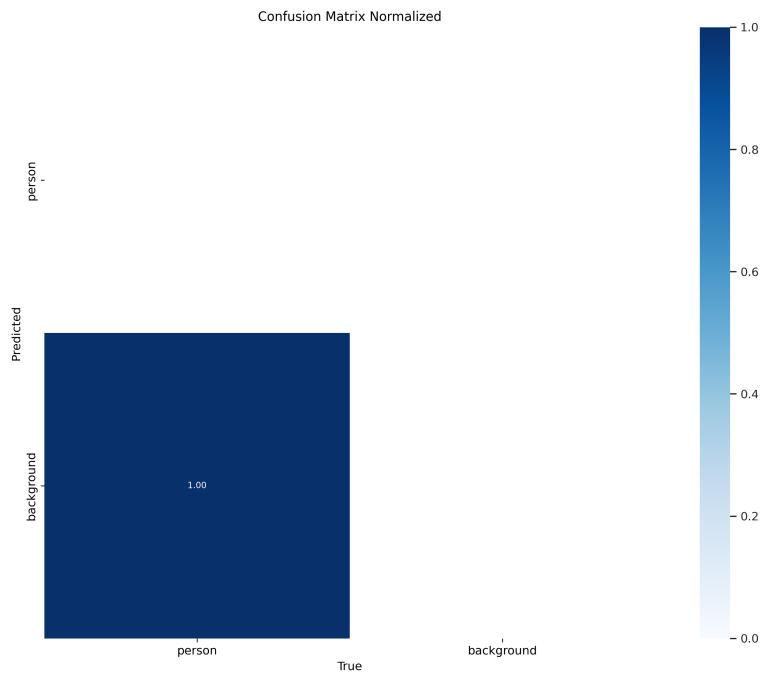


Figure s490. confusion\_matrix, yolov8n, pre-trained=False, epochs=50, data=keskvaljak, hyperparameter-tuned=False

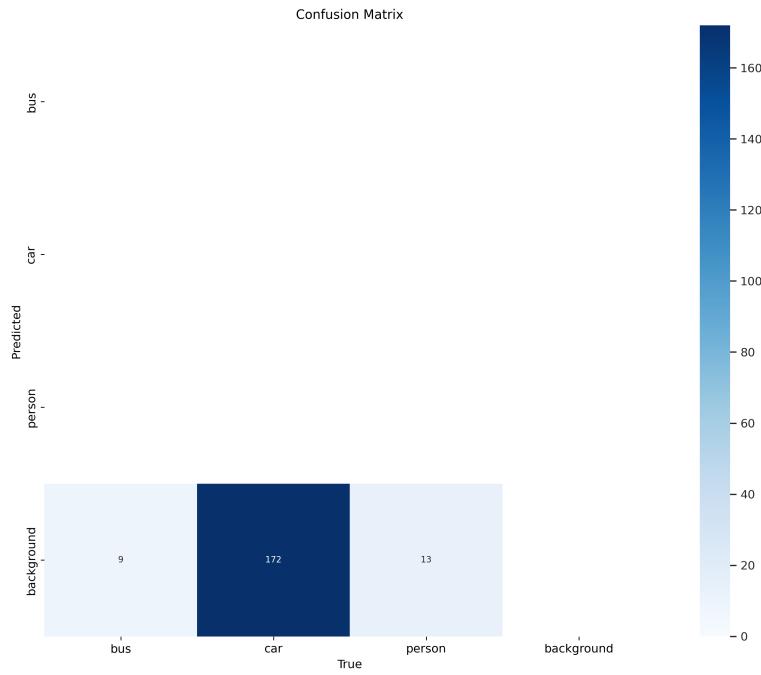


Figure s491. confusion\_matrix\_normalized, yolov8n, pre-trained=False, epochs=50, data=keskvaljak, hyperparameter-tuned=False

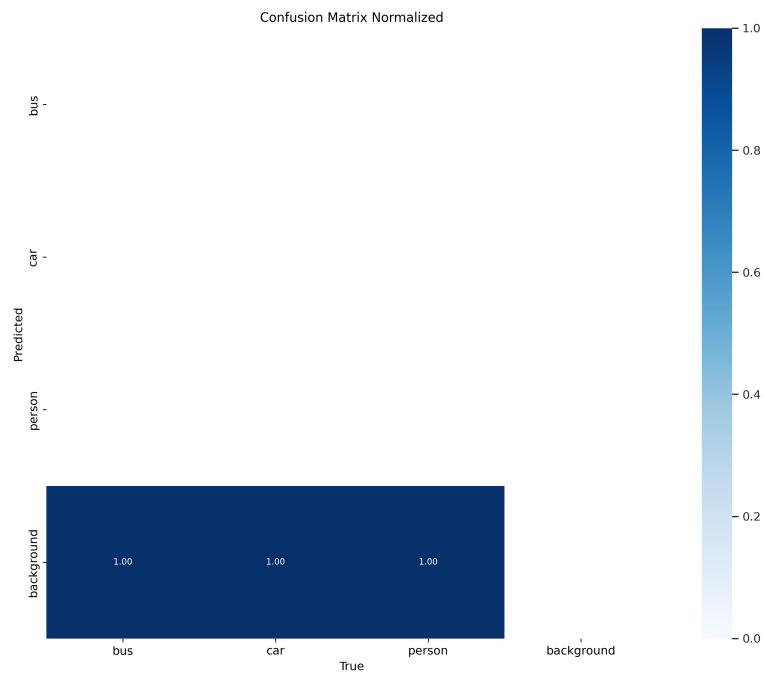


Figure s496. confusion\_matrix, yolov8n, pre-trained=False, epochs=100, data=keskvaljak, hyperparameter-tuned=False

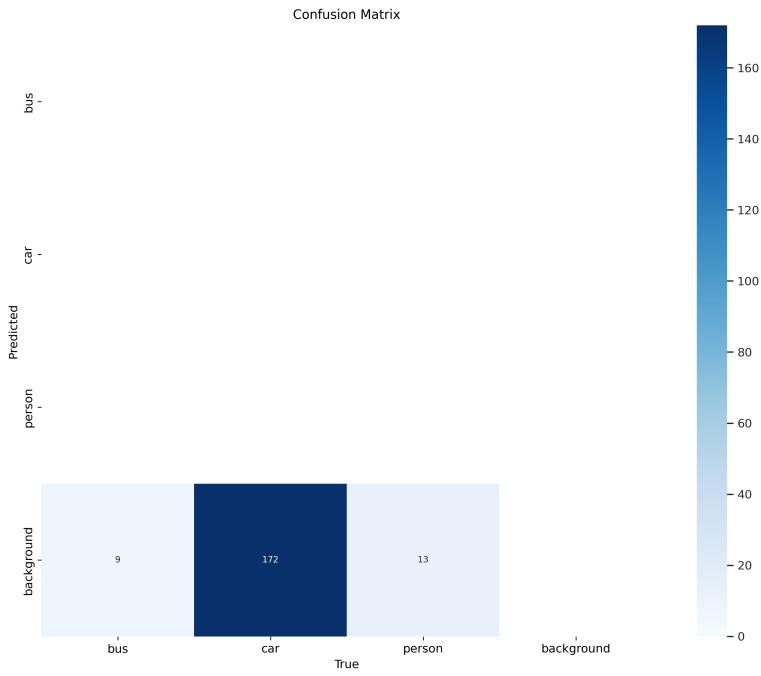


Figure s497. confusion\_matrix\_normalized, yolov8n, pre-trained=False, epochs=100, data=keskvaljak, hyperparameter-tuned=False

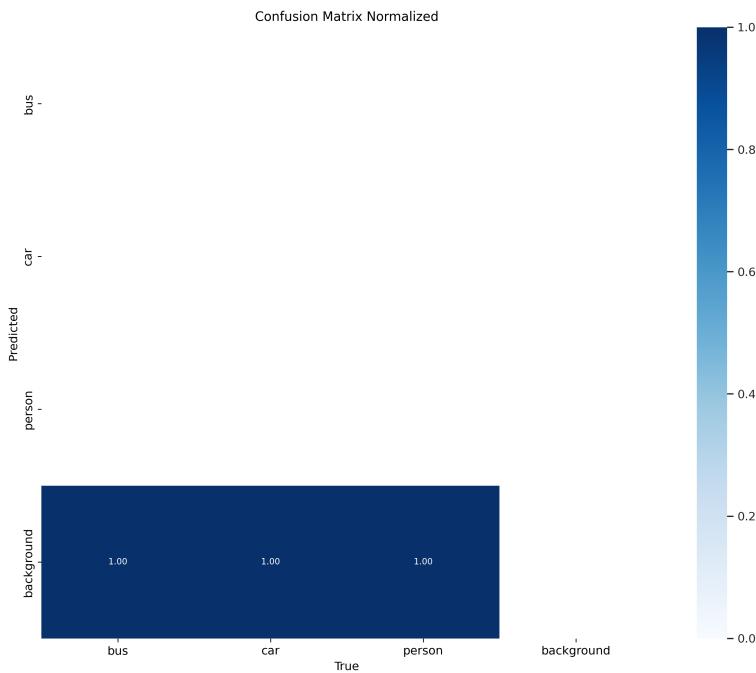


Figure s498. f1\_over\_confidence, yolov8n, pre-trained=False, epochs=150, data=keskvaljak, hyperparameter-tuned=False

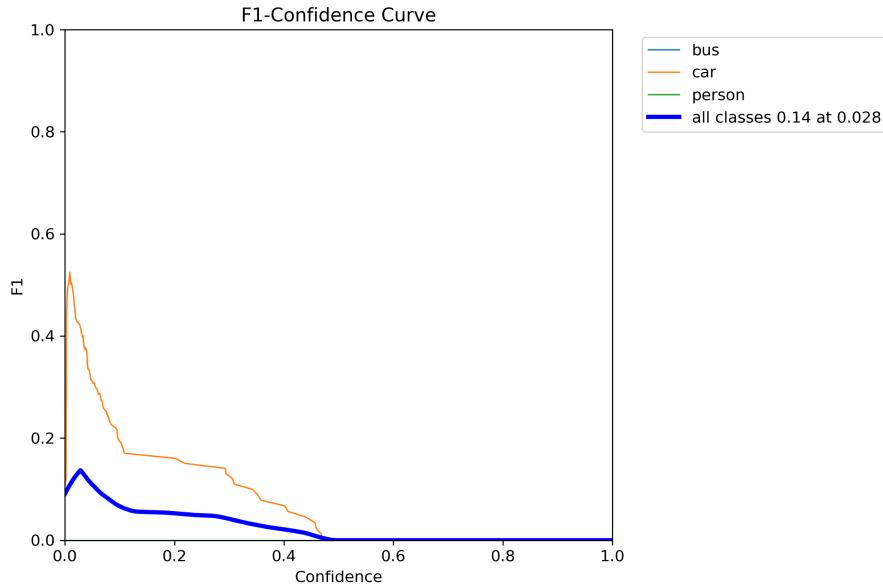


Figure s499. precision\_over\_recall, yolov8n, pre-trained=False, epochs=150, data=keskvaljak, hyperparameter-tuned=False

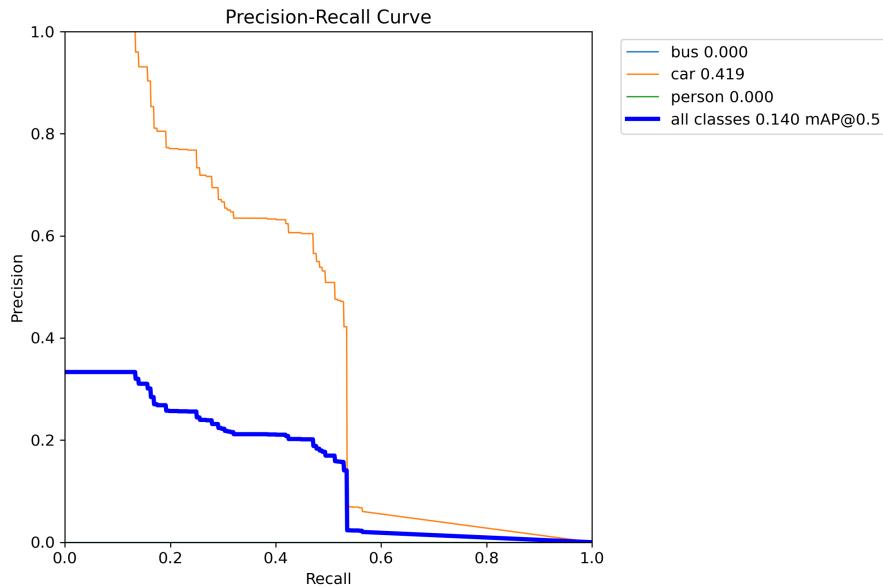


Figure s500. precision\_over\_confidence, yolov8n, pre-trained=False, epochs=150, data=keskvaljak, hyperparameter-tuned=False

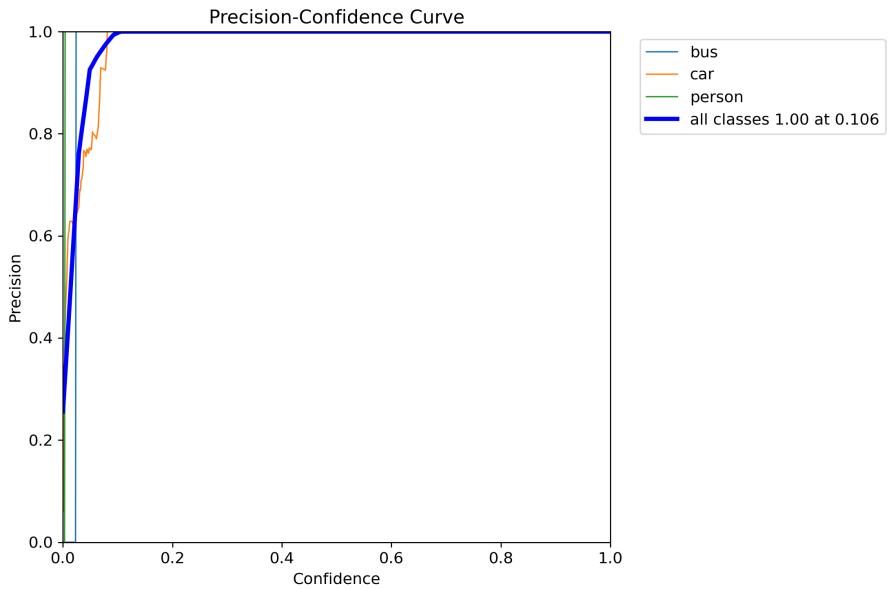


Figure s501. recall\_over\_confidence, yolov8n, pre-trained=False, epochs=150, data=keskvaljak, hyperparameter-tuned=False

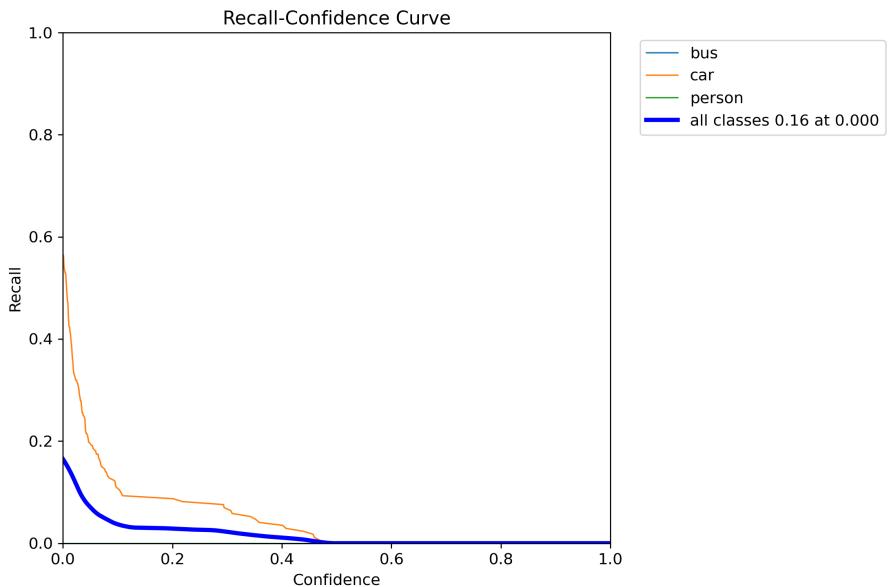


Figure s502. confusion\_matrix, yolov8n, pre-trained=False, epochs=150, data=keskvaljak, hyperparameter-tuned=False

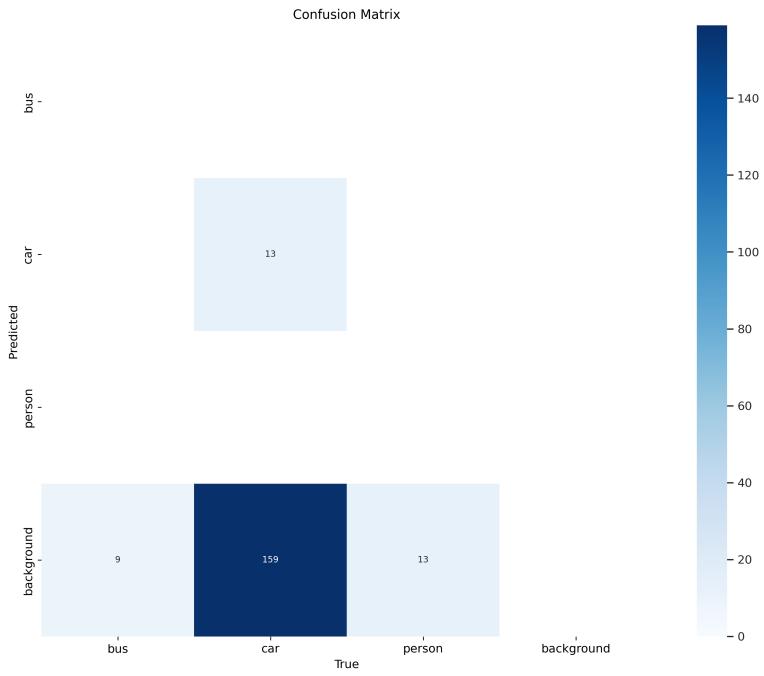


Figure s503. confusion\_matrix\_normalized, yolov8n, pre-trained=False, epochs=150, data=keskvaljak, hyperparameter-tuned=False

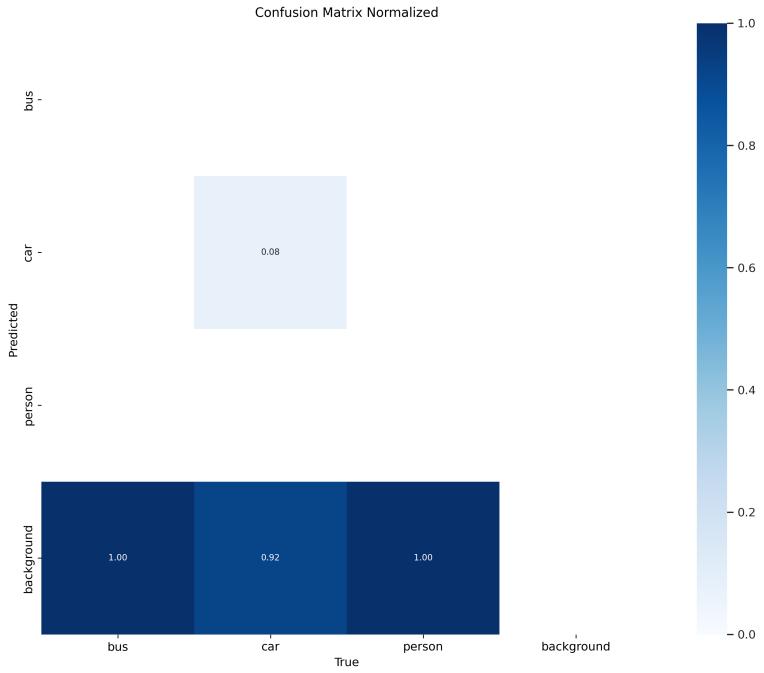


Figure s508. confusion\_matrix, yolov8n, pre-trained=False, epochs=50, data=kielce\_university\_of\_technology, hyperparameter-tuned=False

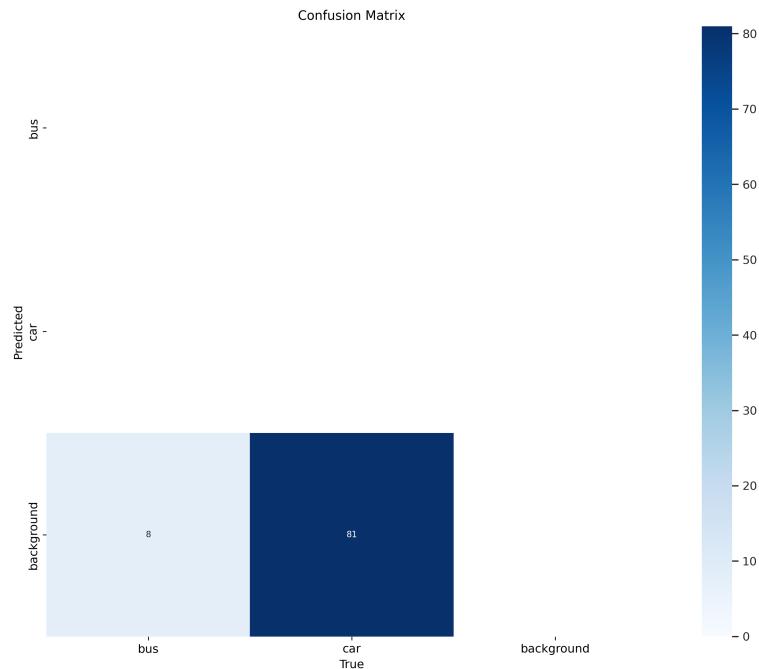


Figure s509. confusion\_matrix\_normalized, yolov8n, pre-trained=False, epochs=50, data=kielce\_university\_of\_technology, hyperparameter-tuned=False

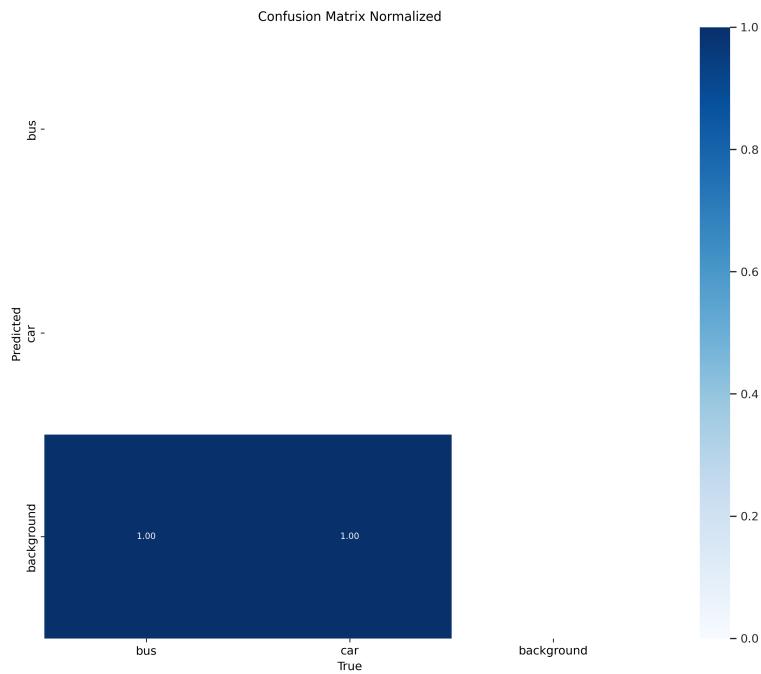


Figure s514. confusion\_matrix, yolov8n, pre-trained=False, epochs=100, data=kielce\_university\_of\_technology, hyperparameter-tuned=False

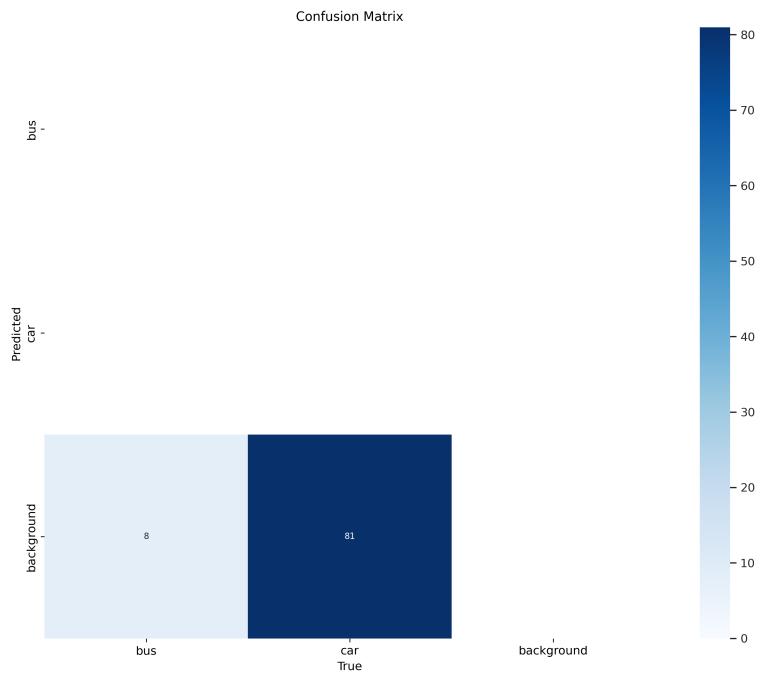


Figure s515. confusion\_matrix\_normalized, yolov8n, pre-trained=False, epochs=100, data=kielce\_university\_of\_technology, hyperparameter-tuned=False

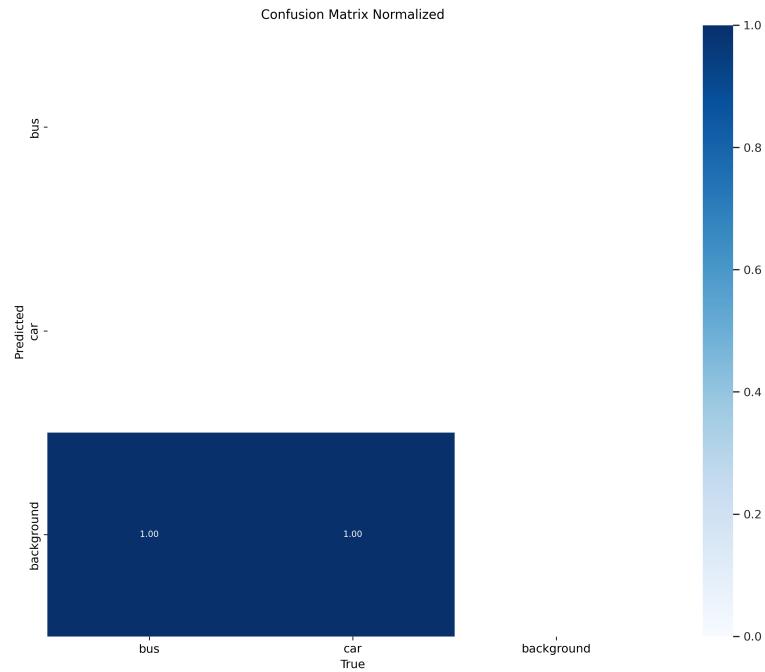


Figure s516. f1\_over\_confidence, yolov8n, pre-trained=False, epochs=150, data=kielce\_university\_of\_technology, hyperparameter-tuned=False

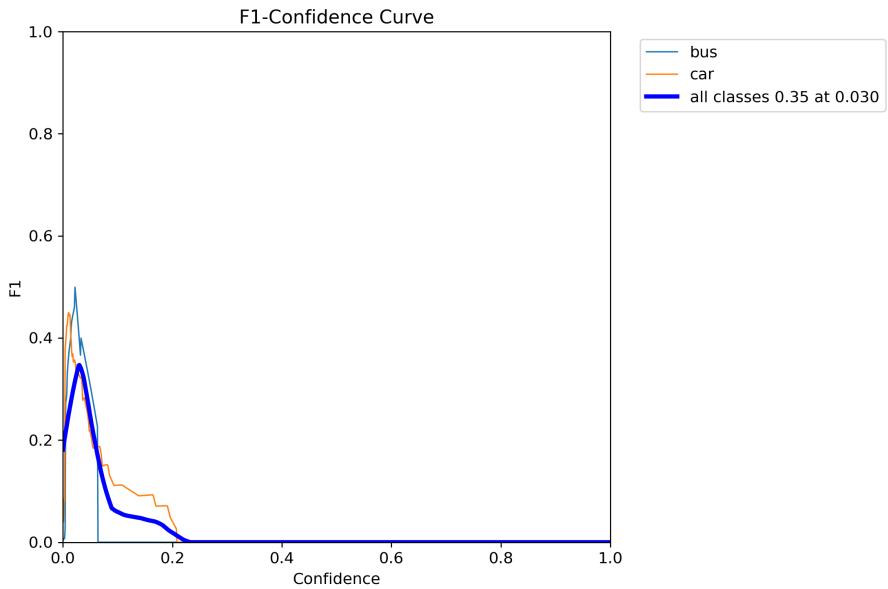


Figure s517. precision\_over\_recall, yolov8n, pre-trained=False, epochs=150, data=kielce\_university\_of\_technology, hyperparameter-tuned=False

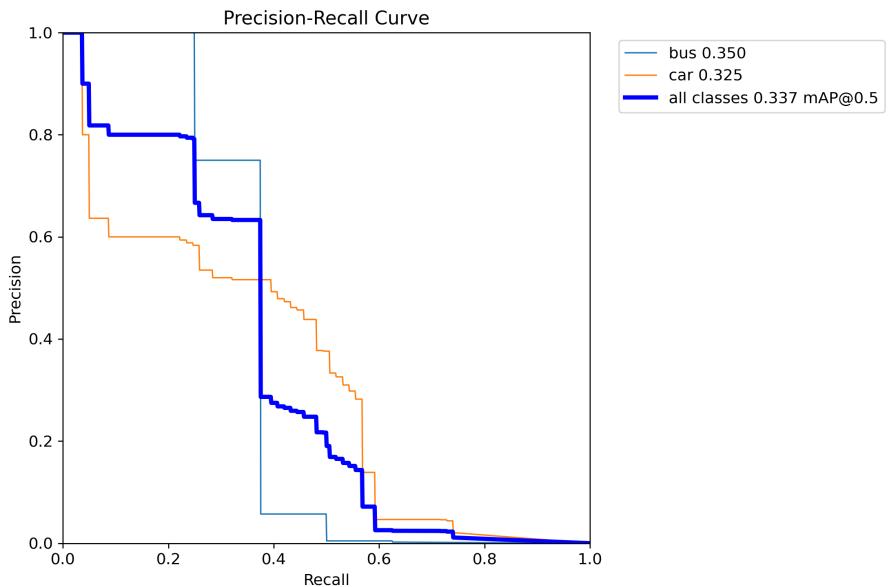


Figure s518. precision\_over\_confidence, yolov8n, pre-trained=False, epochs=150, data=kielce\_university\_of\_technology, hyperparameter-tuned=False

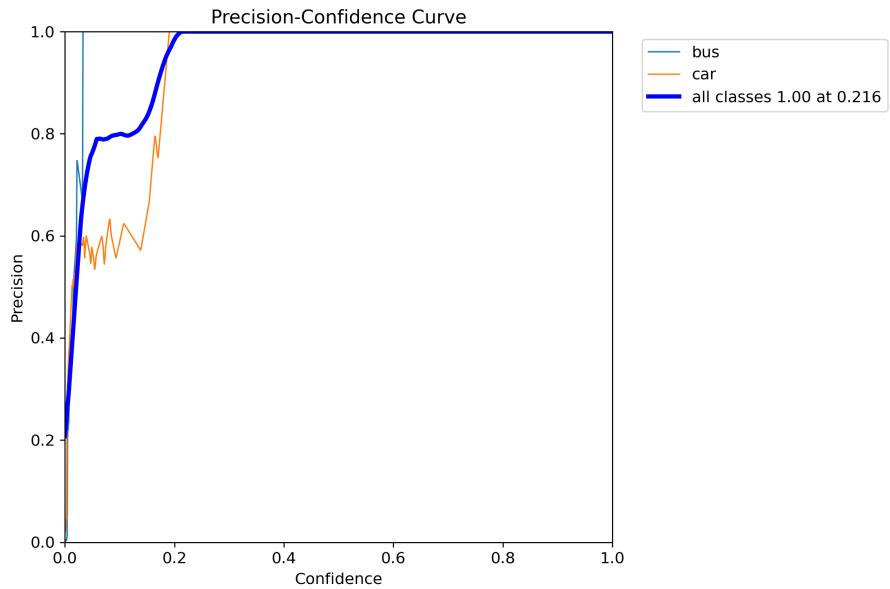


Figure s519. recall\_over\_confidence, yolov8n, pre-trained=False, epochs=150, data=kielce\_university\_of\_technology, hyperparameter-tuned=False

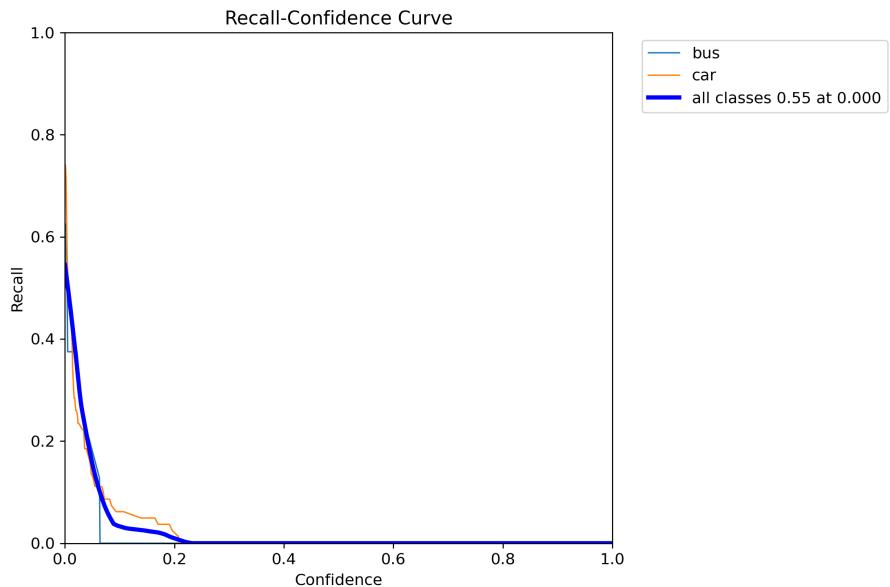


Figure s520. confusion\_matrix, yolov8n, pre-trained=False, epochs=150, data=kielce\_university\_of\_technology, hyperparameter-tuned=False

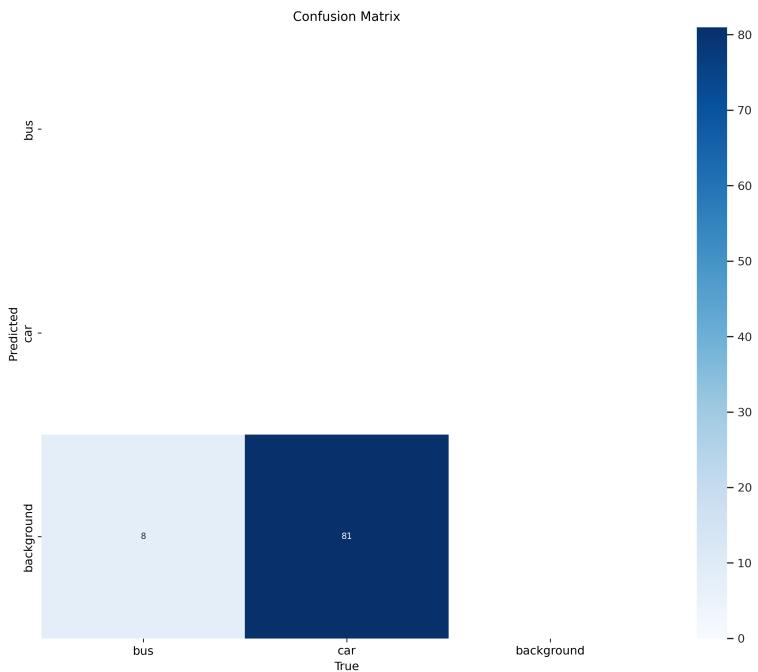


Figure s521. confusion\_matrix\_normalized, yolov8n, pre-trained=False, epochs=150, data=kielce\_university\_of\_technology, hyperparameter-tuned=False

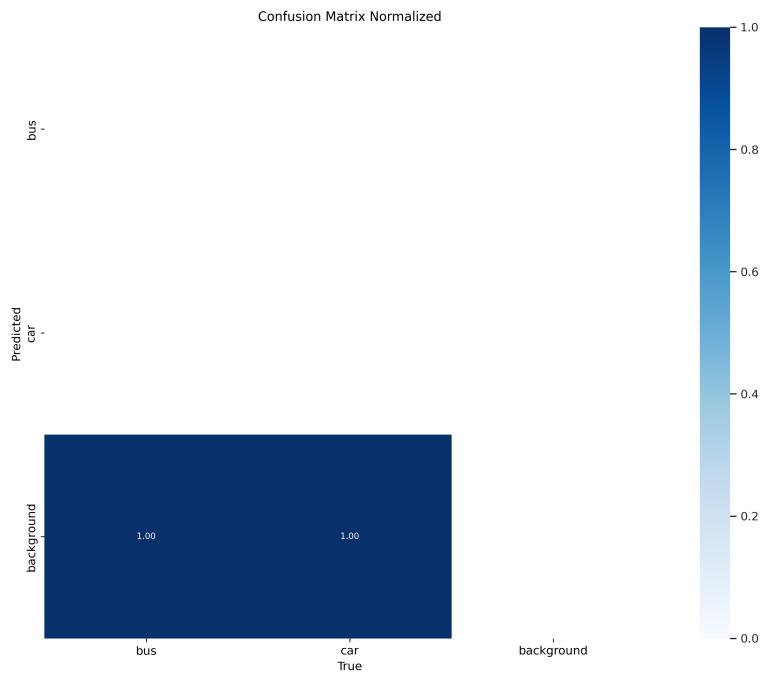


Figure s526. confusion\_matrix, yolov8n, pre-trained=False, epochs=50, data=toggenburg\_alpaca\_ranch, hyperparameter-tuned=False

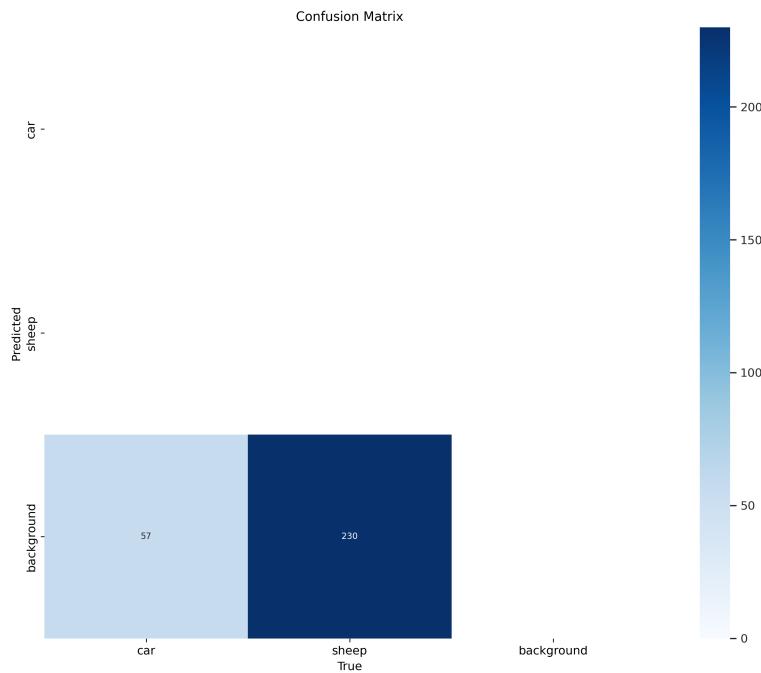


Figure s527. confusion\_matrix\_normalized, yolov8n, pre-trained=False, epochs=50, data=toggenburg\_alpaca\_ranch, hyperparameter-tuned=False

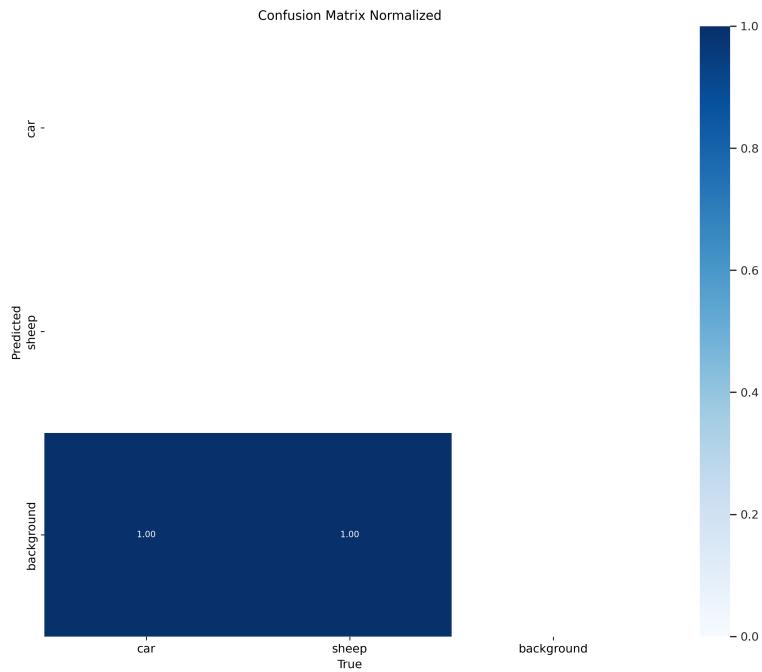


Figure s528. f1\_over\_confidence, yolov8n, pre-trained=False, epochs=100, data=toggenburg\_alpaca\_ranch, hyperparameter-tuned=False

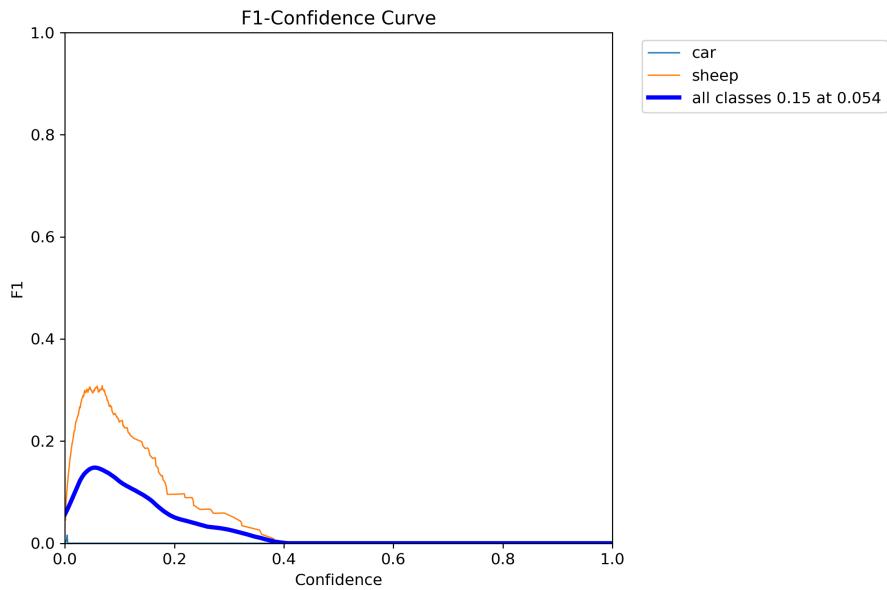


Figure s529. precision\_over\_recall, yolov8n, pre-trained=False, epochs=100, data=toggenburg\_alpaca\_ranch, hyperparameter-tuned=False

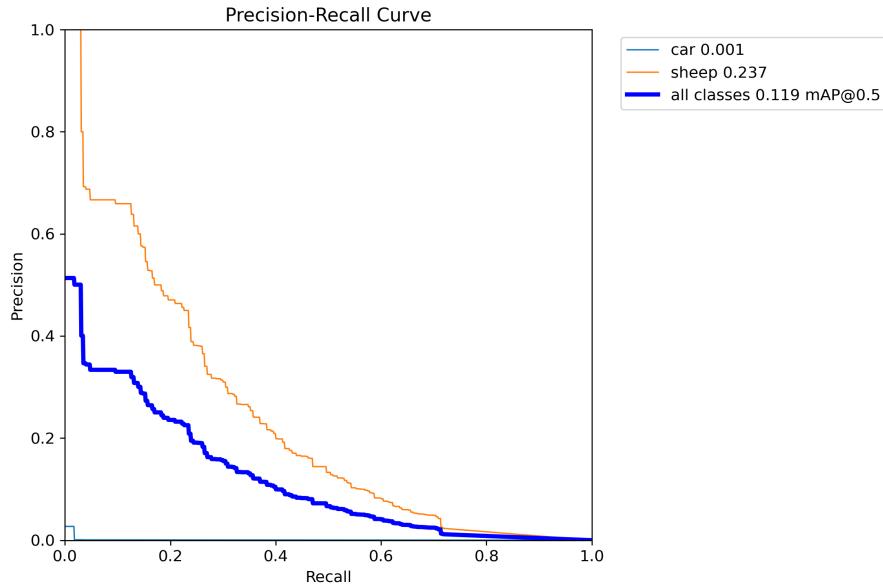


Figure s530. precision\_over\_confidence, yolov8n, pre-trained=False, epochs=100, data=toggenburg\_alpaca\_ranch, hyperparameter-tuned=False

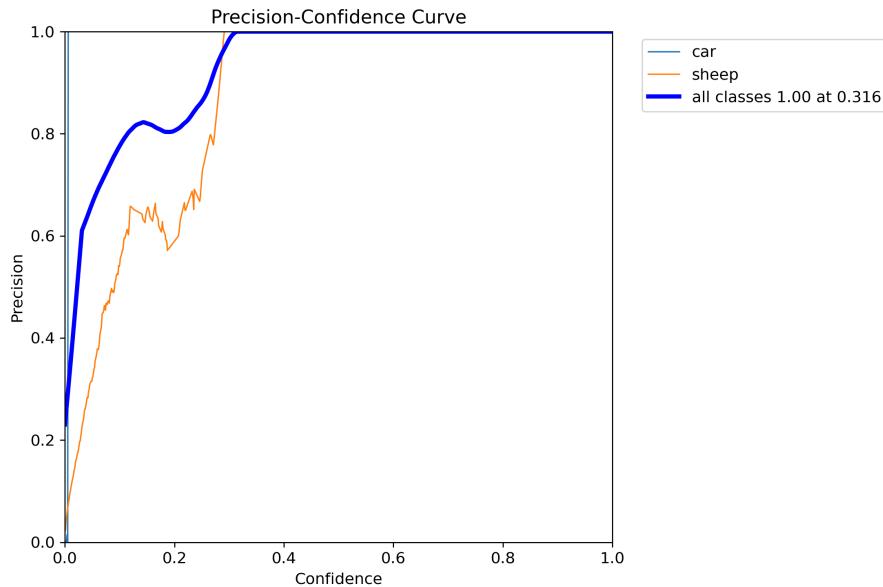


Figure s531. recall\_over\_confidence, yolov8n, pre-trained=False, epochs=100, data=toggenburg\_alpaca\_ranch, hyperparameter-tuned=False

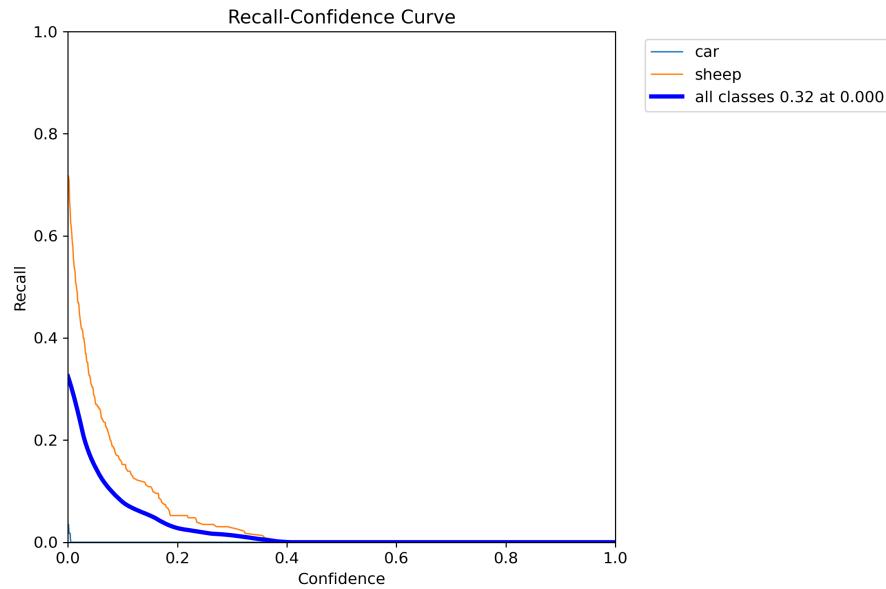


Figure s532. confusion\_matrix, yolov8n, pre-trained=False, epochs=100, data=toggenburg\_alpaca\_ranch, hyperparameter-tuned=False

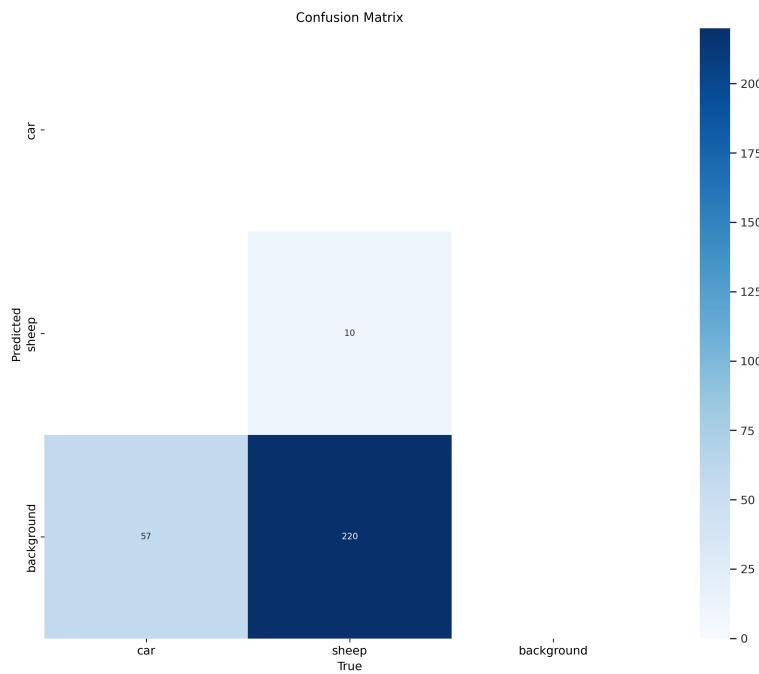


Figure s533. confusion\_matrix\_normalized, yolov8n, pre-trained=False, epochs=100, data=toggenburg\_alpaca\_ranch, hyperparameter-tuned=False

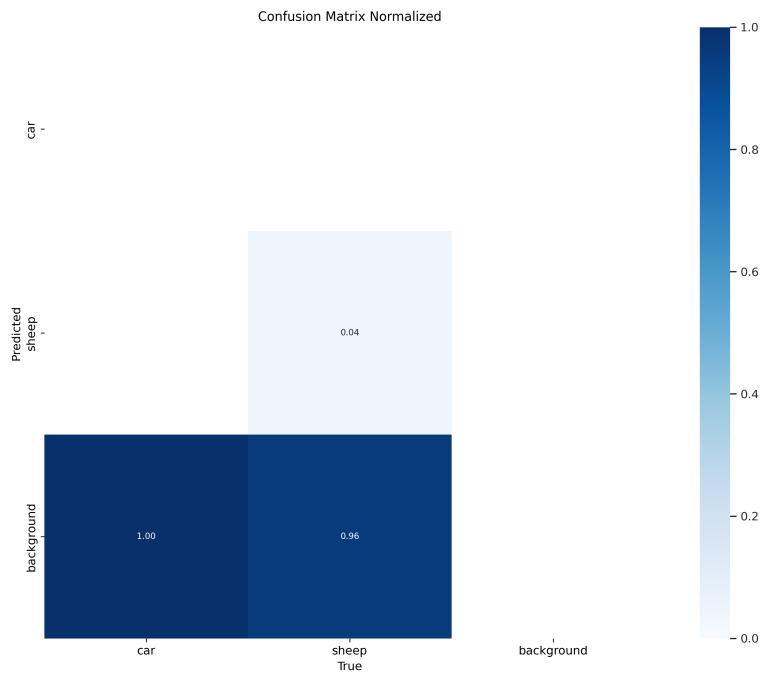


Figure s534. f1\_over\_confidence, yolov8n, pre-trained=False, epochs=150, data=toggenburg\_alpaca\_ranch, hyperparameter-tuned=False

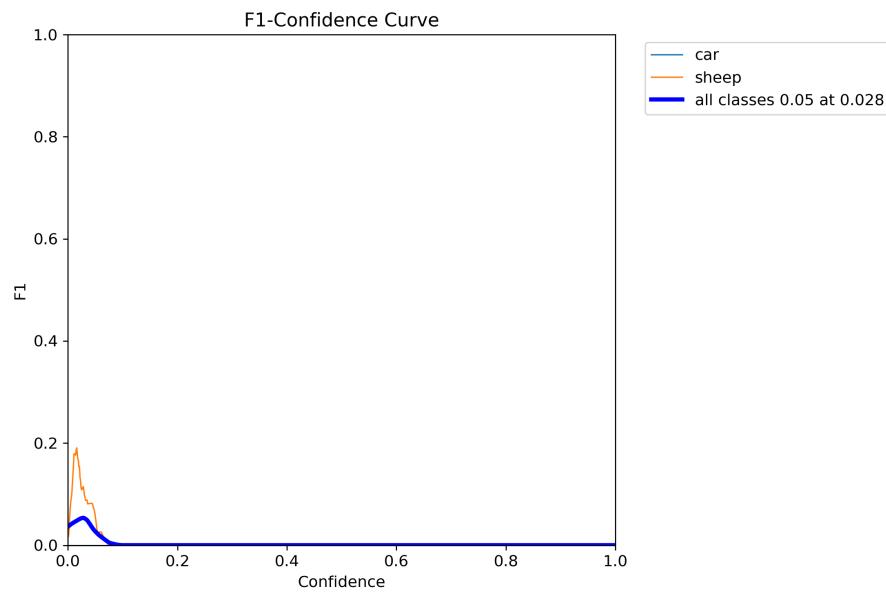


Figure s535. precision\_over\_recall, yolov8n, pre-trained=False, epochs=150, data=toggenburg\_alpaca\_ranch, hyperparameter-tuned=False

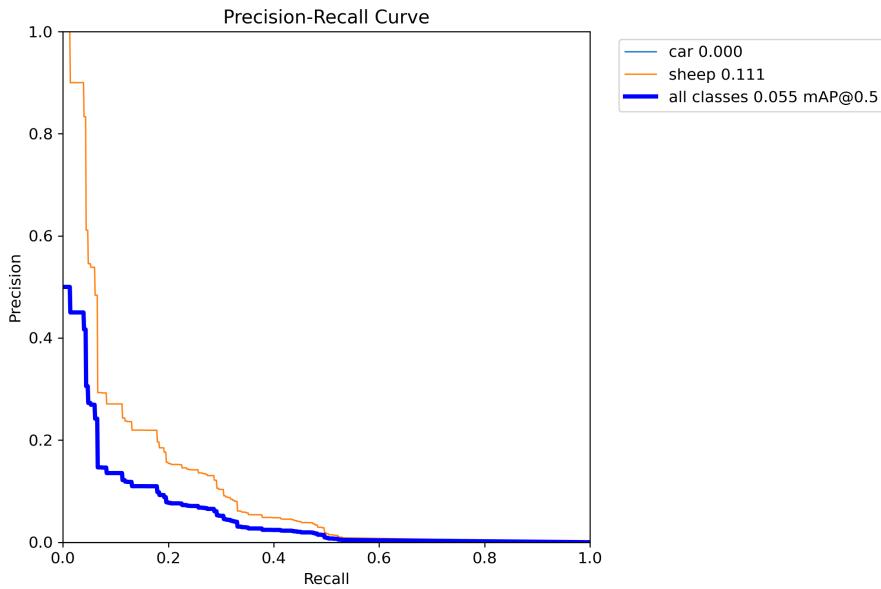


Figure s536. precision\_over\_confidence, yolov8n, pre-trained=False, epochs=150, data=toggenburg\_alpaca\_ranch, hyperparameter-tuned=False

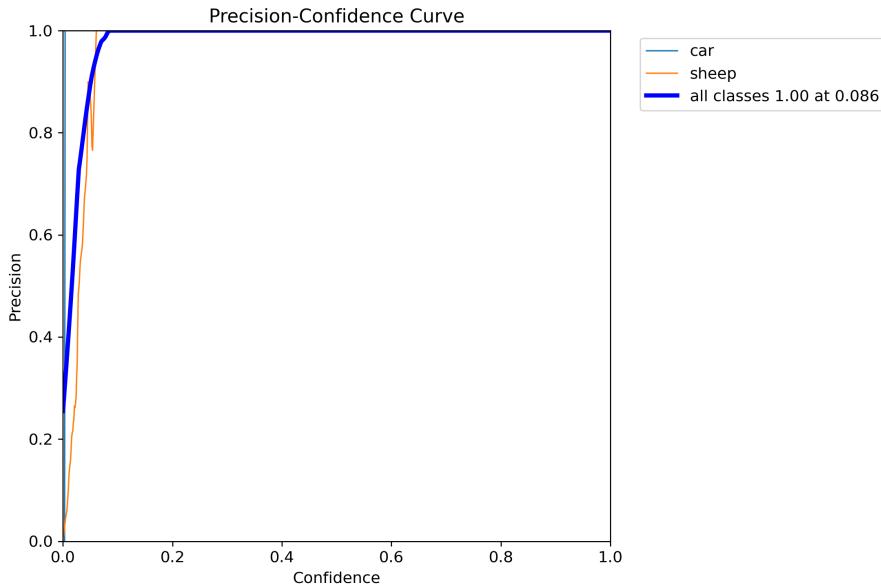


Figure s537. recall\_over\_confidence, yolov8n, pre-trained=False, epochs=150, data=toggenburg\_alpaca\_ranch, hyperparameter-tuned=False

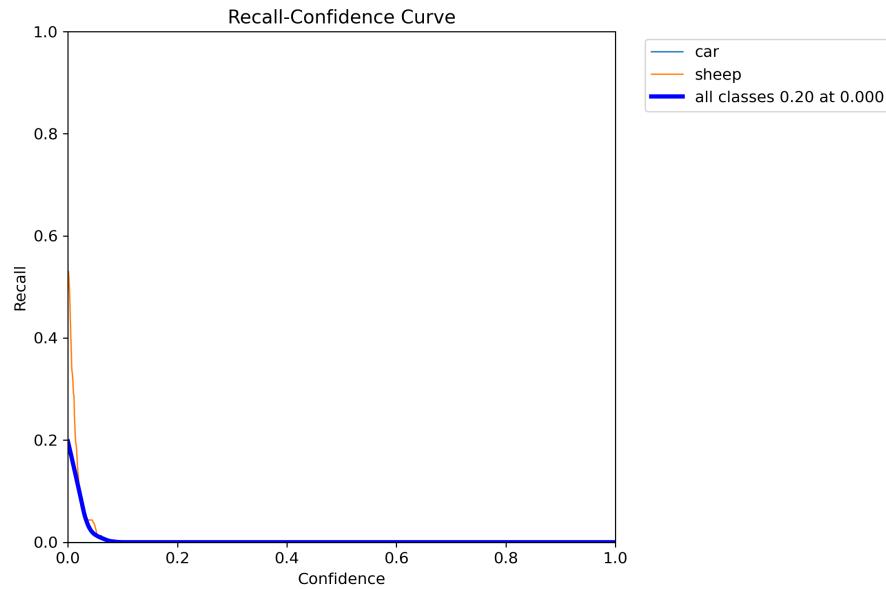


Figure s538. confusion\_matrix, yolov8n, pre-trained=False, epochs=150, data=toggenburg\_alpaca\_ranch, hyperparameter-tuned=False

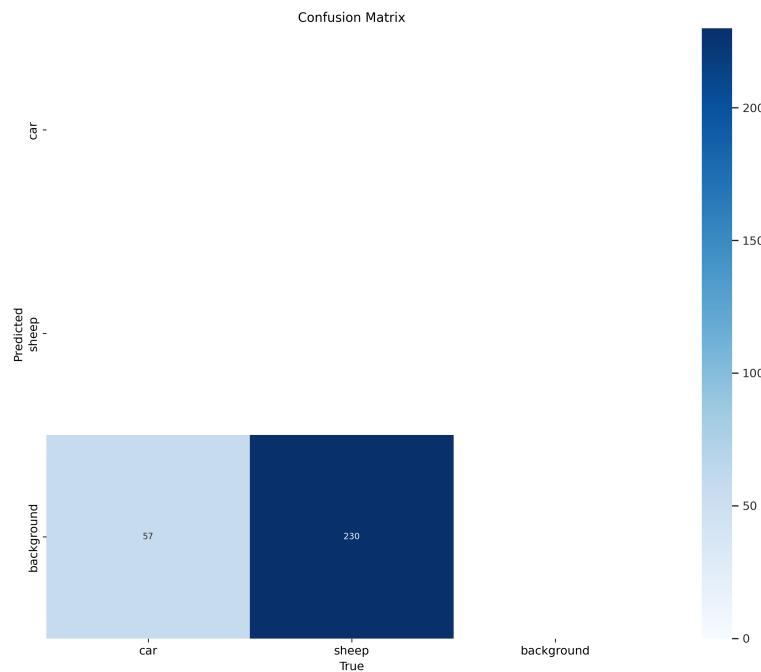


Figure s539. confusion\_matrix\_normalized, yolov8n, pre-trained=False, epochs=150, data=toggenburg\_alpaca\_ranch, hyperparameter-tuned=False

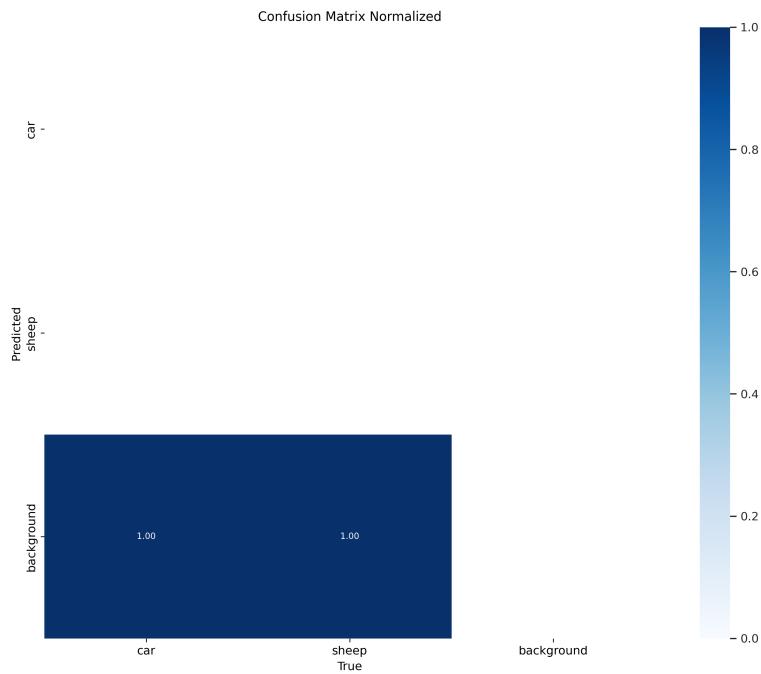


Figure s540. f1\_over\_confidence, yolov8n, pre-trained=True, epochs=50, data=duomo, hyperparameter-tuned=True

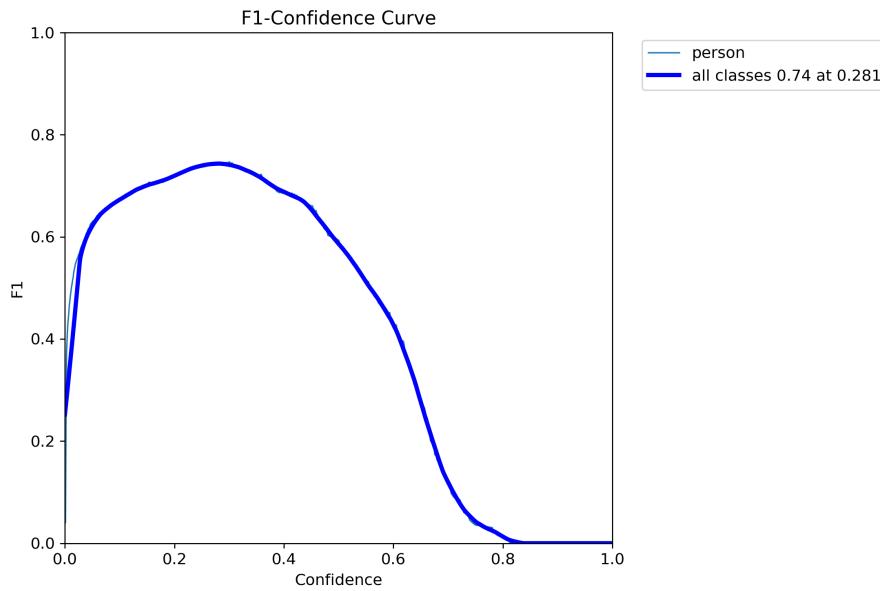


Figure s541. precision\_over\_recall, yolov8n, pre-trained=True, epochs=50, data=duomo, hyperparameter-tuned=True

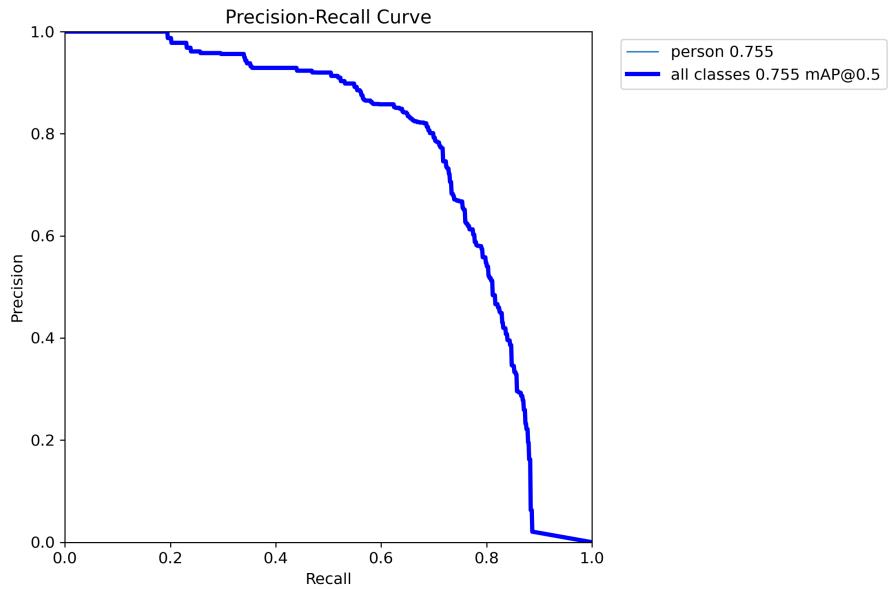


Figure s542. precision\_over\_confidence, yolov8n, pre-trained=True, epochs=50, data=duomo, hyperparameter-tuned=True

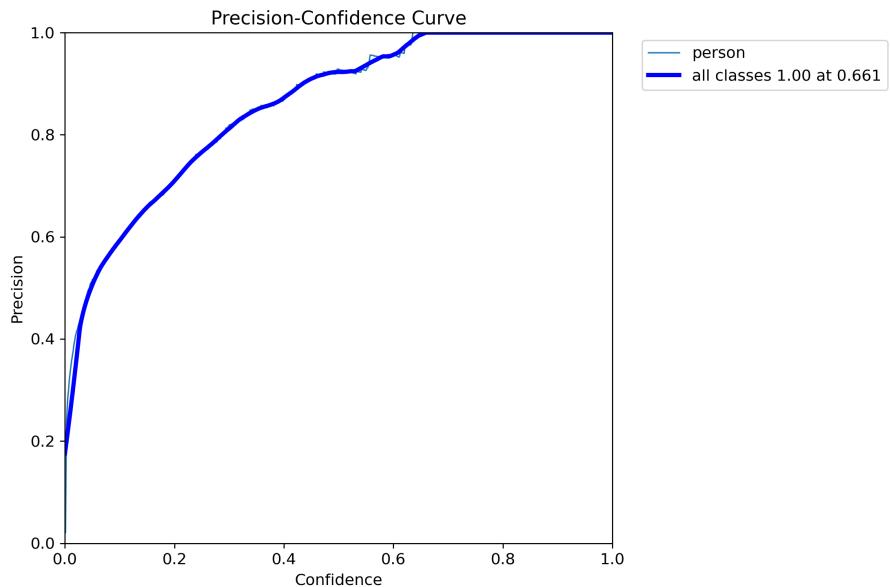


Figure s543. recall\_over\_confidence, yolov8n, pre-trained=True, epochs=50, data=duomo, hyperparameter-tuned=True

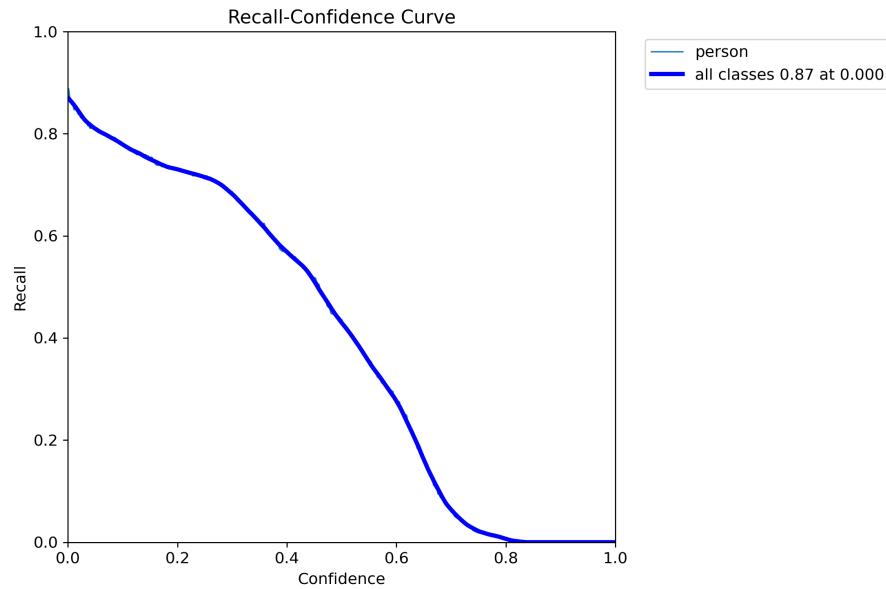


Figure s544. confusion\_matrix, yolov8n, pre-trained=True, epochs=50, data=duomo, hyperparameter-tuned=True

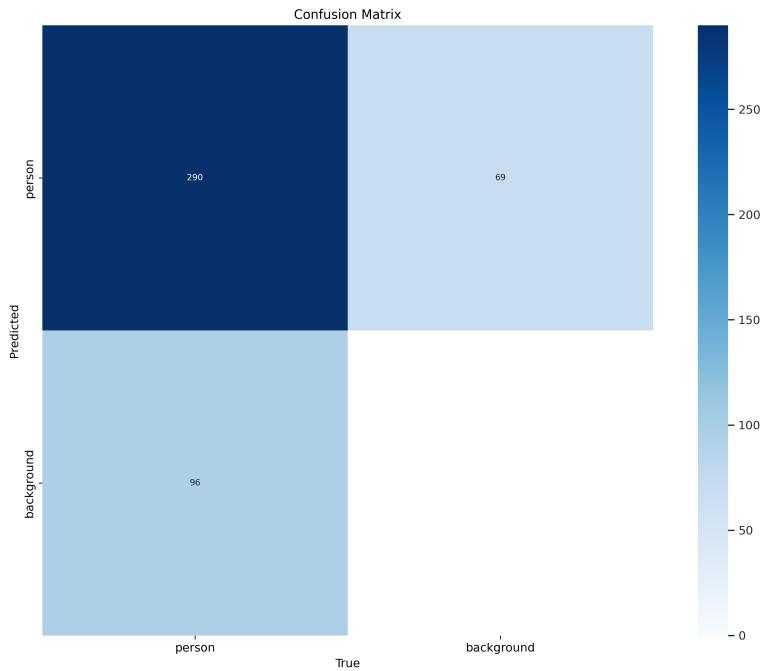


Figure s545. confusion\_matrix\_normalized, yolov8n, pre-trained=True, epochs=50, data=duomo, hyperparameter-tuned=True

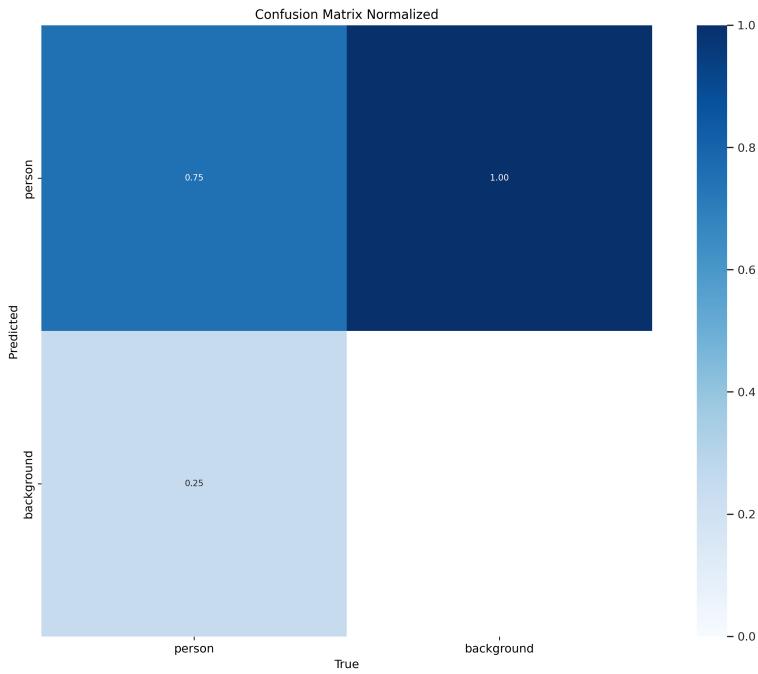


Figure s546. f1\_over\_confidence, yolov8n, pre-trained=True, epochs=100, data=duomo, hyperparameter-tuned=True

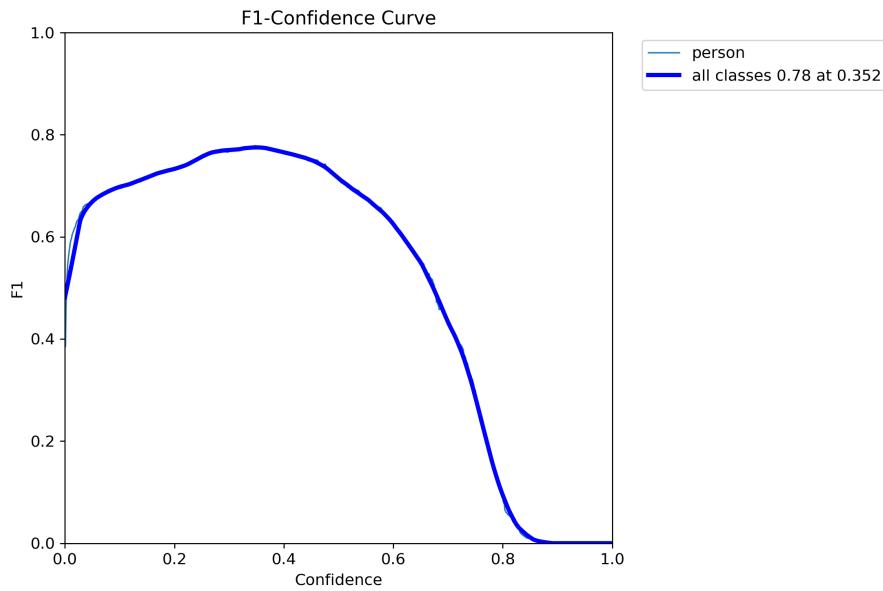


Figure s547. precision\_over\_recall, yolov8n, pre-trained=True, epochs=100, data=duomo, hyperparameter-tuned=True

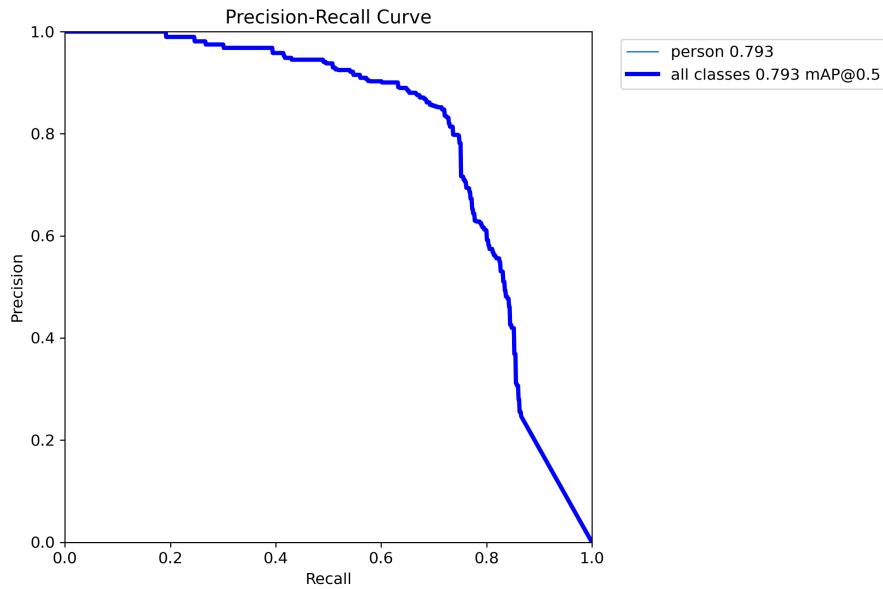


Figure s548. precision\_over\_confidence, yolov8n, pre-trained=True, epochs=100, data=duomo, hyperparameter-tuned=True

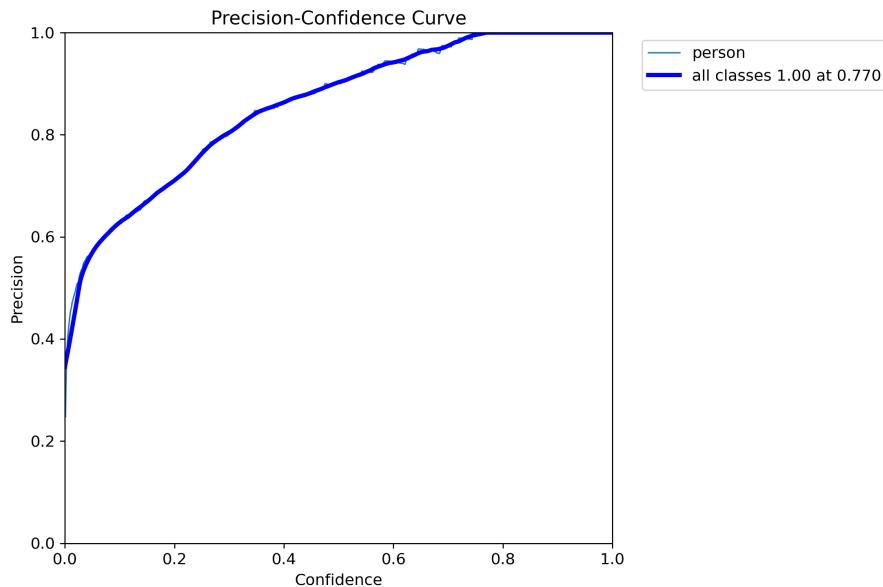


Figure s549. recall\_over\_confidence, yolov8n, pre-trained=True, epochs=100, data=duomo, hyperparameter-tuned=True

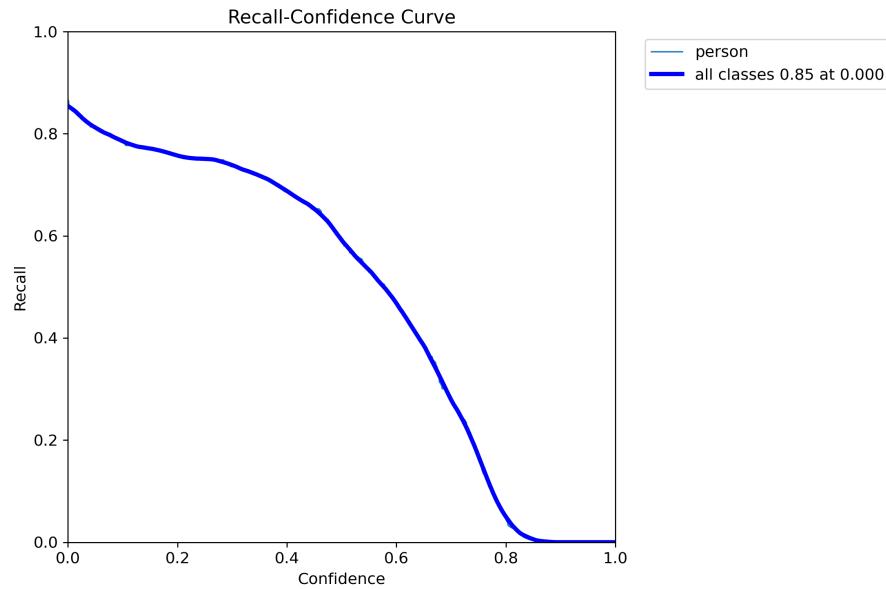


Figure s550. confusion\_matrix, yolov8n, pre-trained=True, epochs=100, data=duomo, hyperparameter-tuned=True

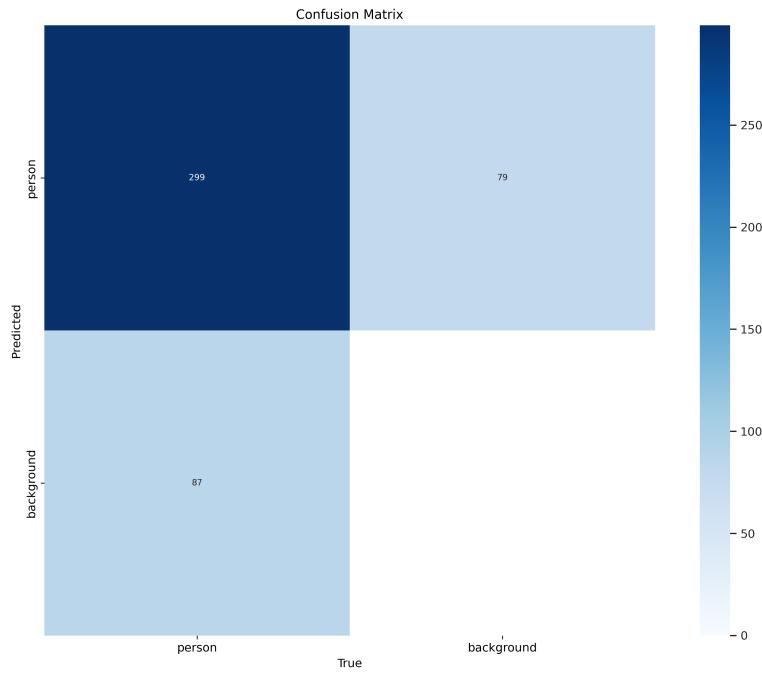


Figure s551. confusion\_matrix\_normalized, yolov8n, pre-trained=True, epochs=100, data=duomo, hyperparameter-tuned=True

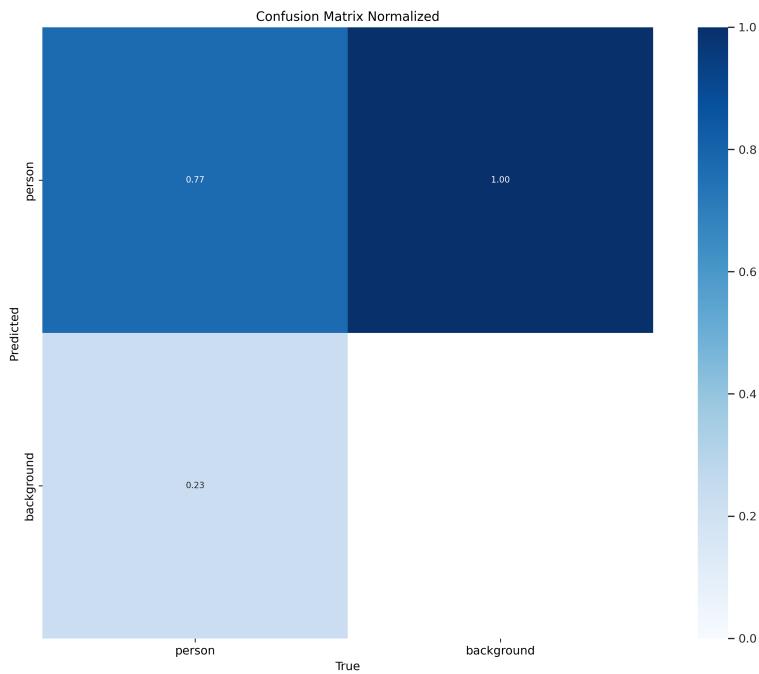


Figure s552. f1\_over\_confidence, yolov8n, pre-trained=True, epochs=150, data=duomo, hyperparameter-tuned=True

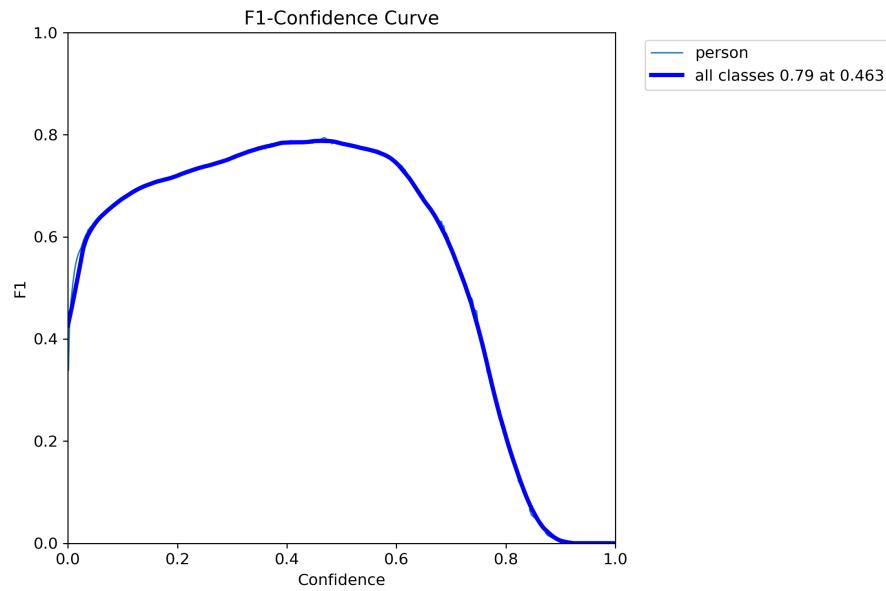


Figure s553. precision\_over\_recall, yolov8n, pre-trained=True, epochs=150, data=duomo, hyperparameter-tuned=True

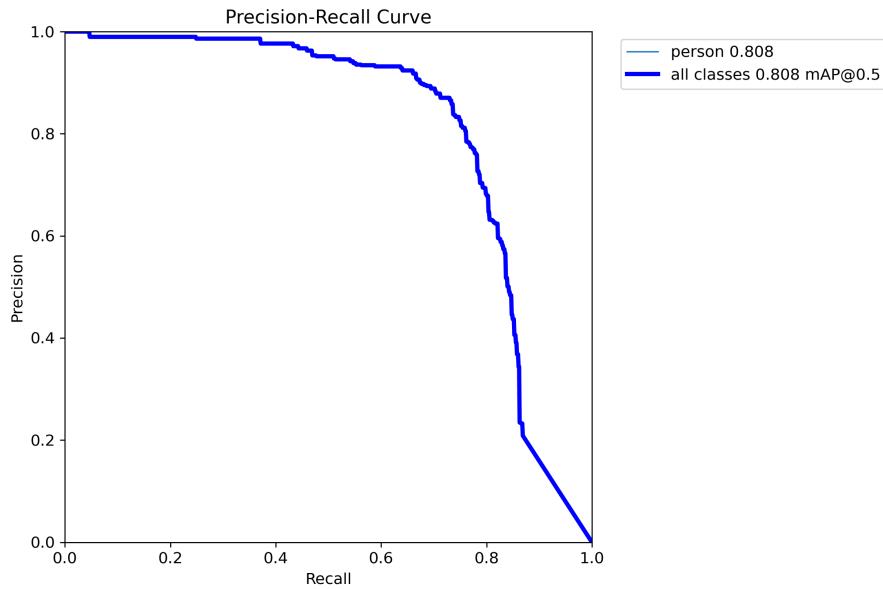


Figure s554. precision\_over\_confidence, yolov8n, pre-trained=True, epochs=150, data=duomo, hyperparameter-tuned=True

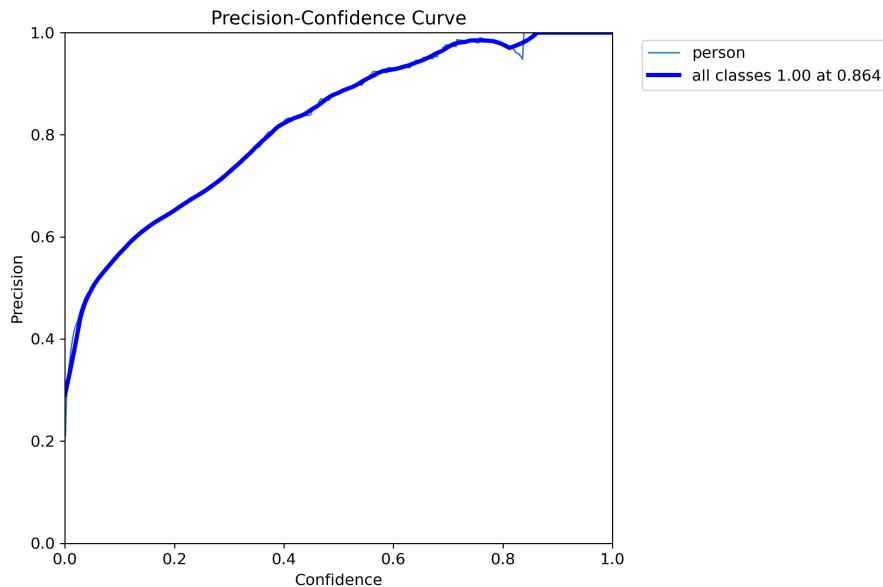


Figure s555. recall\_over\_confidence, yolov8n, pre-trained=True, epochs=150, data=duomo, hyperparameter-tuned=True

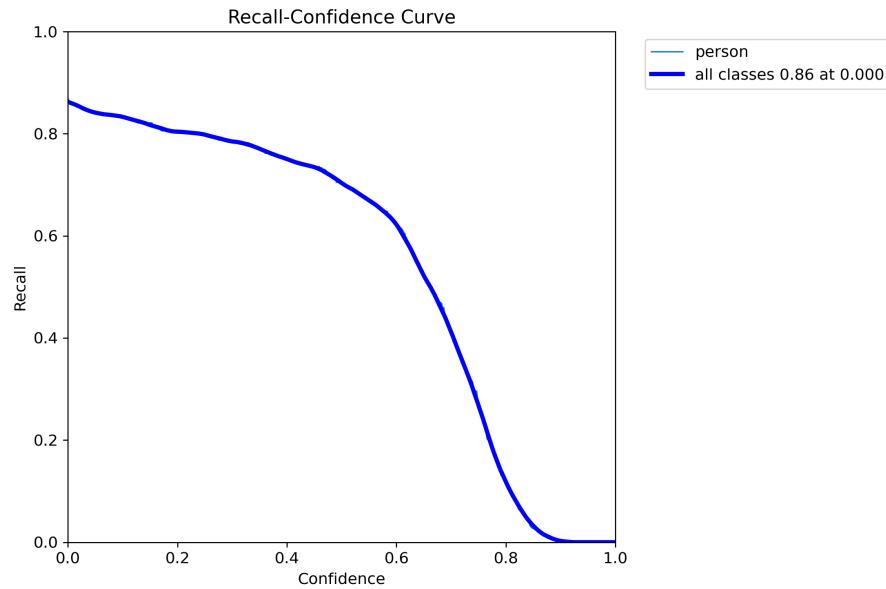


Figure s556. confusion\_matrix, yolov8n, pre-trained=True, epochs=150, data=duomo, hyperparameter-tuned=True

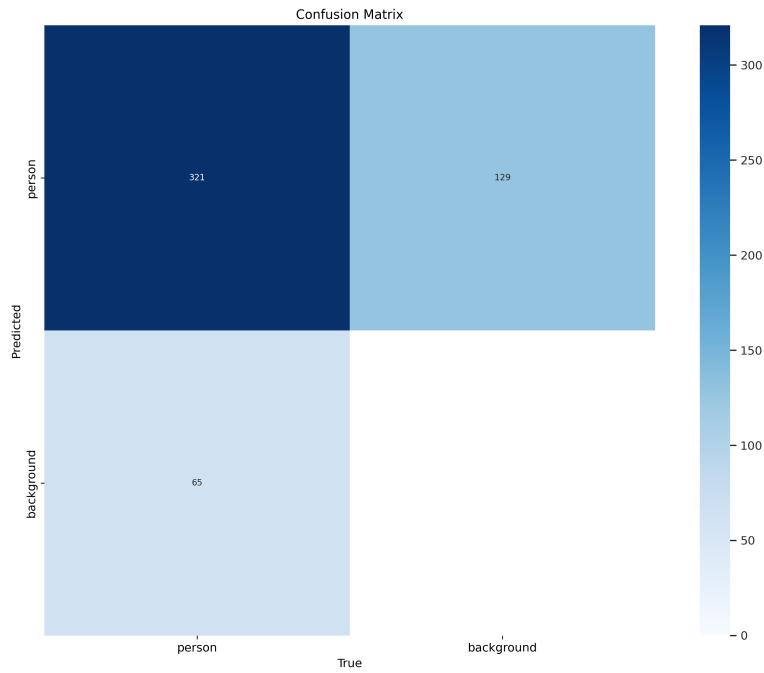


Figure s557. confusion\_matrix\_normalized, yolov8n, pre-trained=True, epochs=150, data=duomo, hyperparameter-tuned=True

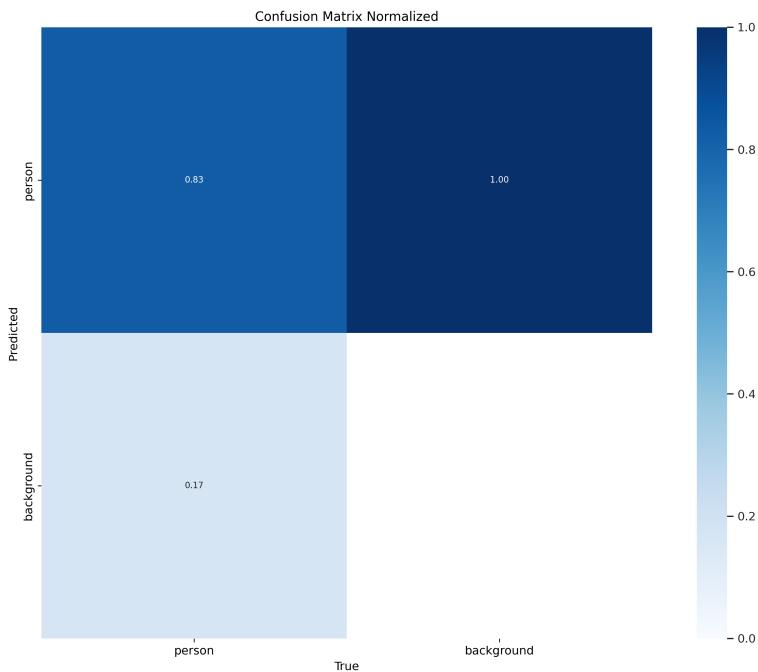


Figure s558. f1\_over\_confidence, yolov8n, pre-trained=True, epochs=50, data=hadji\_dimitar\_square, hyperparameter-tuned=True

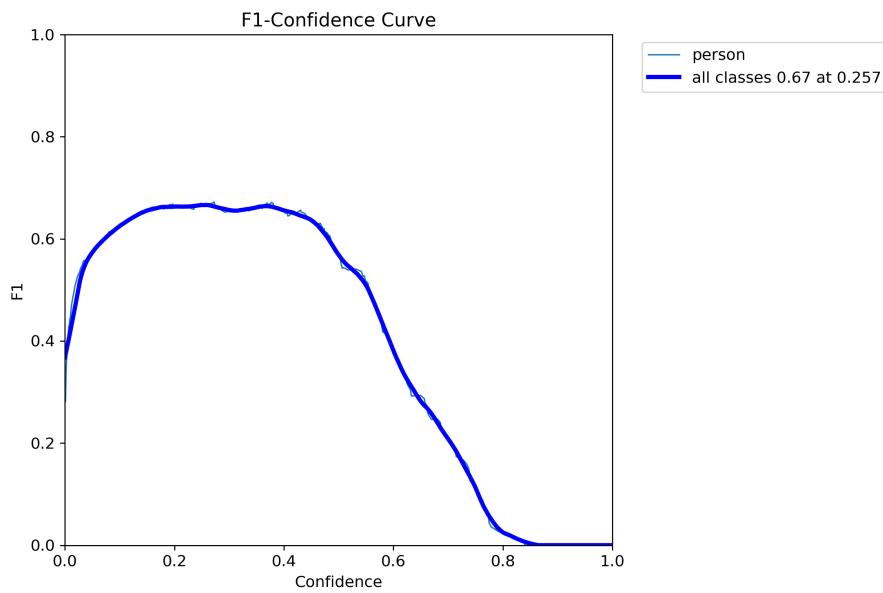


Figure s559. precision\_over\_recall, yolov8n, pre-trained=True, epochs=50, data=hadji\_dimitar\_square, hyperparameter-tuned=True

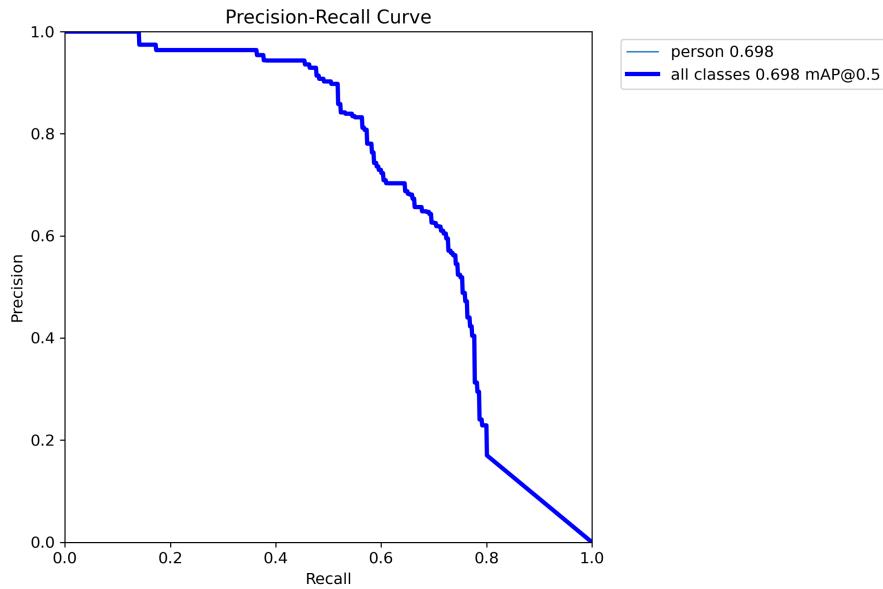


Figure s560. precision\_over\_confidence, yolov8n, pre-trained=True, epochs=50, data=hadji\_dimitar\_square, hyperparameter-tuned=True

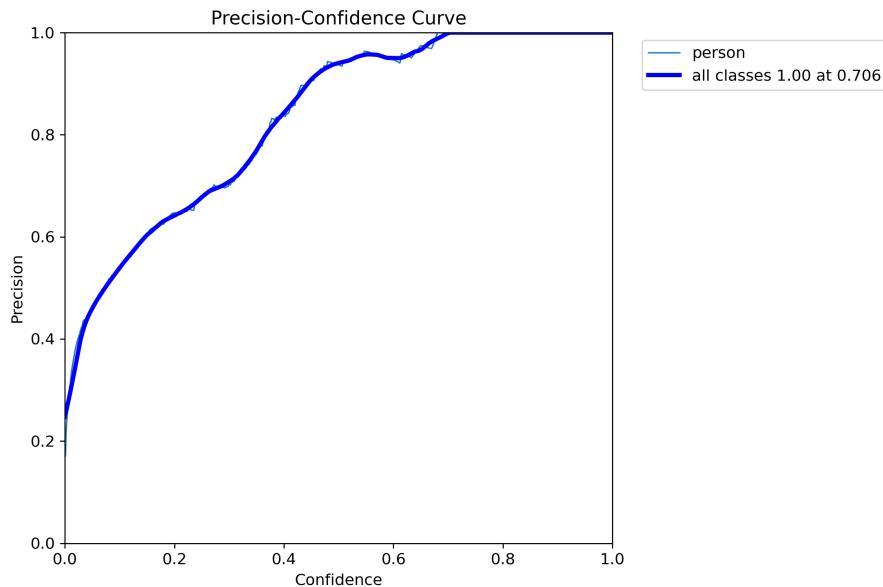


Figure s561. recall\_over\_confidence, yolov8n, pre-trained=True, epochs=50, data=hadji\_dimitar\_square, hyperparameter-tuned=True

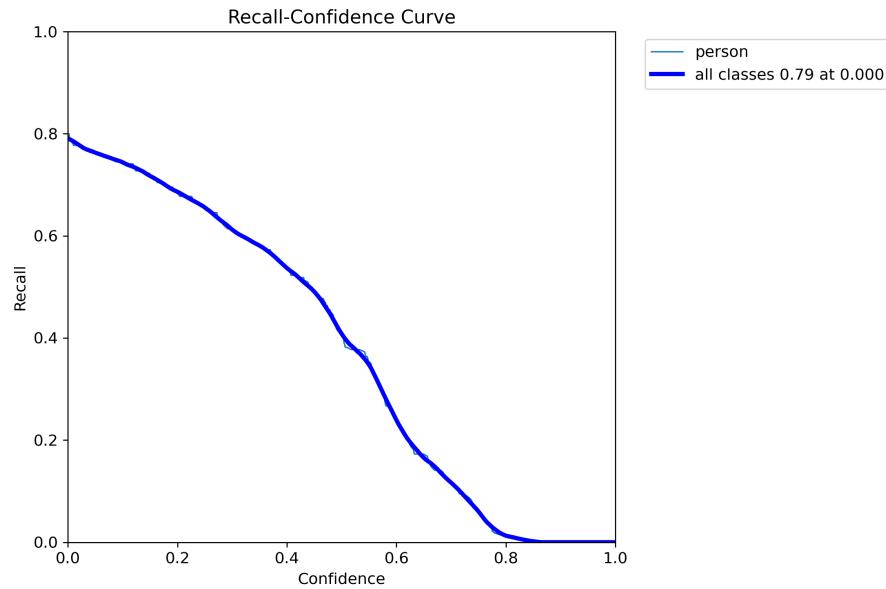


Figure s562. confusion\_matrix, yolov8n, pre-trained=True, epochs=50, data=hadji\_dimitar\_square, hyperparameter-tuned=True

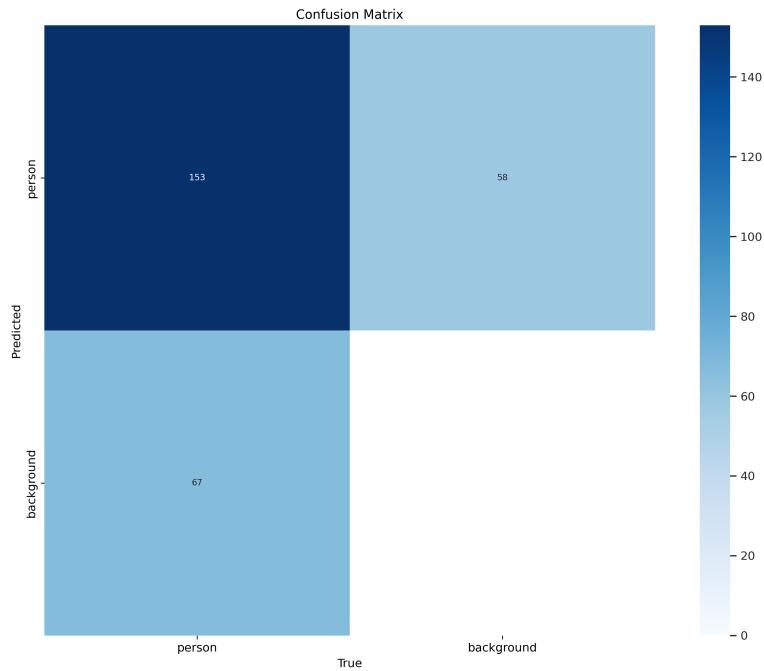


Figure s563. confusion\_matrix\_normalized, yolov8n, pre-trained=True, epochs=50, data=hadji\_dimitar\_square, hyperparameter-tuned=True

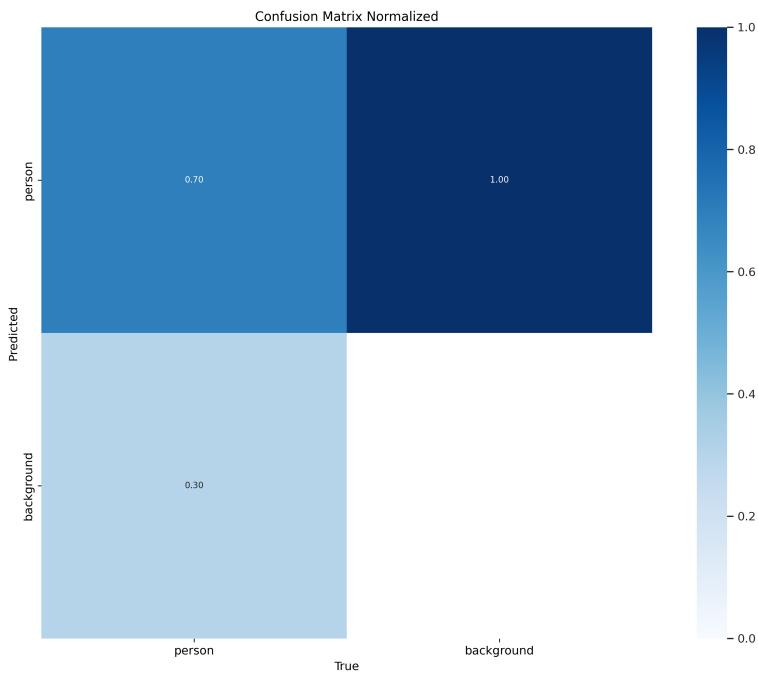


Figure s564. f1\_over\_confidence, yolov8n, pre-trained=True, epochs=100, data=hadji\_dimitar\_square, hyperparameter-tuned=True

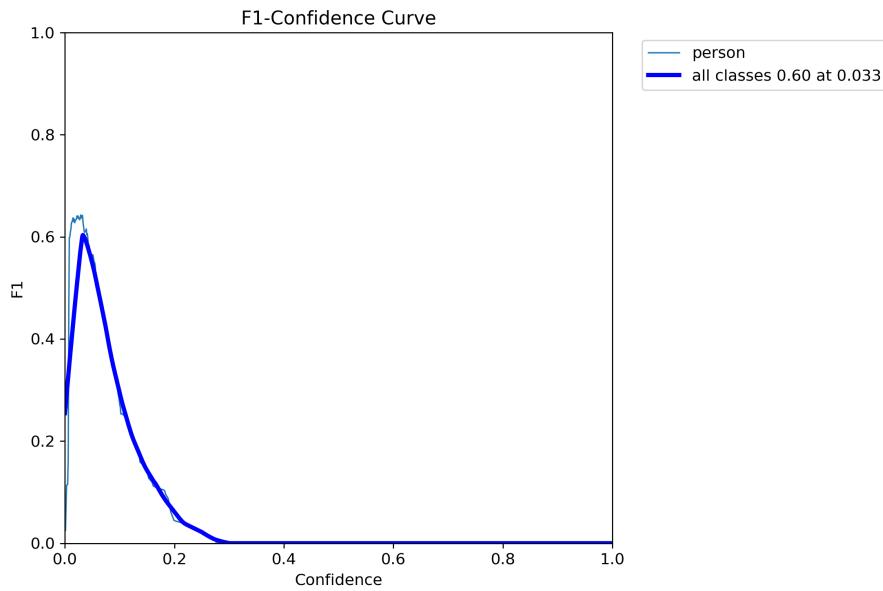


Figure s565. precision\_over\_recall, yolov8n, pre-trained=True, epochs=100, data=hadji\_dimitar\_square, hyperparameter-tuned=True

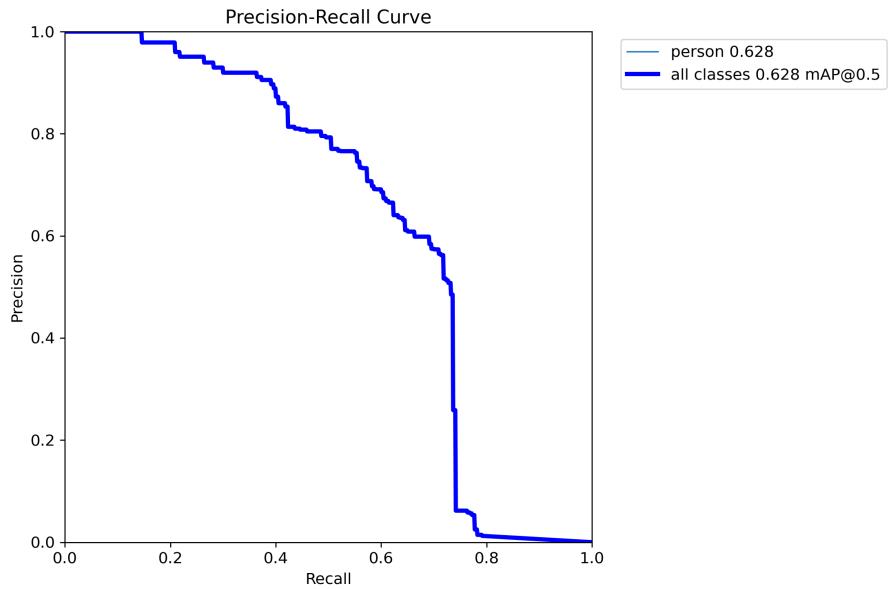


Figure s566. precision\_over\_confidence, yolov8n, pre-trained=True, epochs=100, data=hadji\_dimitar\_square, hyperparameter-tuned=True

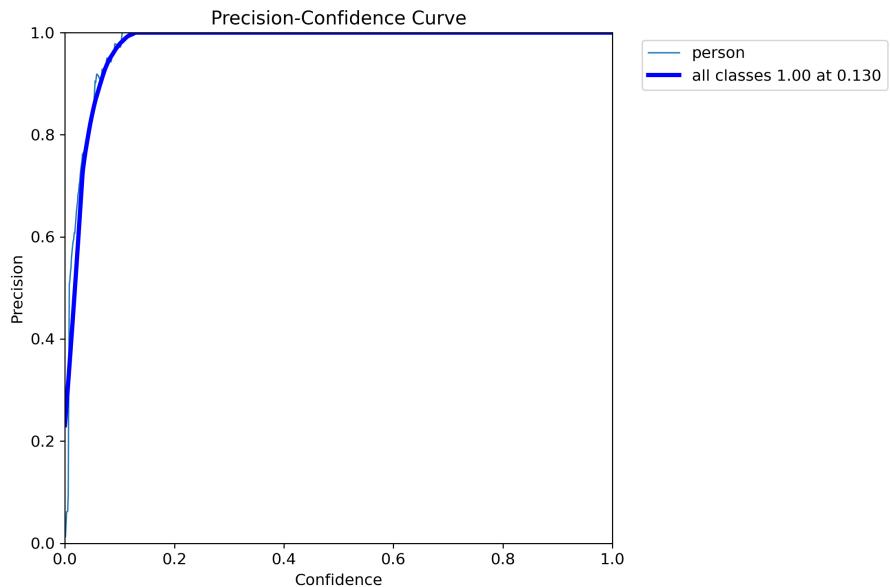


Figure s567. recall\_over\_confidence, yolov8n, pre-trained=True, epochs=100, data=hadji\_dimitar\_square, hyperparameter-tuned=True

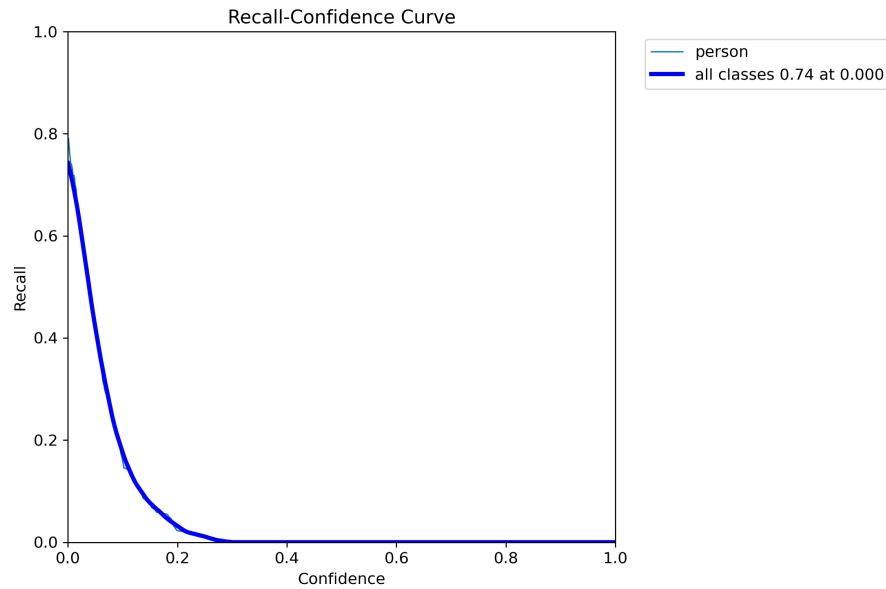


Figure s568. confusion\_matrix, yolov8n, pre-trained=True, epochs=100, data=hadji\_dimitar\_square, hyperparameter-tuned=True

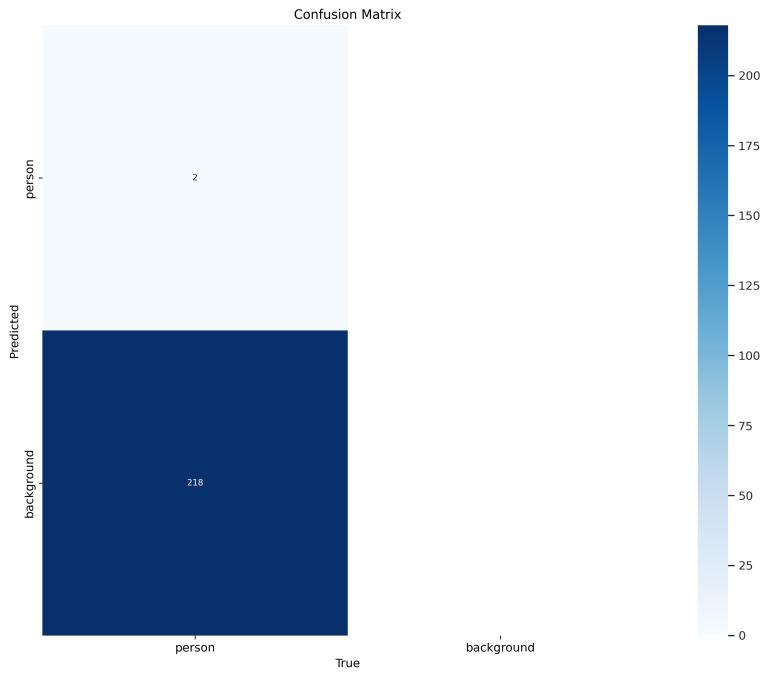


Figure s569. confusion\_matrix\_normalized, yolov8n, pre-trained=True, epochs=100, data=hadji\_dimitar\_square, hyperparameter-tuned=True

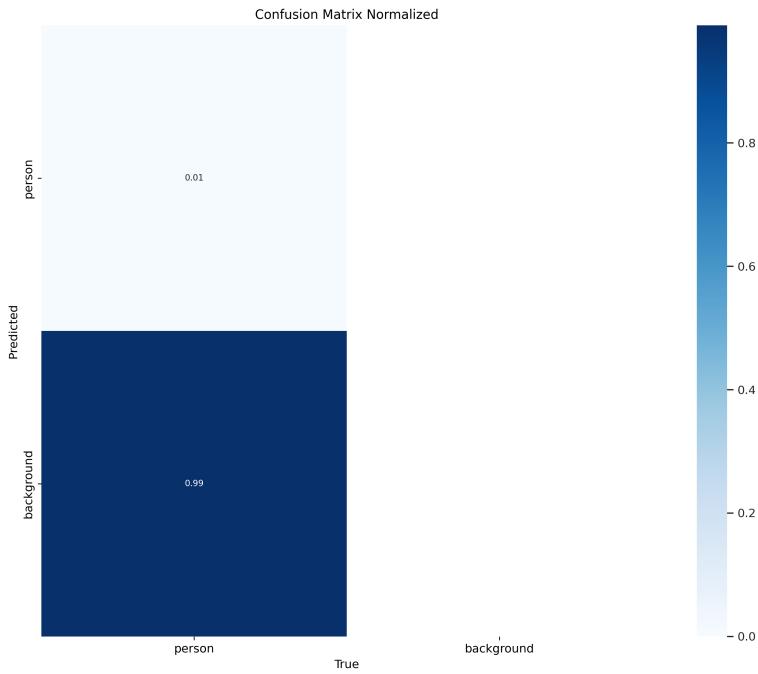


Figure s570. f1\_over\_confidence, yolov8n, pre-trained=True, epochs=150, data=hadji\_dimitar\_square, hyperparameter-tuned=True

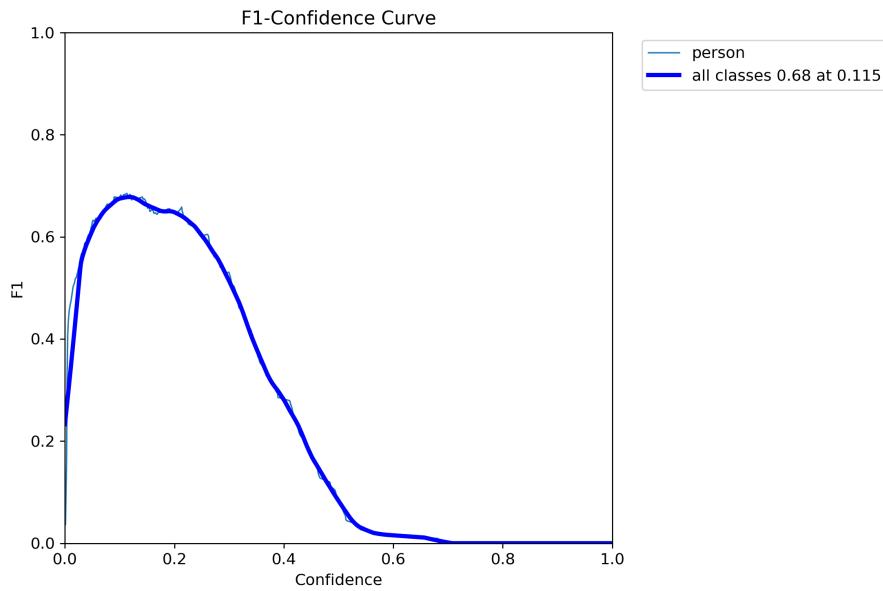


Figure s571. precision\_over\_recall, yolov8n, pre-trained=True, epochs=150, data=hadji\_dimitar\_square, hyperparameter-tuned=True

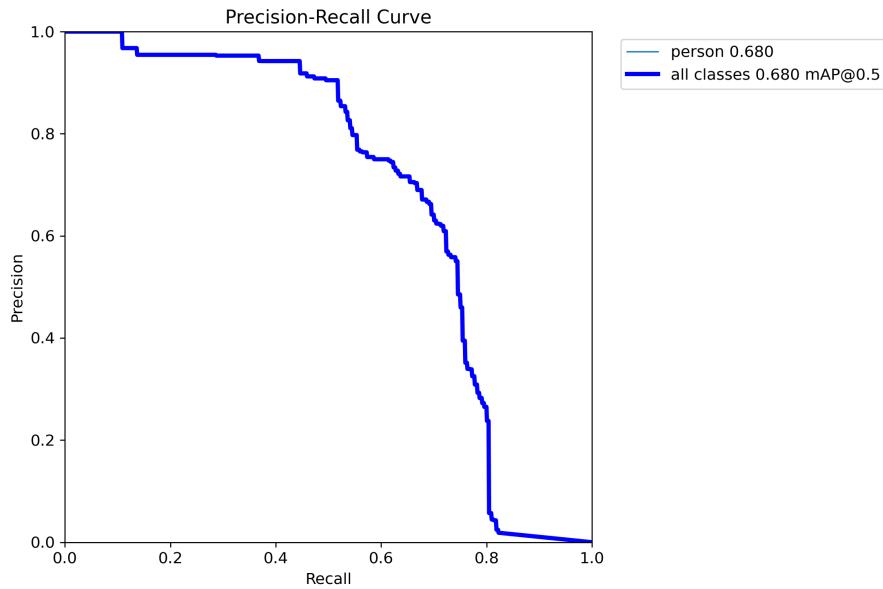


Figure s572. precision\_over\_confidence, yolov8n, pre-trained=True, epochs=150, data=hadji\_dimitar\_square, hyperparameter-tuned=True

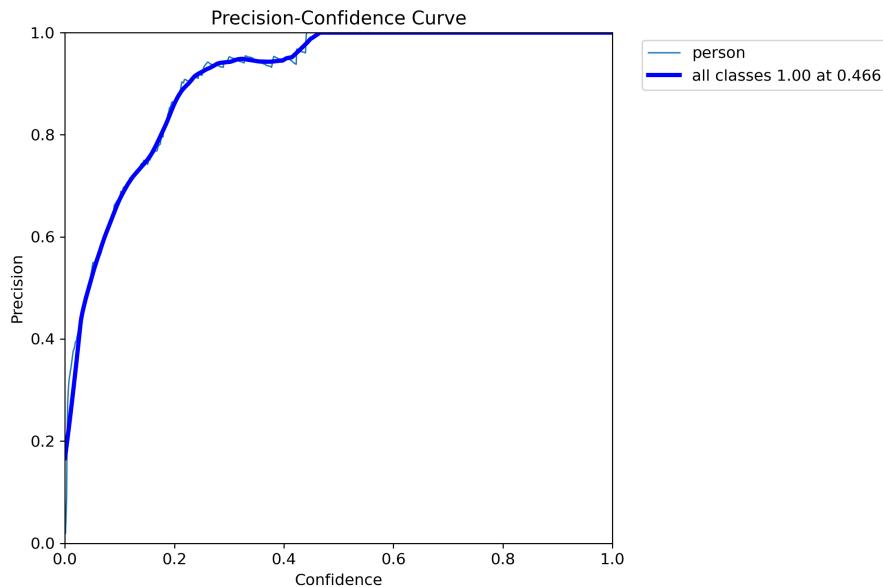


Figure s573. recall\_over\_confidence, yolov8n, pre-trained=True, epochs=150, data=hadji\_dimitar\_square, hyperparameter-tuned=True

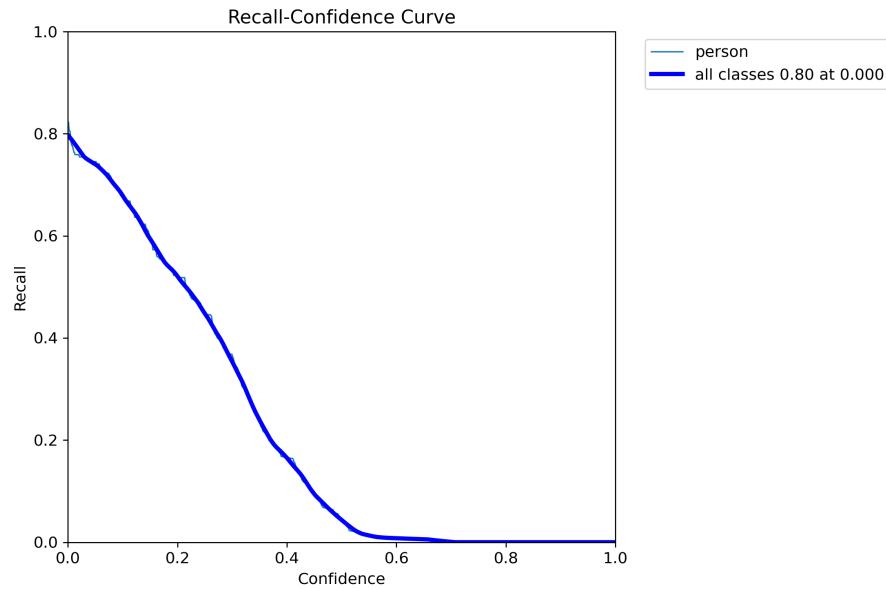


Figure s574. confusion\_matrix, yolov8n, pre-trained=True, epochs=150, data=hadji\_dimitar\_square, hyperparameter-tuned=True

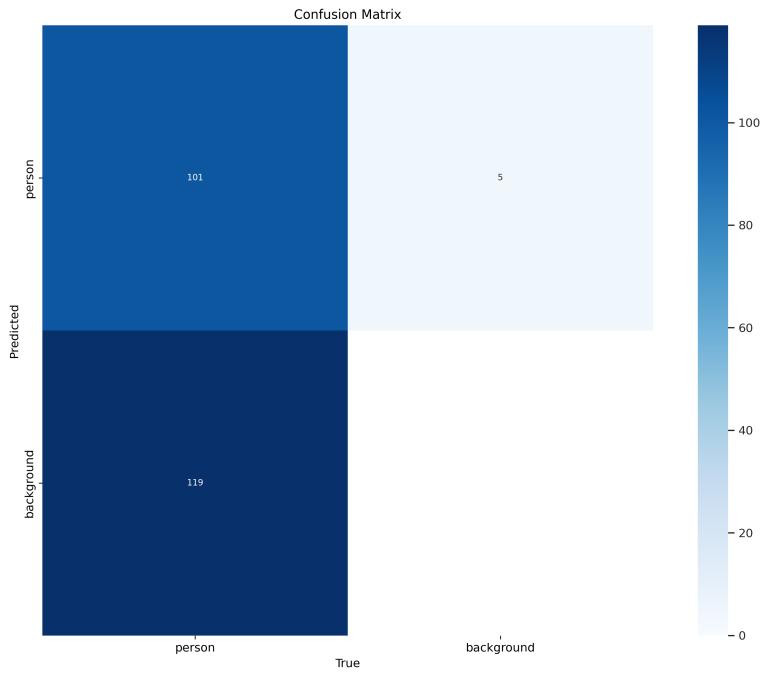


Figure s575. confusion\_matrix\_normalized, yolov8n, pre-trained=True, epochs=150, data=hadji\_dimitar\_square, hyperparameter-tuned=True

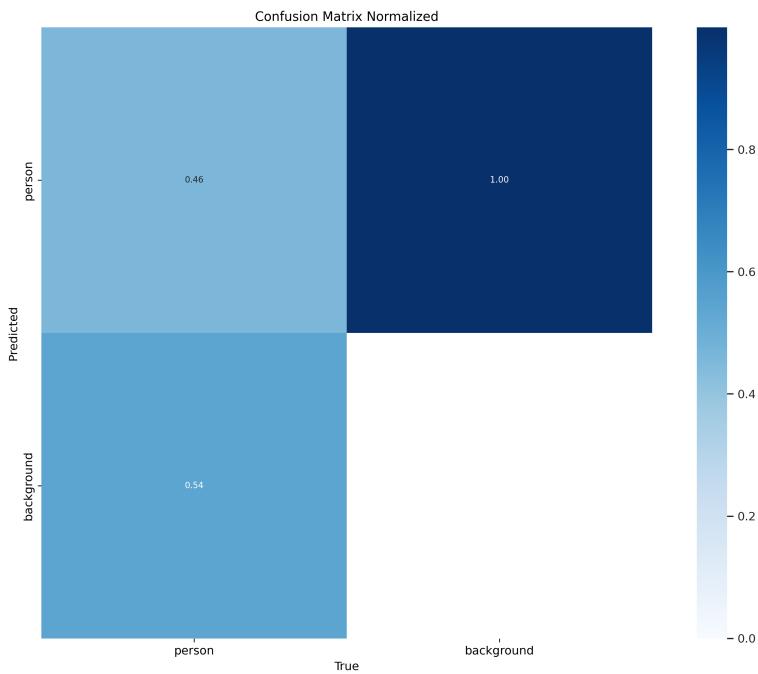


Figure s576. f1\_over\_confidence, yolov8n, pre-trained=True, epochs=50, data=keskvaljak, hyperparameter-tuned=True

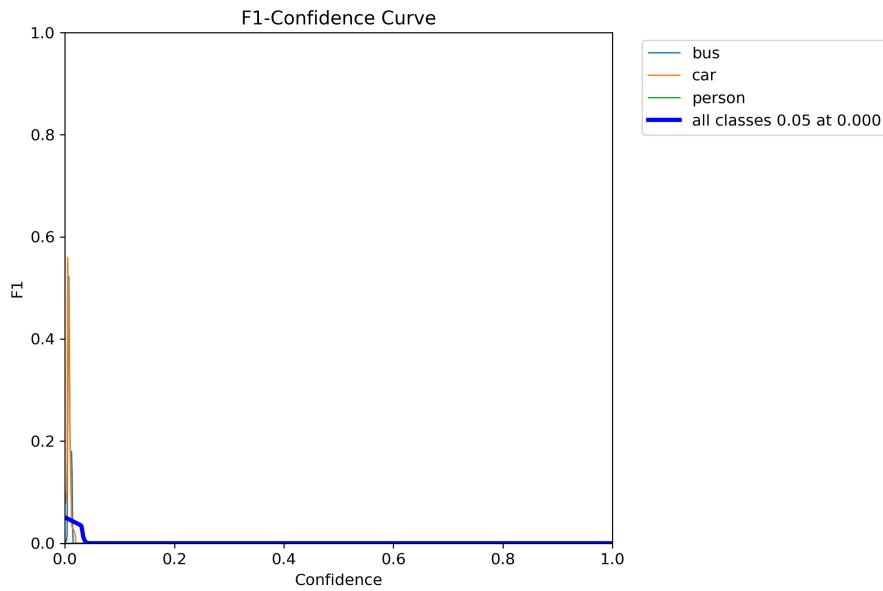


Figure s577. precision\_over\_recall, yolov8n, pre-trained=True, epochs=50, data=keskvaljak, hyperparameter-tuned=True

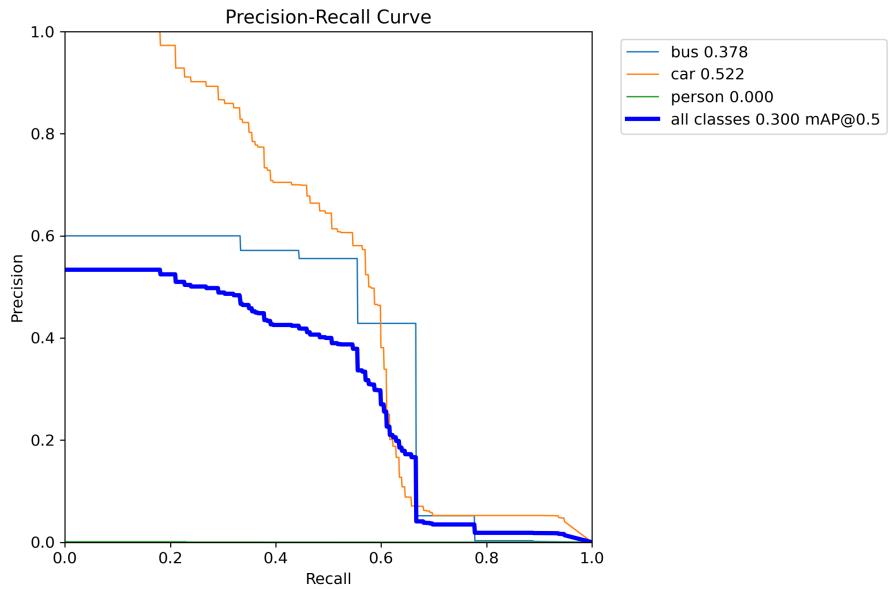


Figure s578. precision\_over\_confidence, yolov8n, pre-trained=True, epochs=50, data=keskvaljak, hyperparameter-tuned=True

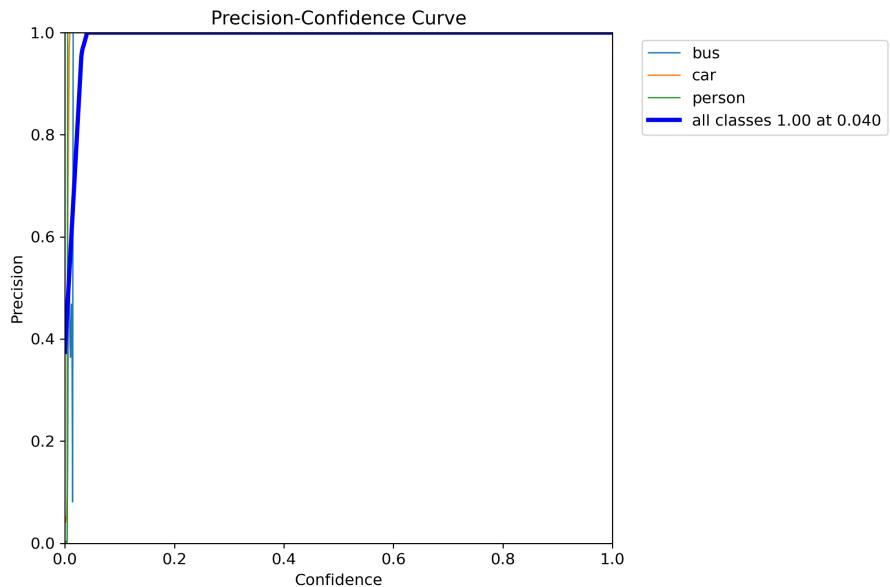


Figure s579. recall\_over\_confidence, yolov8n, pre-trained=True, epochs=50, data=keskvaljak, hyperparameter-tuned=True

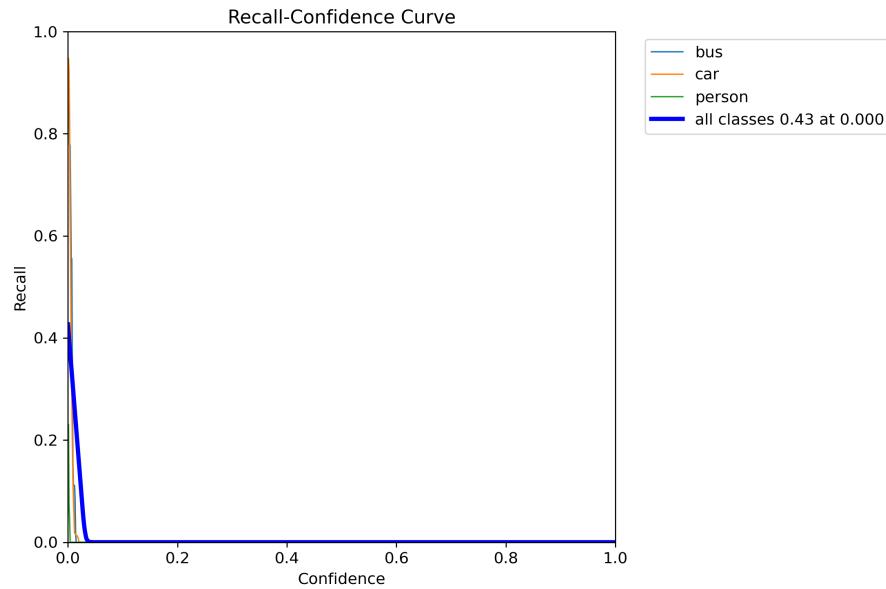


Figure s580. confusion\_matrix, yolov8n, pre-trained=True, epochs=50, data=keskvaljak, hyperparameter-tuned=True

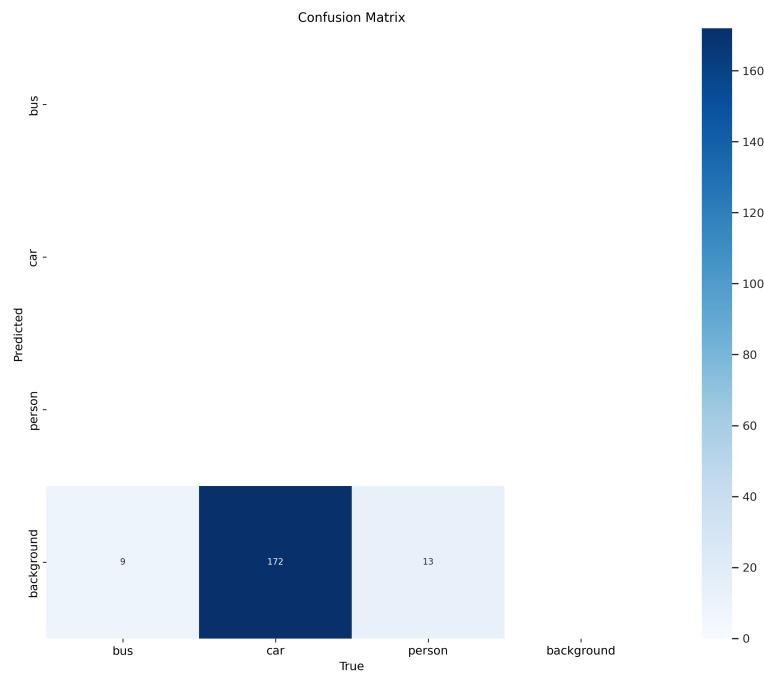


Figure s581. confusion\_matrix\_normalized, yolov8n, pre-trained=True, epochs=50, data=keskvaljak, hyperparameter-tuned=True

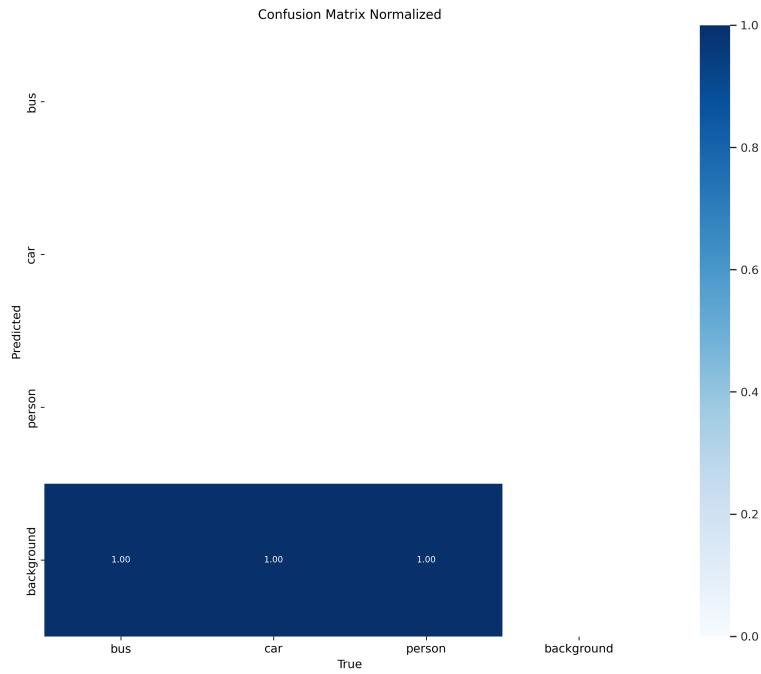


Figure s582. f1\_over\_confidence, yolov8n, pre-trained=True, epochs=100, data=keskvaljak, hyperparameter-tuned=True

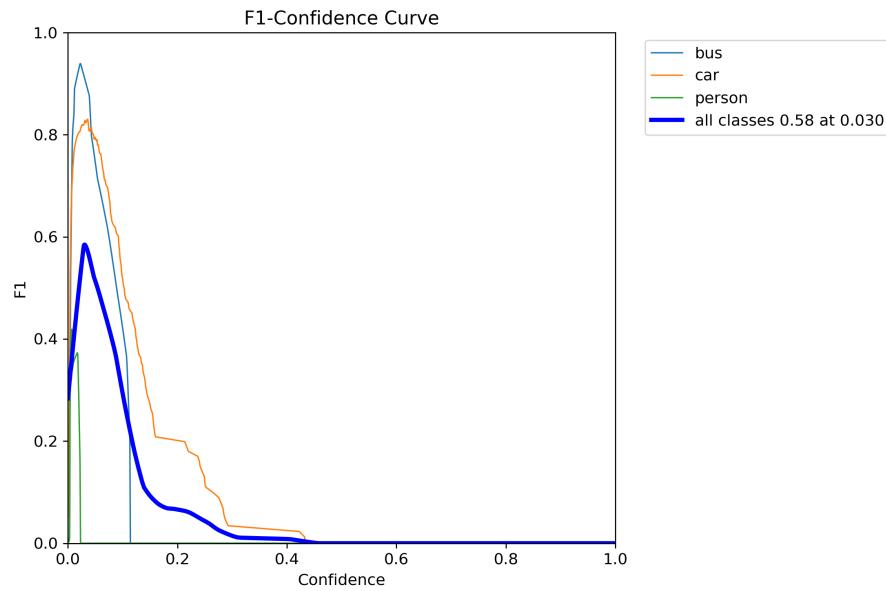


Figure s583. precision\_over\_recall, yolov8n, pre-trained=True, epochs=100, data=keskvaljak, hyperparameter-tuned=True

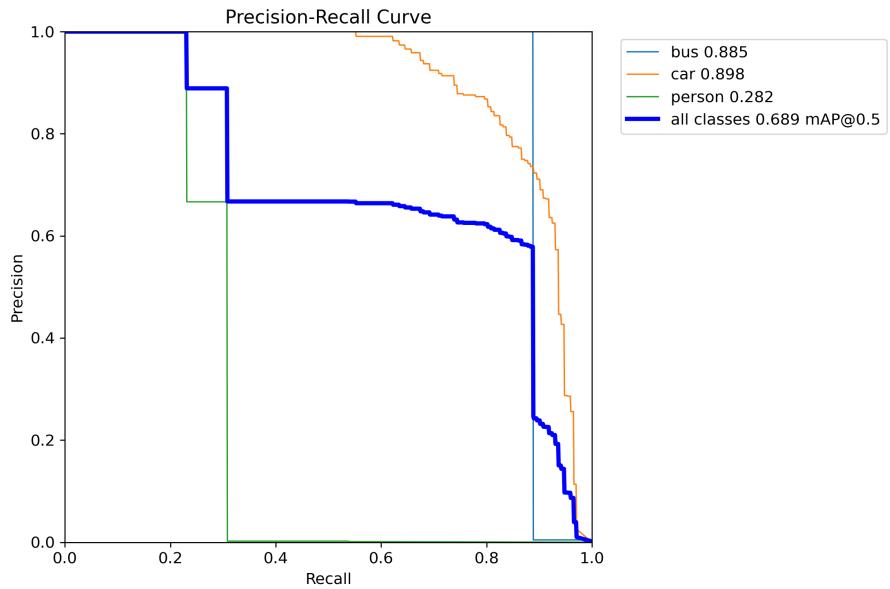


Figure s584. precision\_over\_confidence, yolov8n, pre-trained=True, epochs=100, data=keskvaljak, hyperparameter-tuned=True

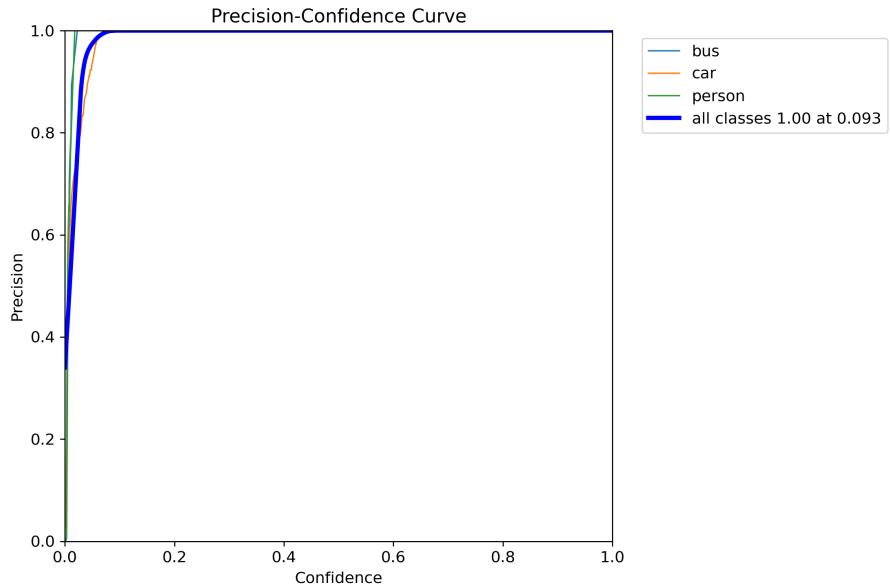


Figure s585. recall\_over\_confidence, yolov8n, pre-trained=True, epochs=100, data=keskvaljak, hyperparameter-tuned=True

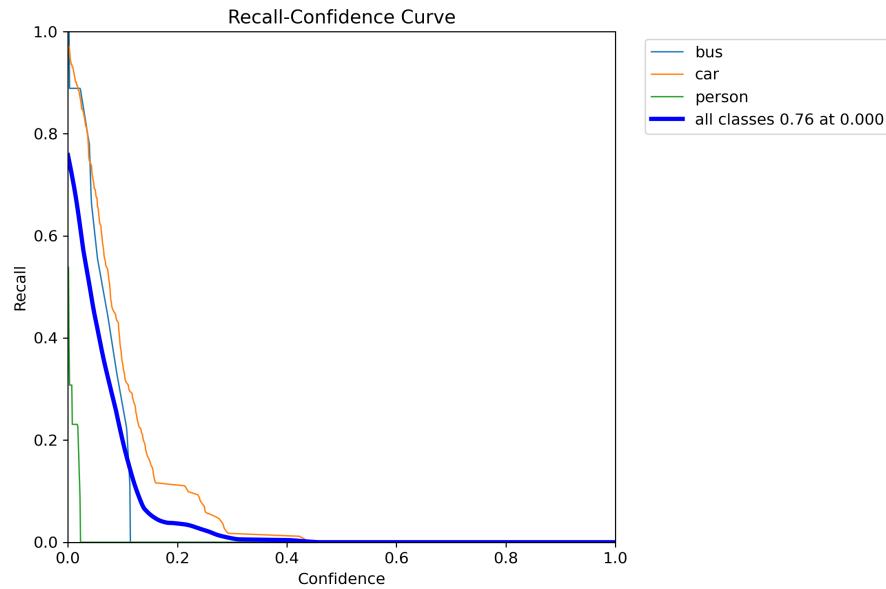


Figure s586. confusion\_matrix, yolov8n, pre-trained=True, epochs=100, data=keskvaljak, hyperparameter-tuned=True

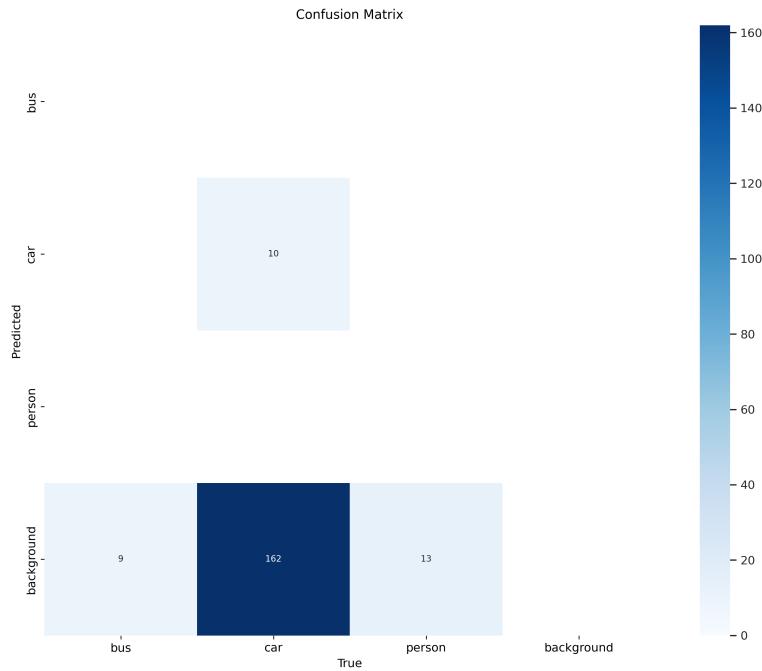


Figure s587. confusion\_matrix\_normalized, yolov8n, pre-trained=True, epochs=100, data=keskvaljak, hyperparameter-tuned=True

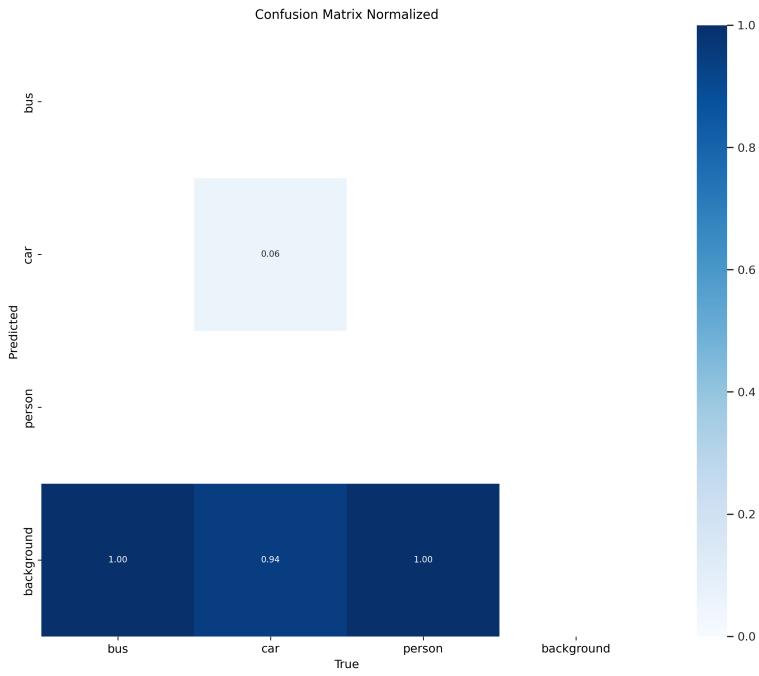


Figure s588. f1\_over\_confidence, yolov8n, pre-trained=True, epochs=150, data=keskvaljak, hyperparameter-tuned=True

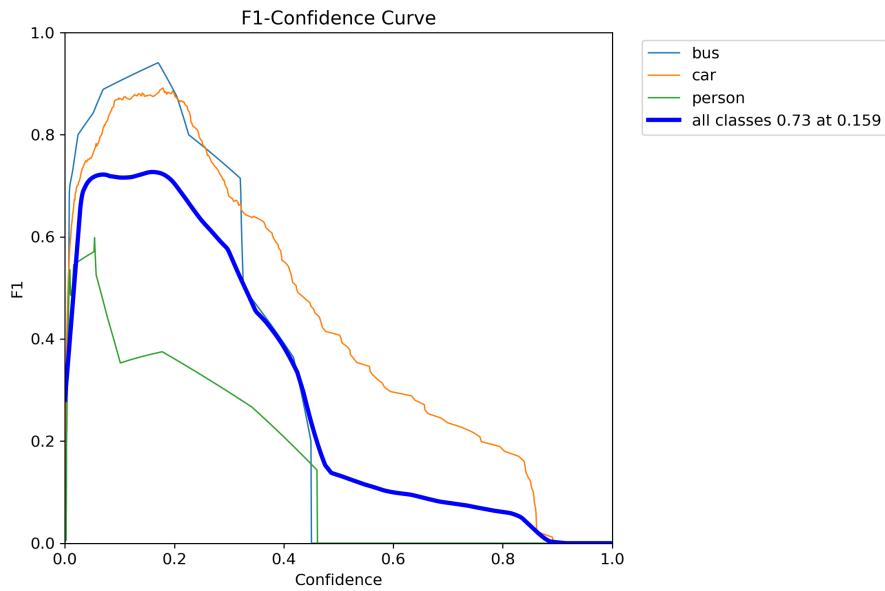


Figure s589. precision\_over\_recall, yolov8n, pre-trained=True, epochs=150, data=keskvaljak, hyperparameter-tuned=True

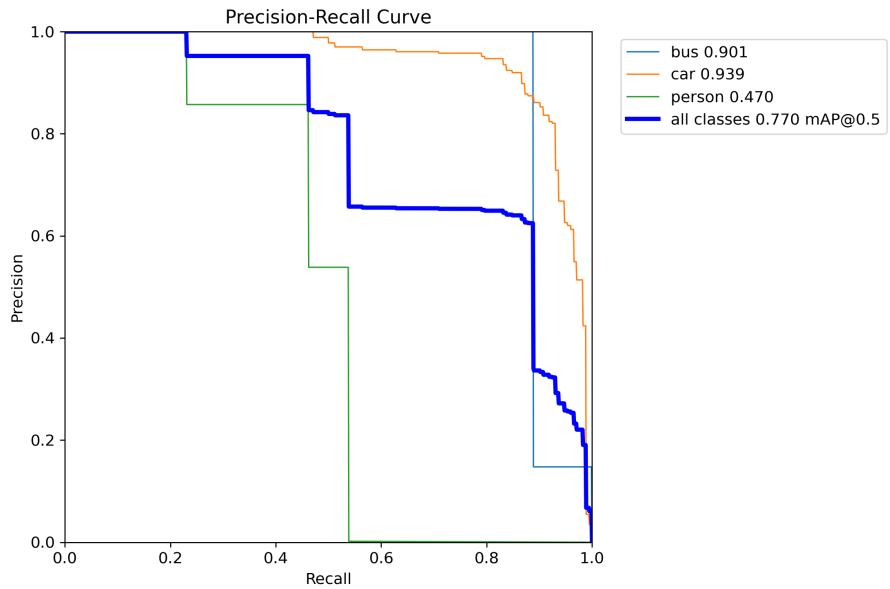


Figure s590. precision\_over\_confidence, yolov8n, pre-trained=True, epochs=150, data=keskvaljak, hyperparameter-tuned=True

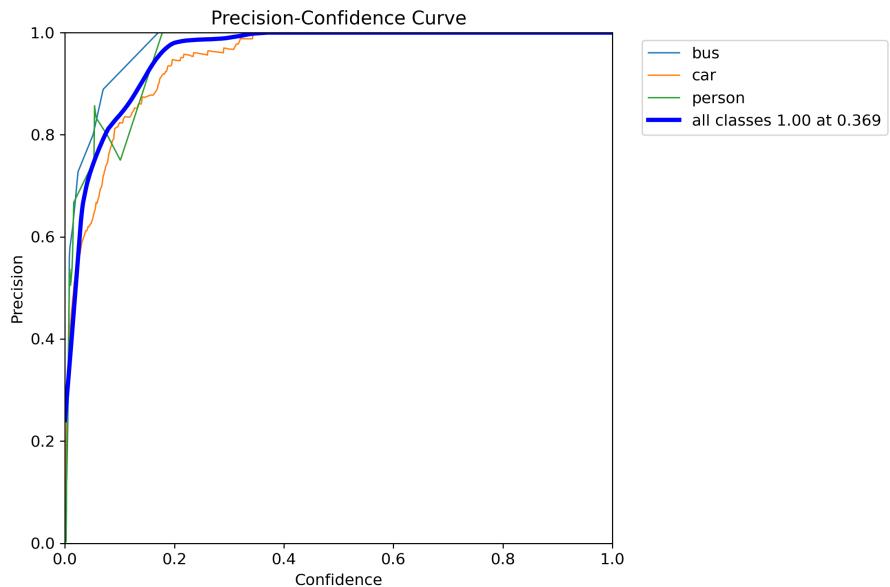


Figure s591. recall\_over\_confidence, yolov8n, pre-trained=True, epochs=150, data=keskvaljak, hyperparameter-tuned=True

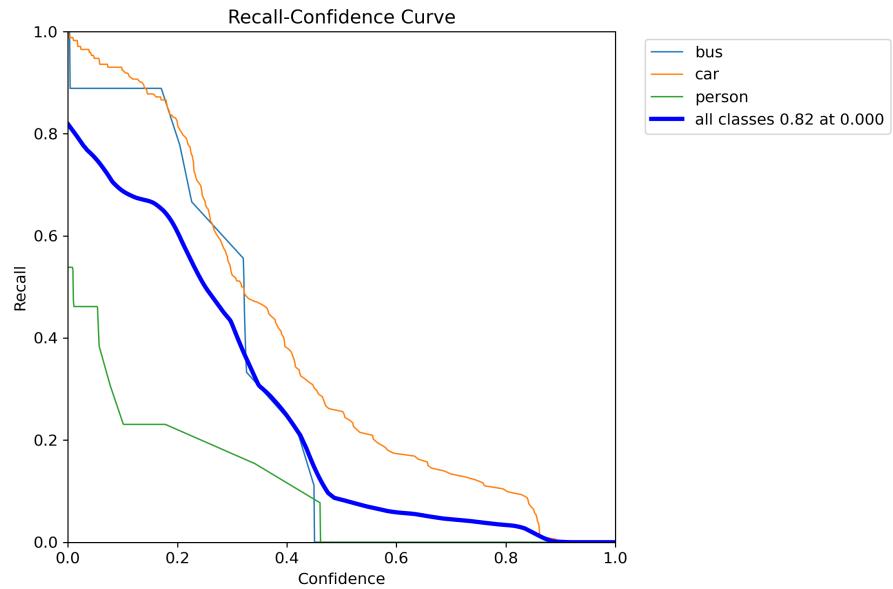


Figure s592. confusion\_matrix, yolov8n, pre-trained=True, epochs=150, data=keskvaljak, hyperparameter-tuned=True

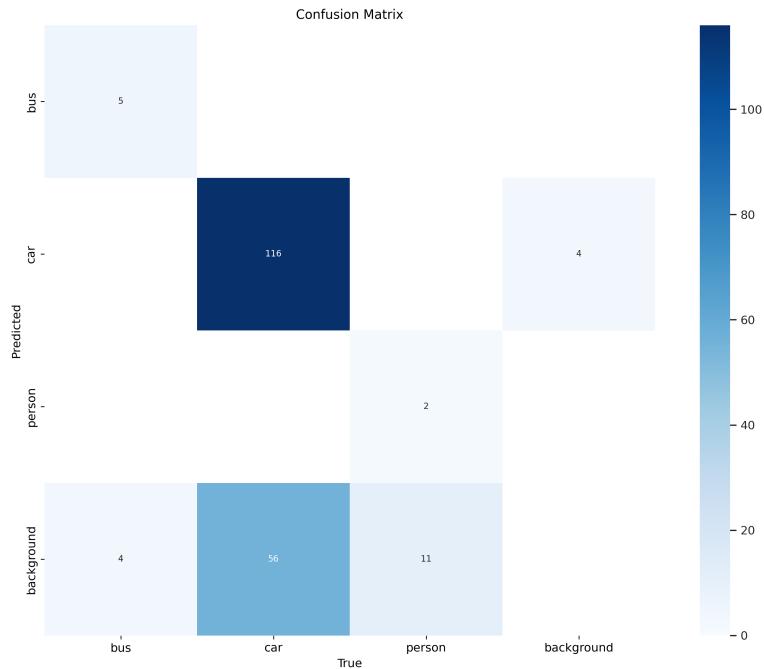


Figure s593. confusion\_matrix\_normalized, yolov8n, pre-trained=True, epochs=150, data=keskvaljak, hyperparameter-tuned=True

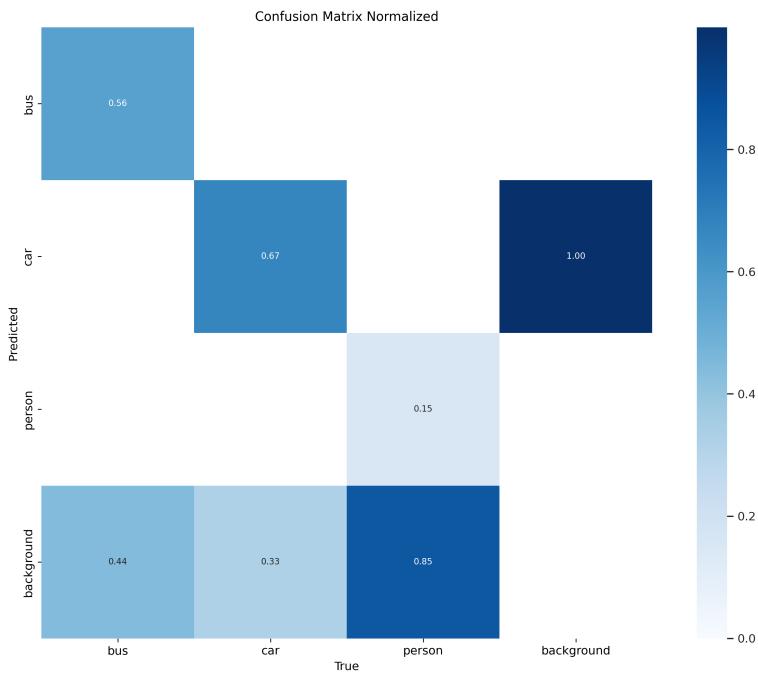


Figure s594. f1\_over\_confidence, yolov8n, pre-trained=True, epochs=50, data=kielce\_university\_of\_technology, hyperparameter-tuned=True

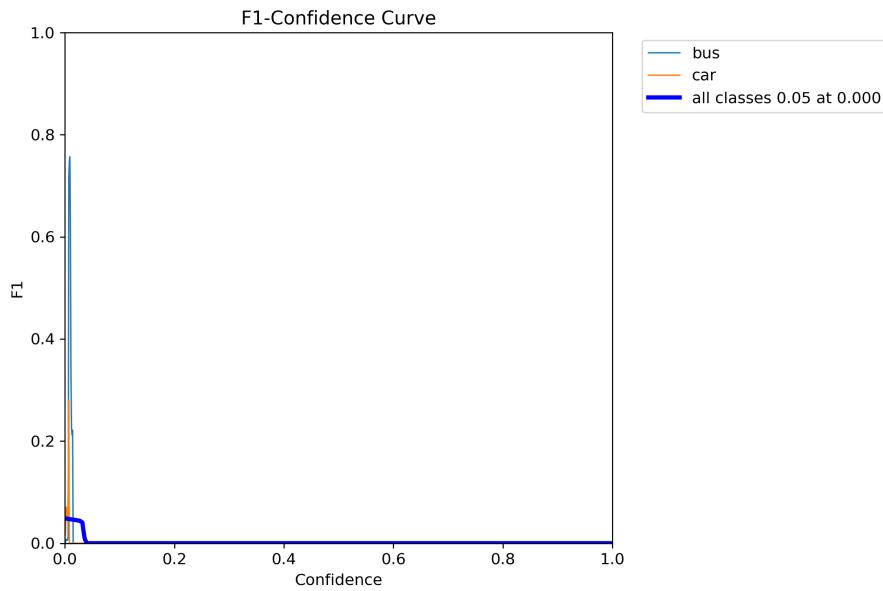


Figure s595. precision\_over\_recall, yolov8n, pre-trained=True, epochs=50, data=kielce\_university\_of\_technology, hyperparameter-tuned=True

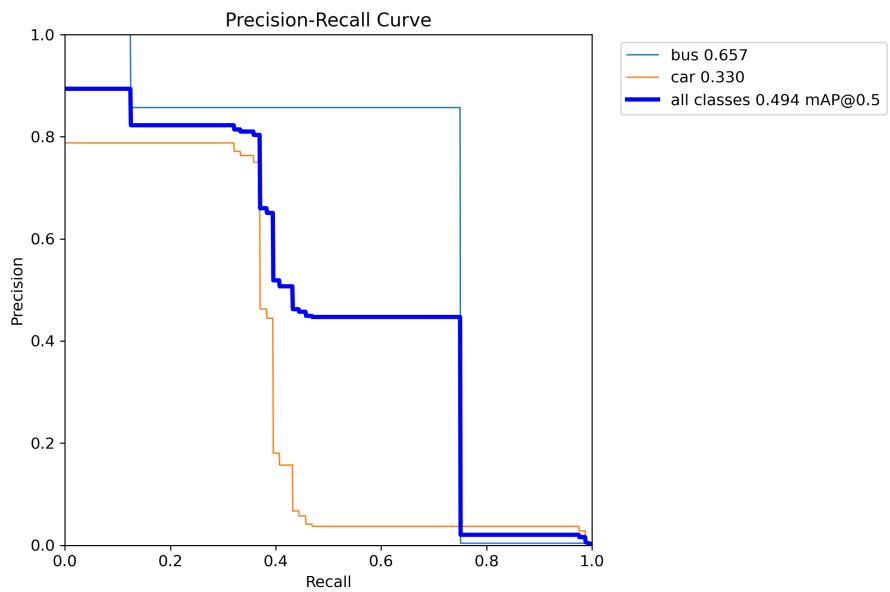


Figure s596. precision\_over\_confidence, yolov8n, pre-trained=True, epochs=50, data=kielce\_university\_of\_technology, hyperparameter-tuned=True

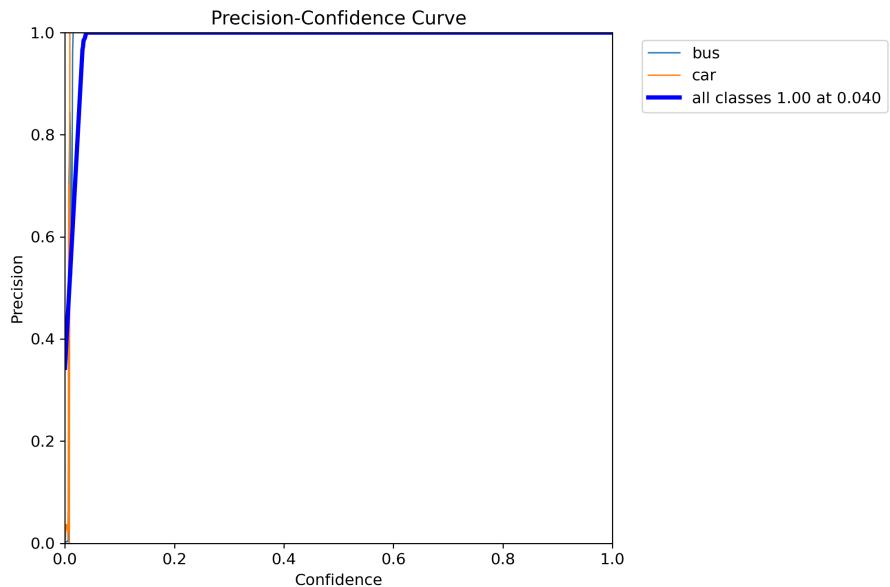


Figure s597. recall\_over\_confidence, yolov8n, pre-trained=True, epochs=50, data=kielce\_university\_of\_technology, hyperparameter-tuned=True

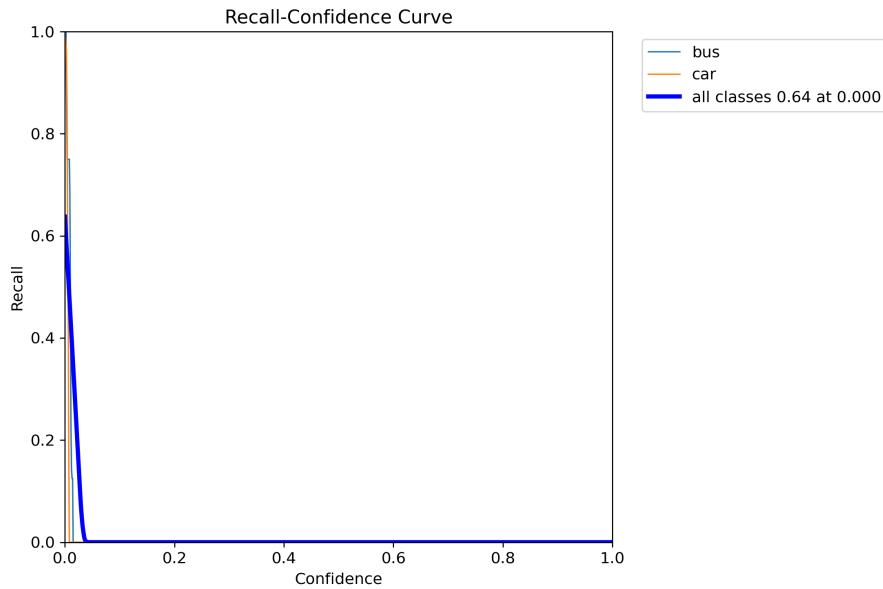


Figure s598. confusion\_matrix, yolov8n, pre-trained=True, epochs=50, data=kielce\_university\_of\_technology, hyperparameter-tuned=True

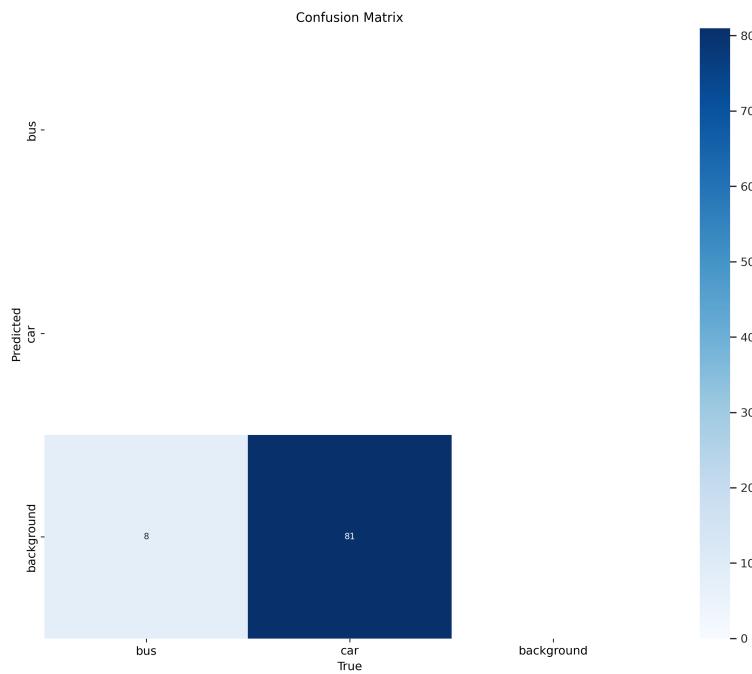


Figure s599. confusion\_matrix\_normalized, yolov8n, pre-trained=True, epochs=50, data=kielce\_university\_of\_technology, hyperparameter-

tuned=True

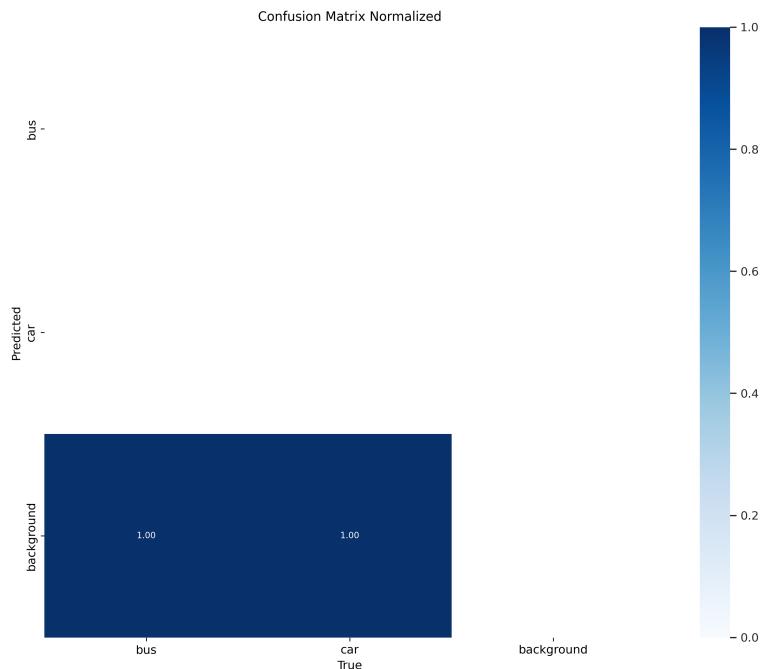


Figure s600. f1\_over\_confidence, yolov8n, pre-trained=True, epochs=100, data=kielce\_university\_of\_technology, hyperparameter-tuned=True

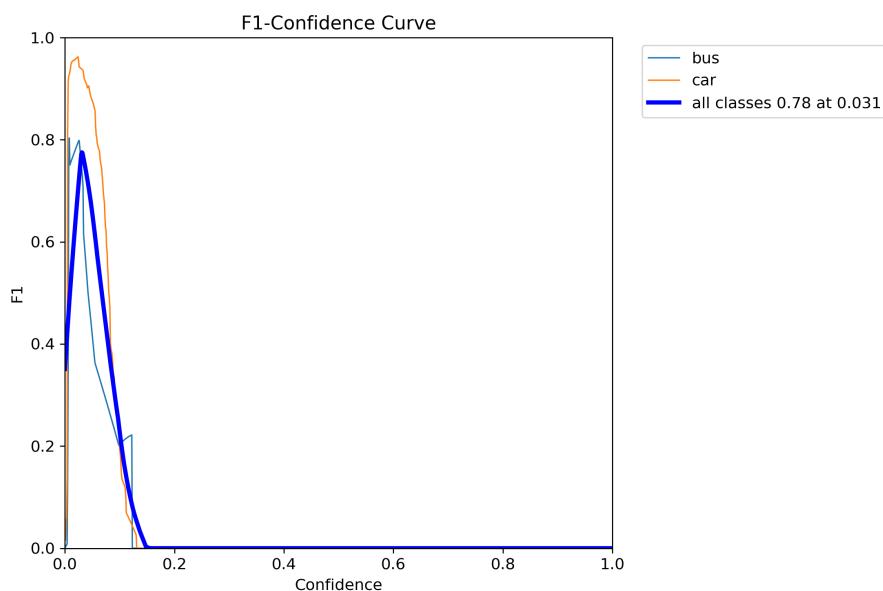


Figure s601. precision\_over\_recall, yolov8n, pre-trained=True, epochs=100,

data=kielce\_university\_of\_technology, hyperparameter-tuned=True

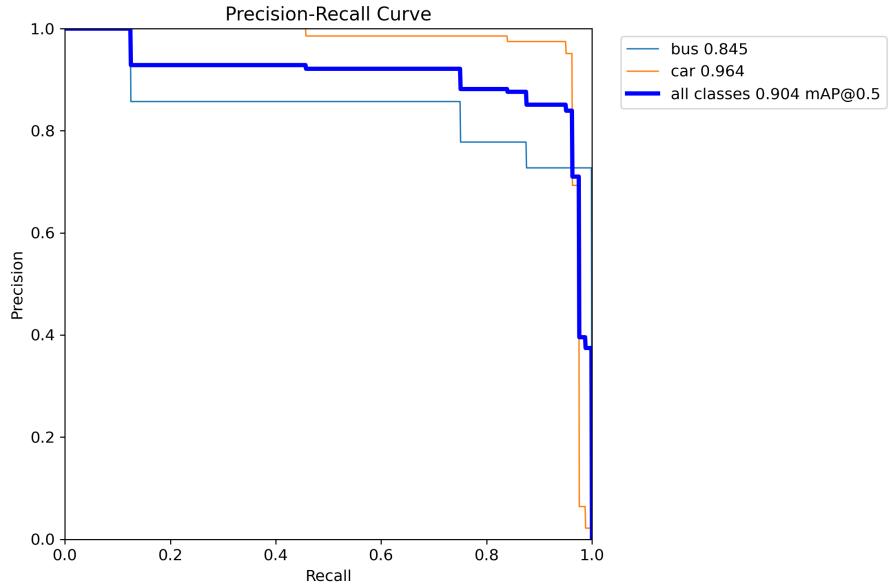


Figure s602. precision\_over\_confidence, yolov8n, pre-trained=True, epochs=100, data=kielce\_university\_of\_technology, hyperparameter-tuned=True

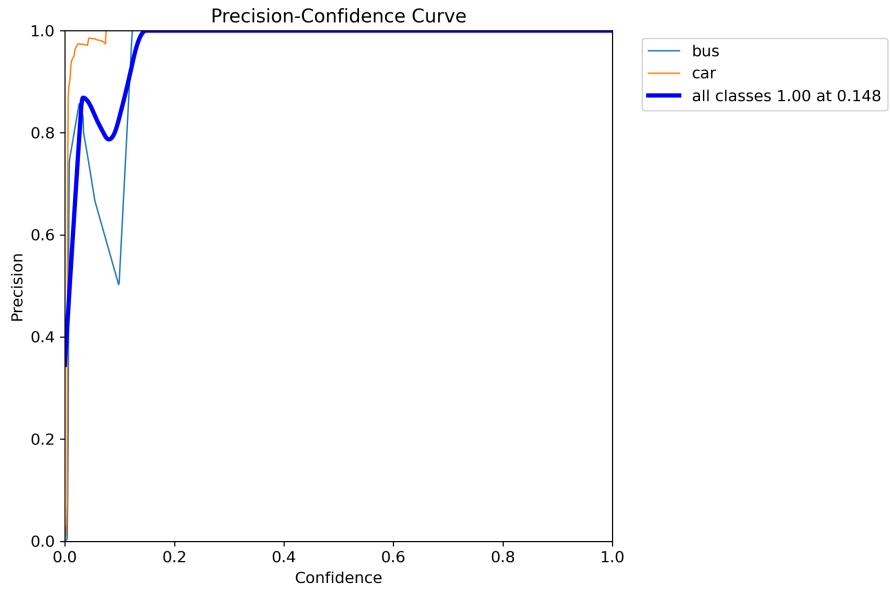


Figure s603. recall\_over\_confidence, yolov8n, pre-trained=True, epochs=100, data=kielce\_university\_of\_technology, hyperparameter-tuned=True

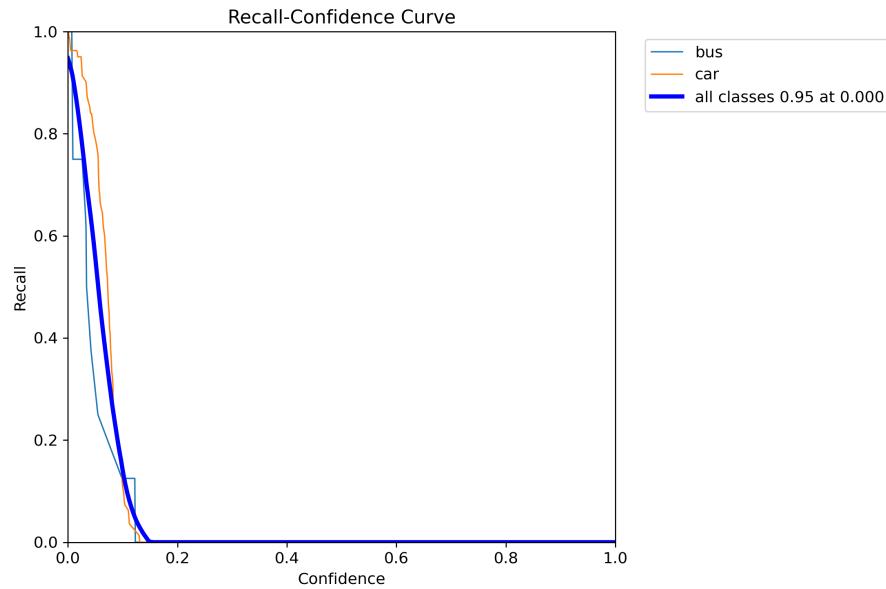


Figure s604. confusion\_matrix, yolov8n, pre-trained=True, epochs=100, data=kielce\_university\_of\_technology, hyperparameter-tuned=True

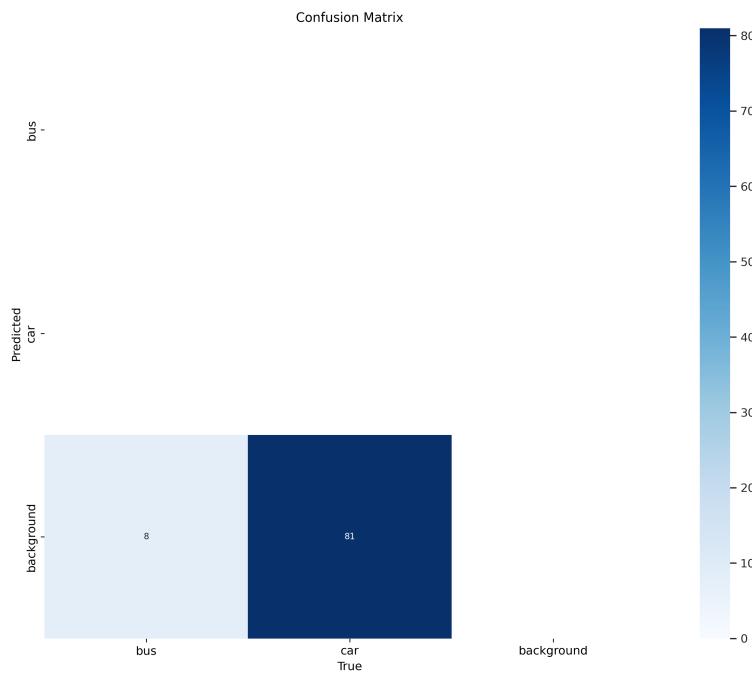


Figure s605. confusion\_matrix\_normalized, yolov8n, pre-trained=True, epochs=100, data=kielce\_university\_of\_technology, hyperparameter-

tuned=True

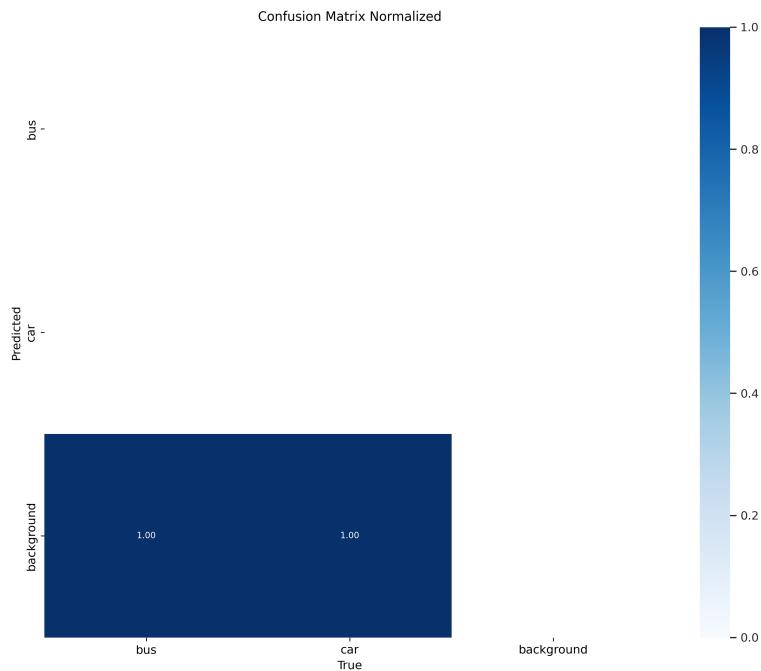


Figure s606. f1\_over\_confidence, yolov8n, pre-trained=True, epochs=150, data=kielce\_university\_of\_technology, hyperparameter-tuned=True

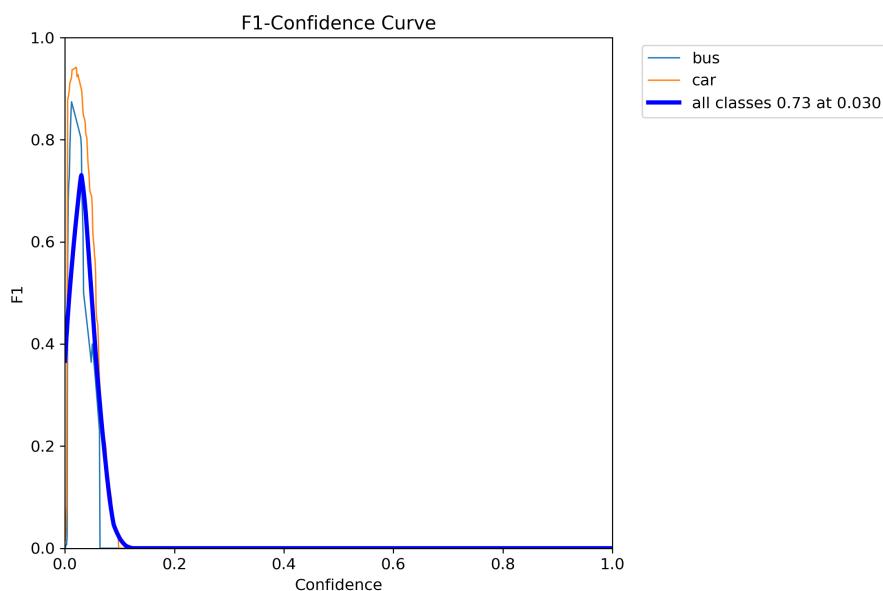


Figure s607. precision\_over\_recall, yolov8n, pre-trained=True, epochs=150,

data=kielce\_university\_of\_technology, hyperparameter-tuned=True

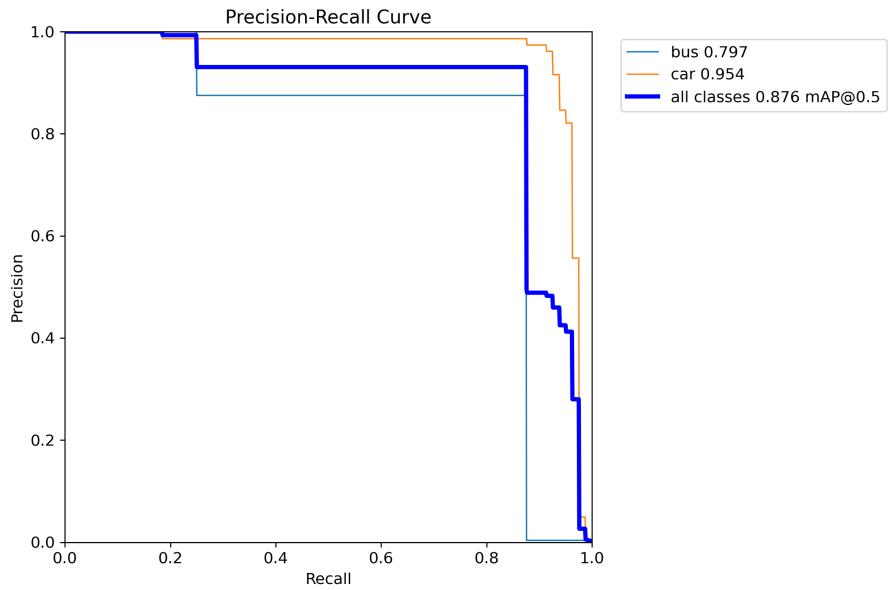


Figure s608. precision\_over\_confidence, yolov8n, pre-trained=True, epochs=150, data=kielce\_university\_of\_technology, hyperparameter-tuned=True

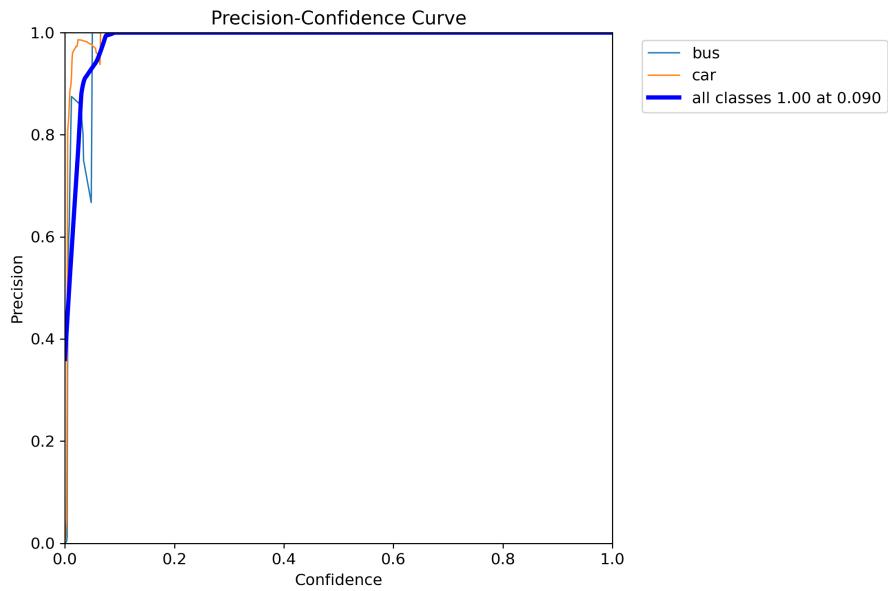


Figure s609. recall\_over\_confidence, yolov8n, pre-trained=True, epochs=150, data=kielce\_university\_of\_technology, hyperparameter-tuned=True

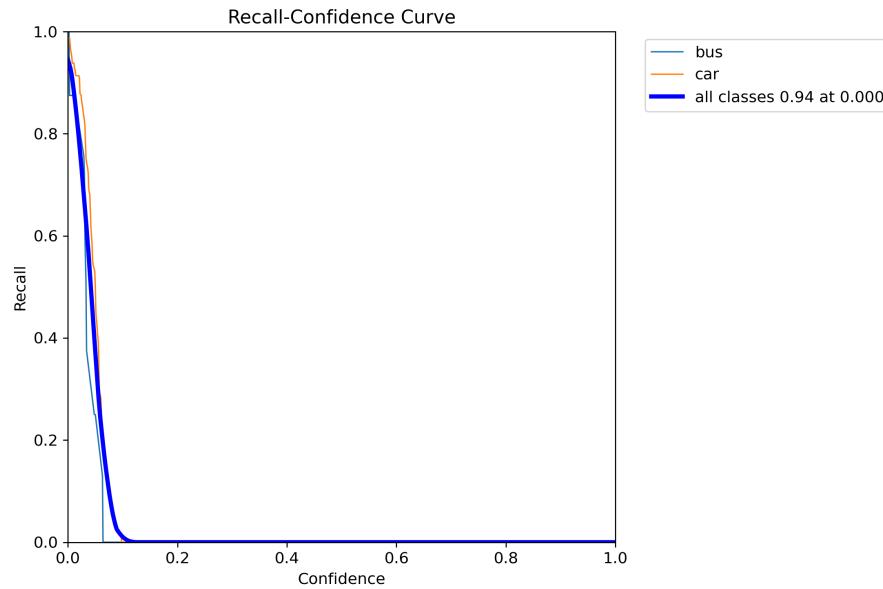


Figure s610. confusion\_matrix, yolov8n, pre-trained=True, epochs=150, data=kielce\_university\_of\_technology, hyperparameter-tuned=True

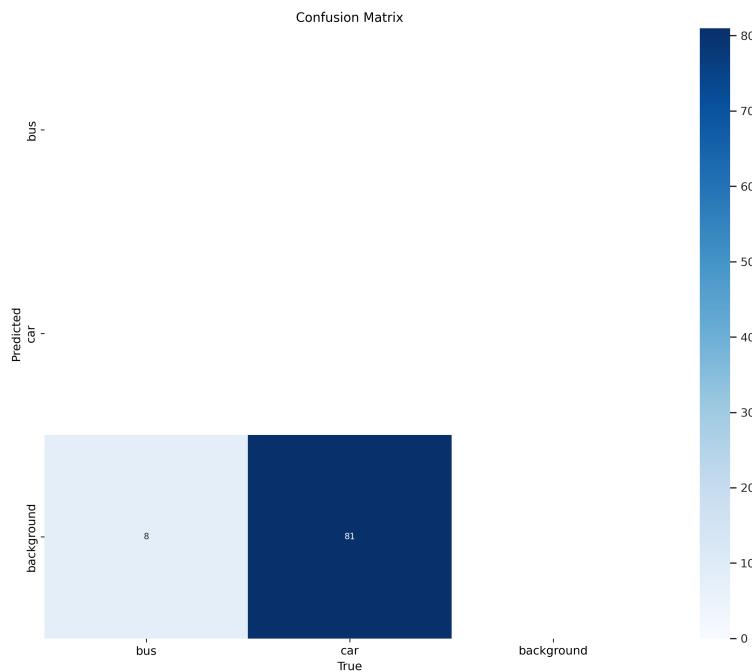


Figure s611. confusion\_matrix\_normalized, yolov8n, pre-trained=True, epochs=150, data=kielce\_university\_of\_technology, hyperparameter-

tuned=True

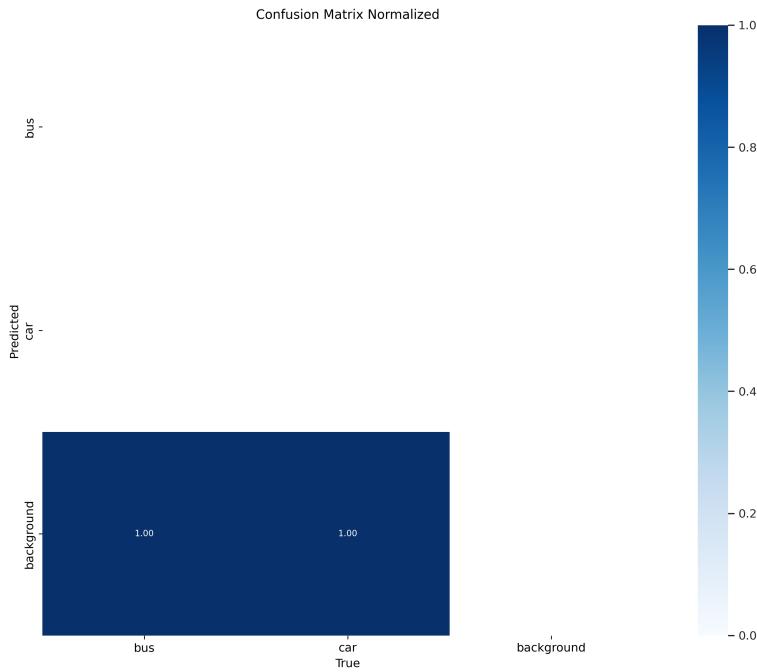


Figure s612. f1\_over\_confidence, yolov8n, pre-trained=True, epochs=50, data=toggenburg\_alpaca\_ranch, hyperparameter-tuned=True

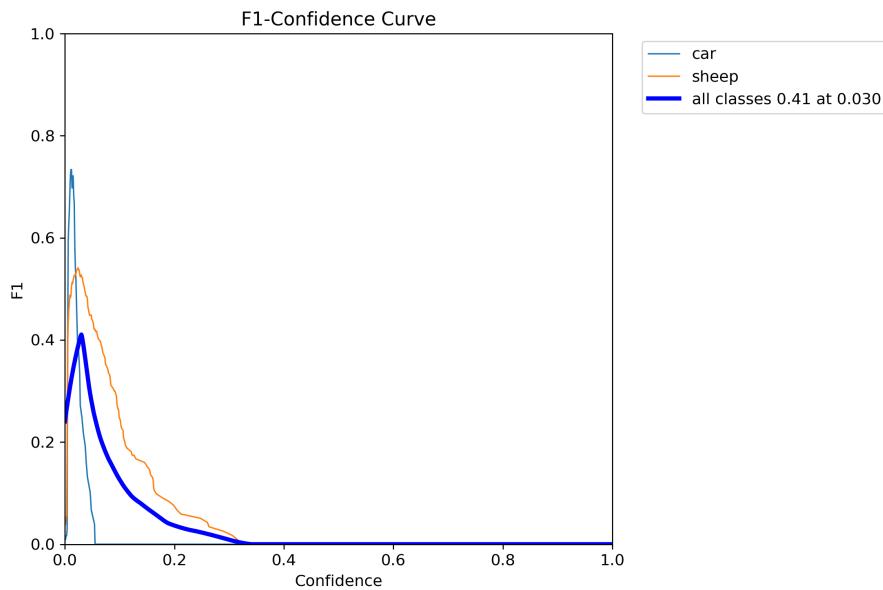


Figure s613. precision\_over\_recall, yolov8n, pre-trained=True, epochs=50,

data=toggenburg\_alpaca\_ranch, hyperparameter-tuned=True

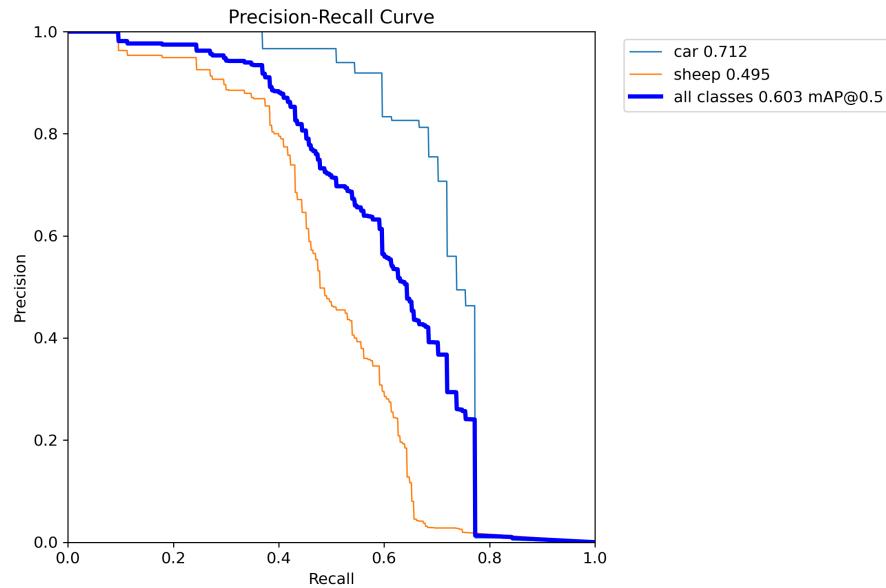


Figure s614. precision\_over\_confidence, yolov8n, pre-trained=True, epochs=50, data=toggenburg\_alpaca\_ranch, hyperparameter-tuned=True

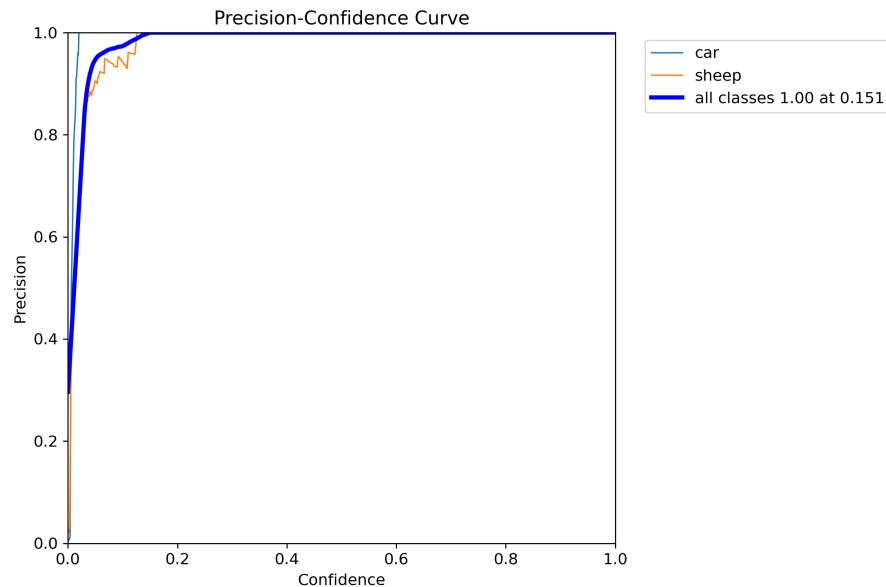


Figure s615. recall\_over\_confidence, yolov8n, pre-trained=True, epochs=50, data=toggenburg\_alpaca\_ranch, hyperparameter-tuned=True

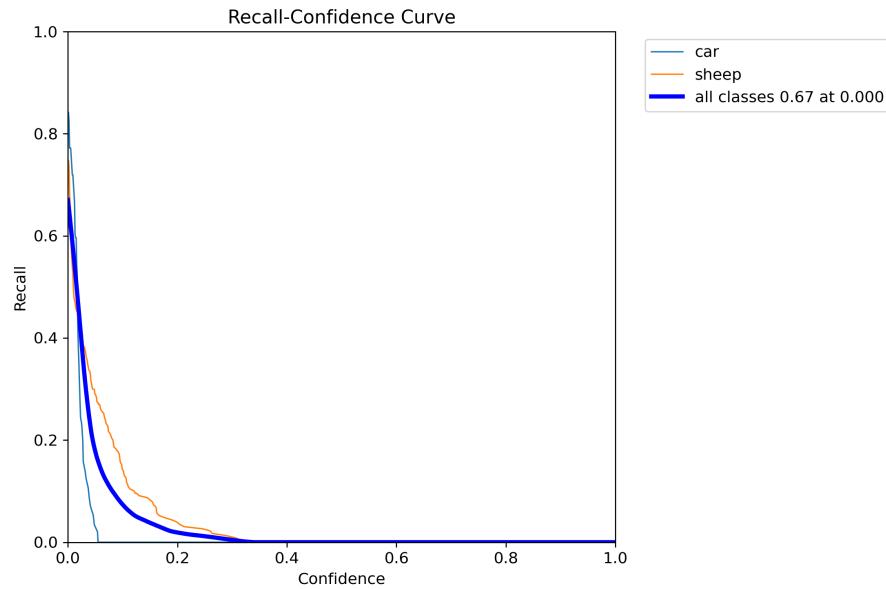


Figure s616. confusion\_matrix, yolov8n, pre-trained=True, epochs=50, data=toggenburg\_alpaca\_ranch, hyperparameter-tuned=True

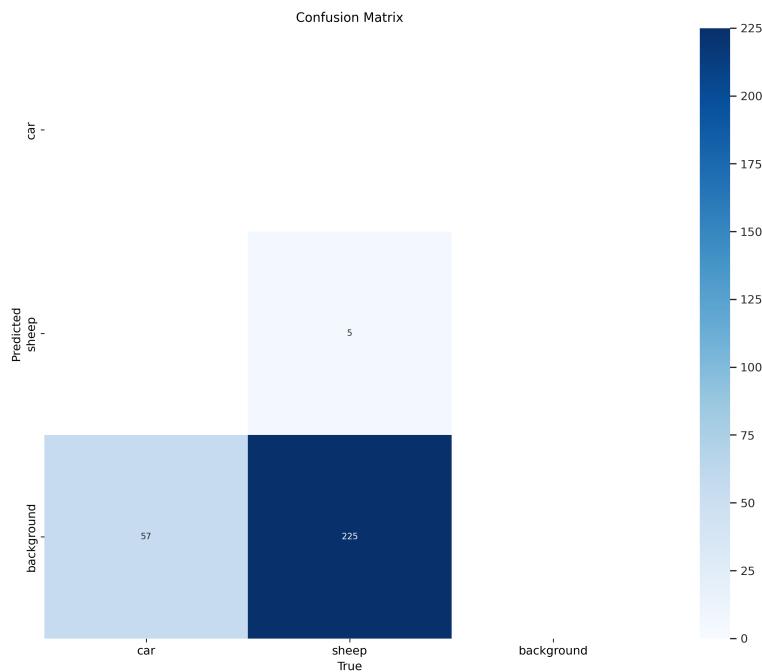


Figure s617. confusion\_matrix\_normalized, yolov8n, pre-trained=True, epochs=50, data=toggenburg\_alpaca\_ranch, hyperparameter-tuned=True

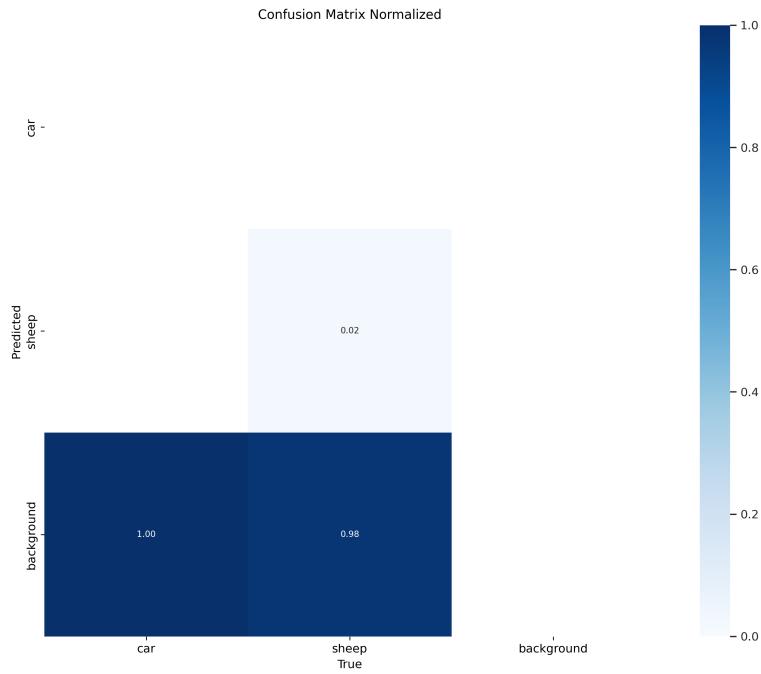


Figure s618. f1\_over\_confidence, yolov8n, pre-trained=True, epochs=100, data=toggenburg\_alpaca\_ranch, hyperparameter-tuned=True

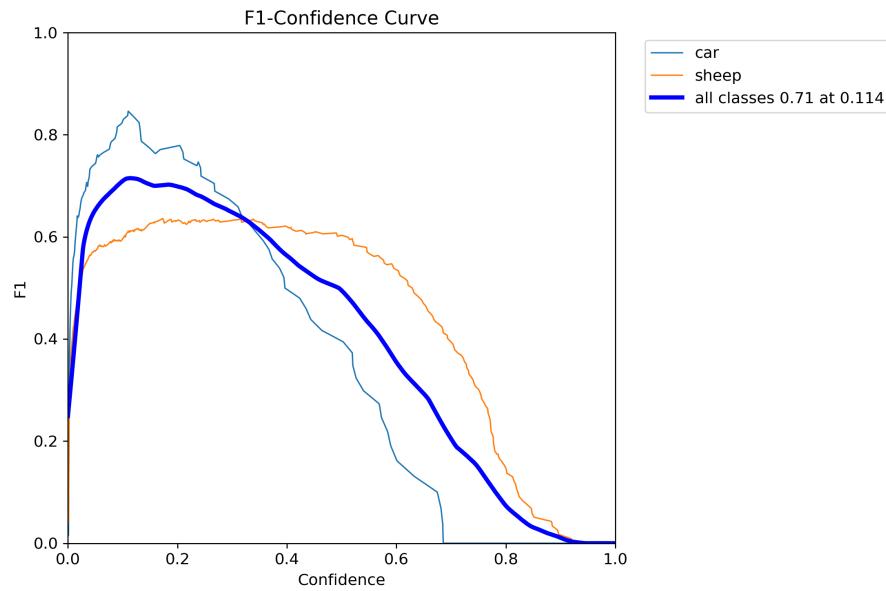


Figure s619. precision\_over\_recall, yolov8n, pre-trained=True, epochs=100, data=toggenburg\_alpaca\_ranch, hyperparameter-tuned=True

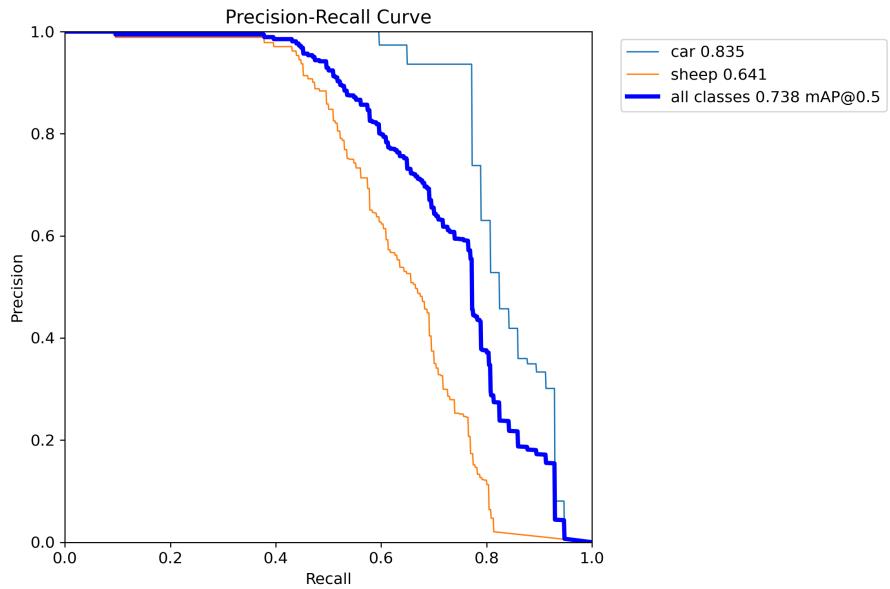


Figure s620. precision\_over\_confidence, yolov8n, pre-trained=True, epochs=100, data=toggenburg\_alpaca\_ranch, hyperparameter-tuned=True

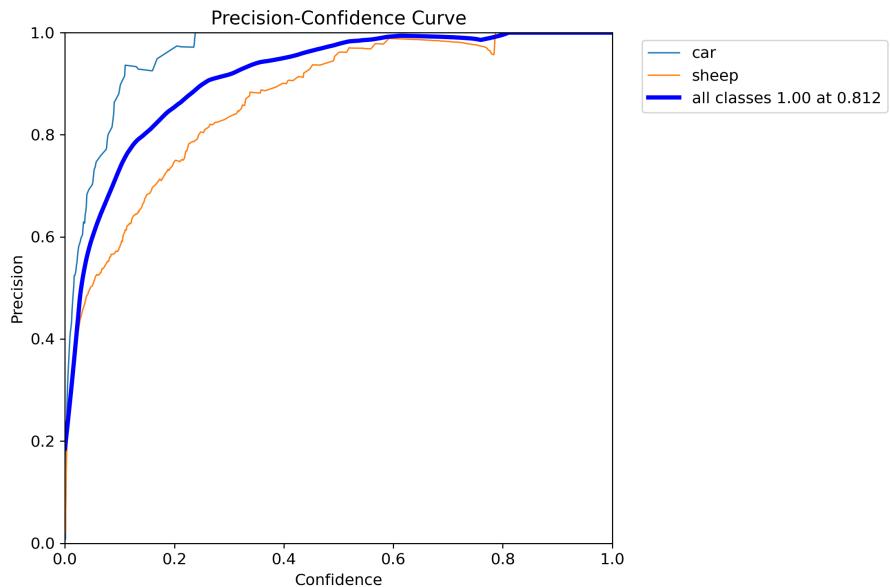


Figure s621. recall\_over\_confidence, yolov8n, pre-trained=True, epochs=100, data=toggenburg\_alpaca\_ranch, hyperparameter-tuned=True

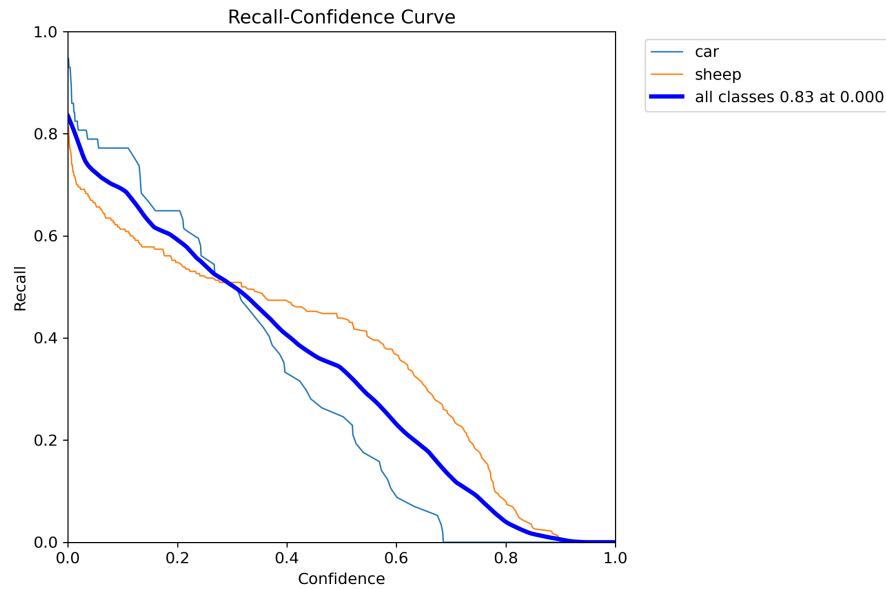


Figure s622. confusion\_matrix, yolov8n, pre-trained=True, epochs=100, data=toggenburg\_alpaca\_ranch, hyperparameter-tuned=True

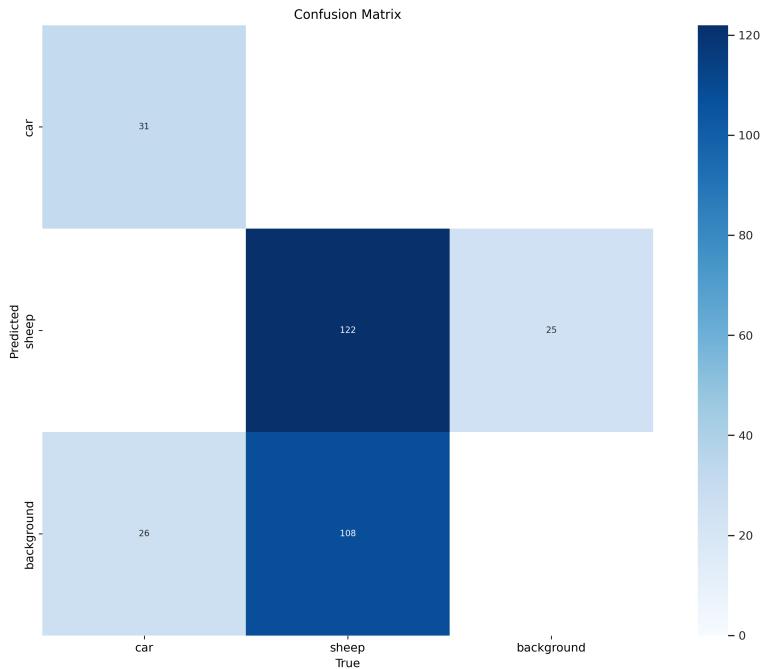


Figure s623. confusion\_matrix\_normalized, yolov8n, pre-trained=True, epochs=100, data=toggenburg\_alpaca\_ranch, hyperparameter-tuned=True

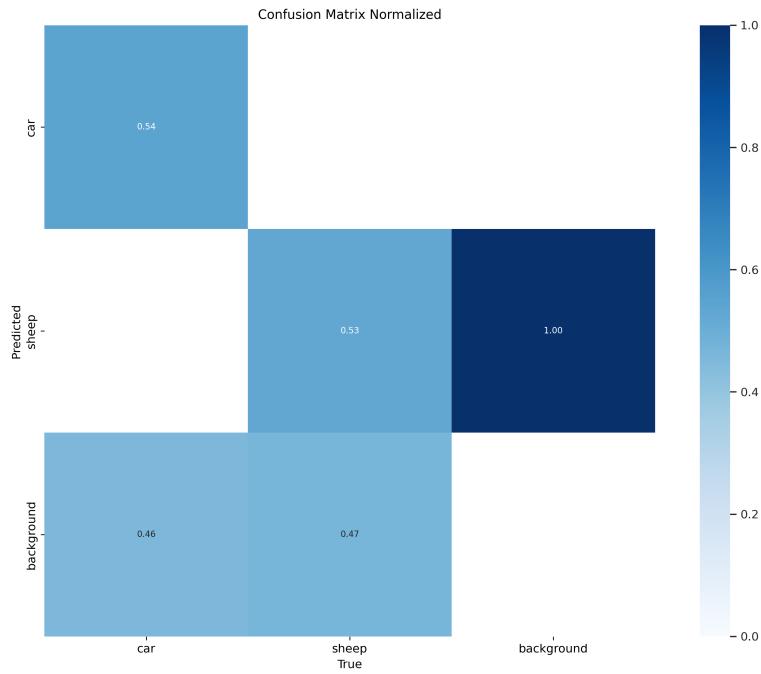


Figure s624. f1\_over\_confidence, yolov8n, pre-trained=True, epochs=150, data=toggenburg\_alpaca\_ranch, hyperparameter-tuned=True

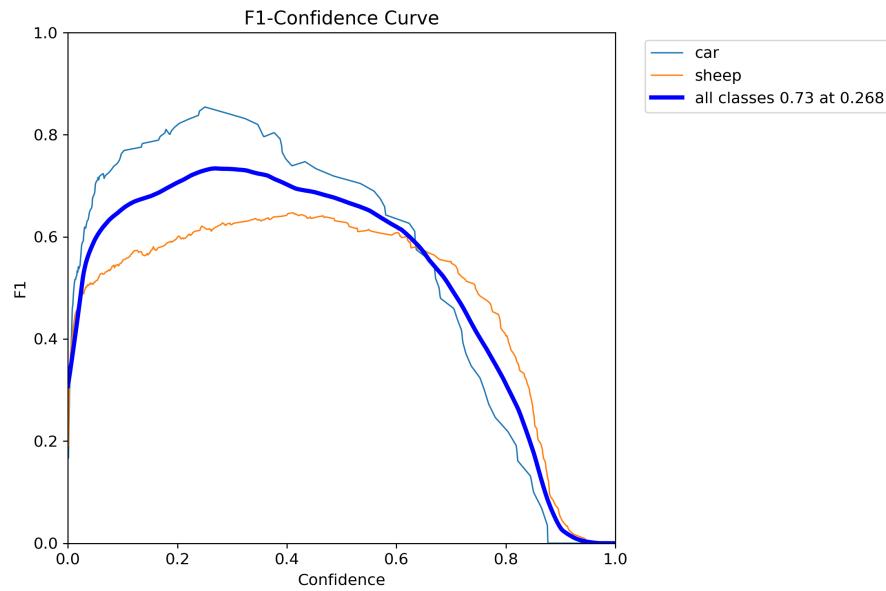


Figure s625. precision\_over\_recall, yolov8n, pre-trained=True, epochs=150, data=toggenburg\_alpaca\_ranch, hyperparameter-tuned=True

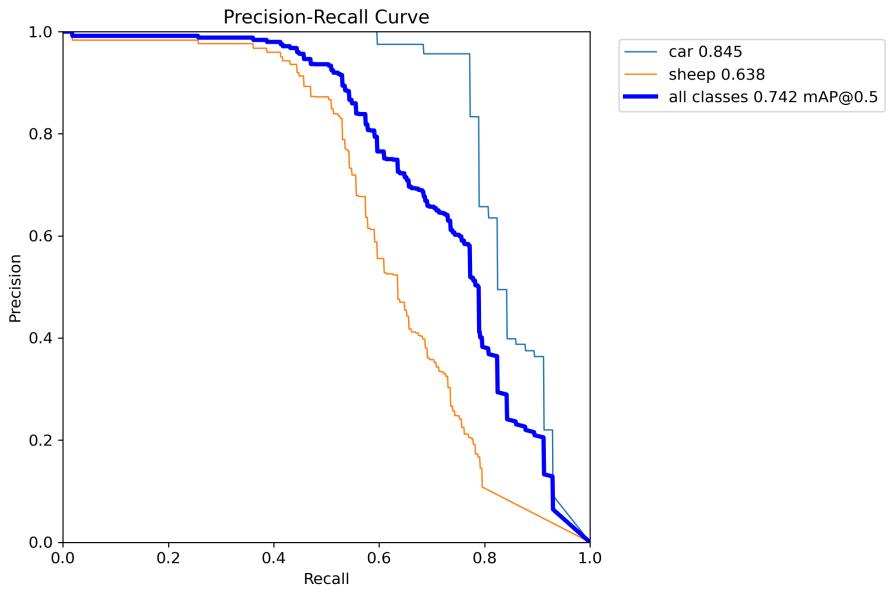


Figure s626. precision\_over\_confidence, yolov8n, pre-trained=True, epochs=150, data=toggenburg\_alpaca\_ranch, hyperparameter-tuned=True

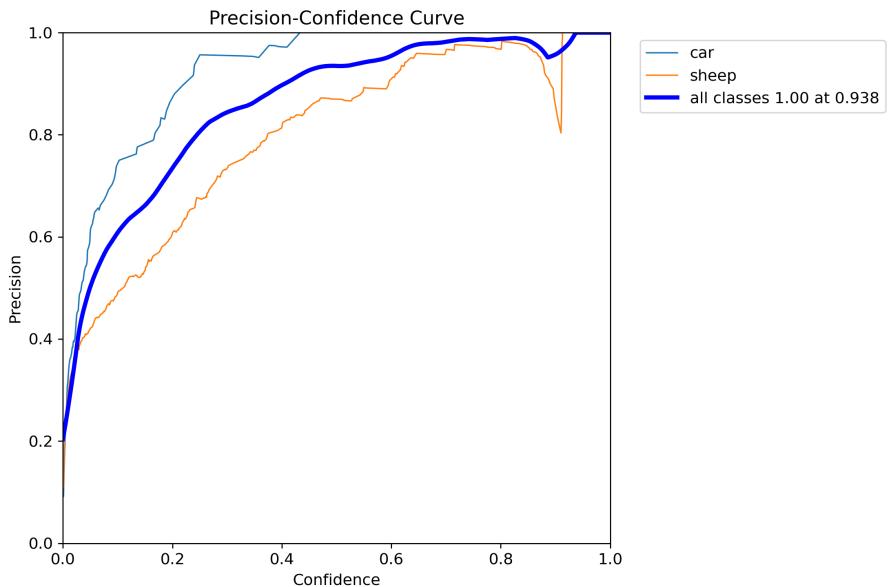


Figure s627. recall\_over\_confidence, yolov8n, pre-trained=True, epochs=150, data=toggenburg\_alpaca\_ranch, hyperparameter-tuned=True

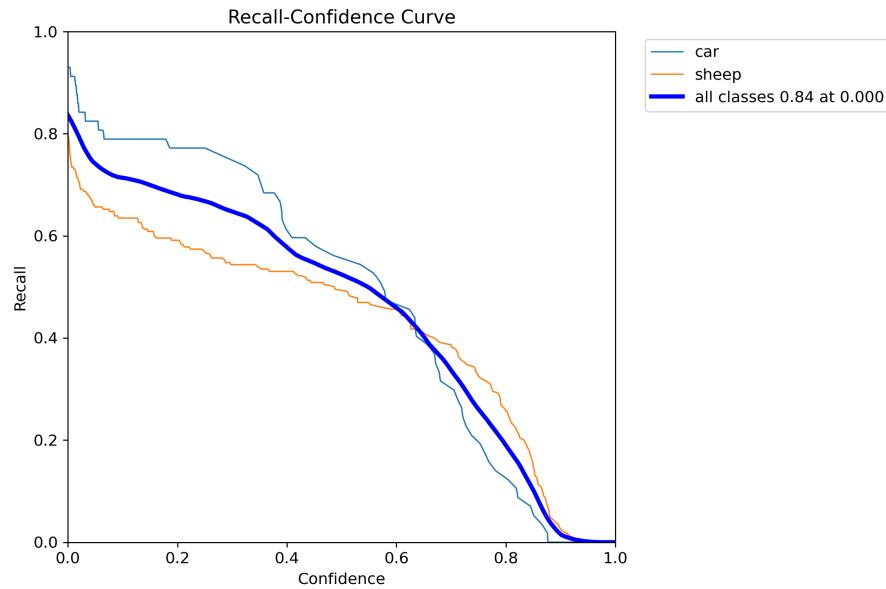


Figure s628. confusion\_matrix, yolov8n, pre-trained=True, epochs=150, data=toggenburg\_alpaca\_ranch, hyperparameter-tuned=True

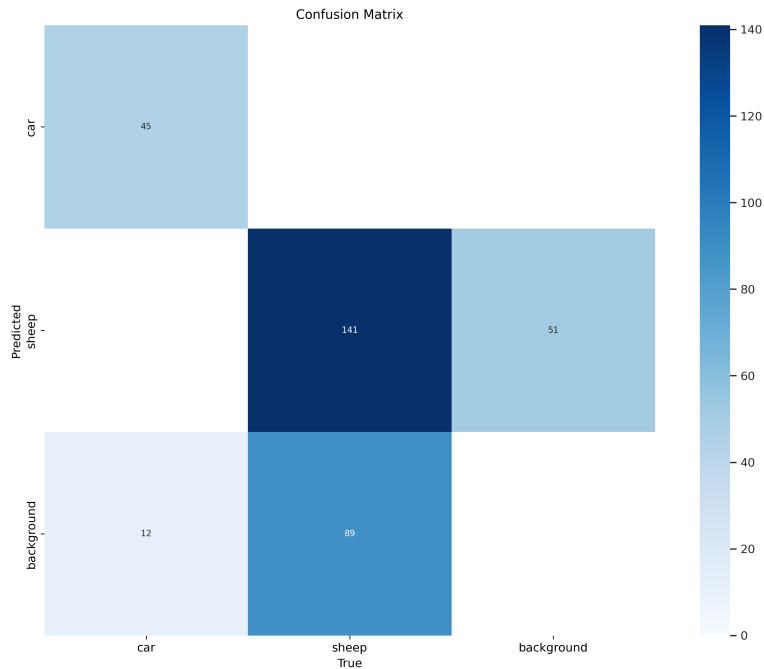


Figure s629. confusion\_matrix\_normalized, yolov8n, pre-trained=True, epochs=150, data=toggenburg\_alpaca\_ranch, hyperparameter-tuned=True

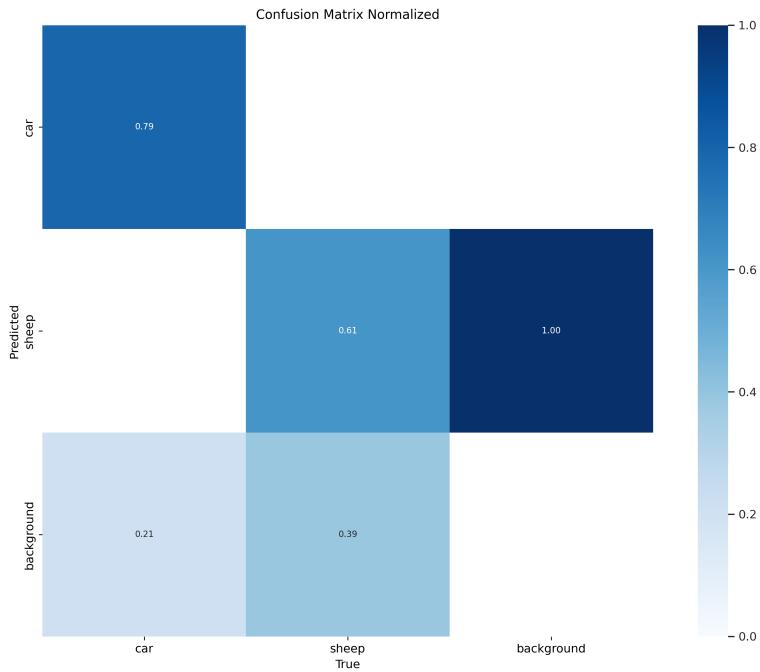


Figure s630. f1\_over\_confidence, yolov8n, pre-trained=False, epochs=50, data=duomo, hyperparameter-tuned=True

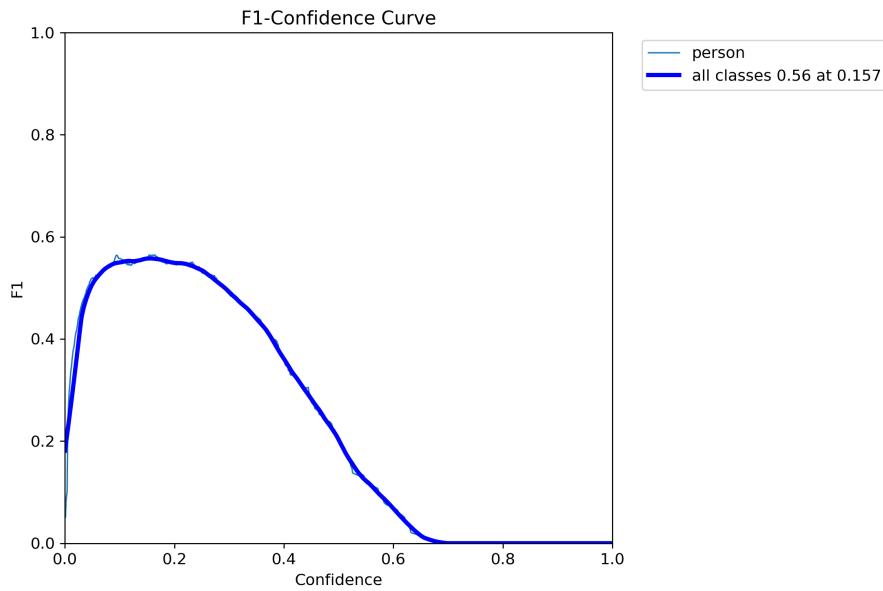


Figure s631. precision\_over\_recall, yolov8n, pre-trained=False, epochs=50, data=duomo, hyperparameter-tuned=True

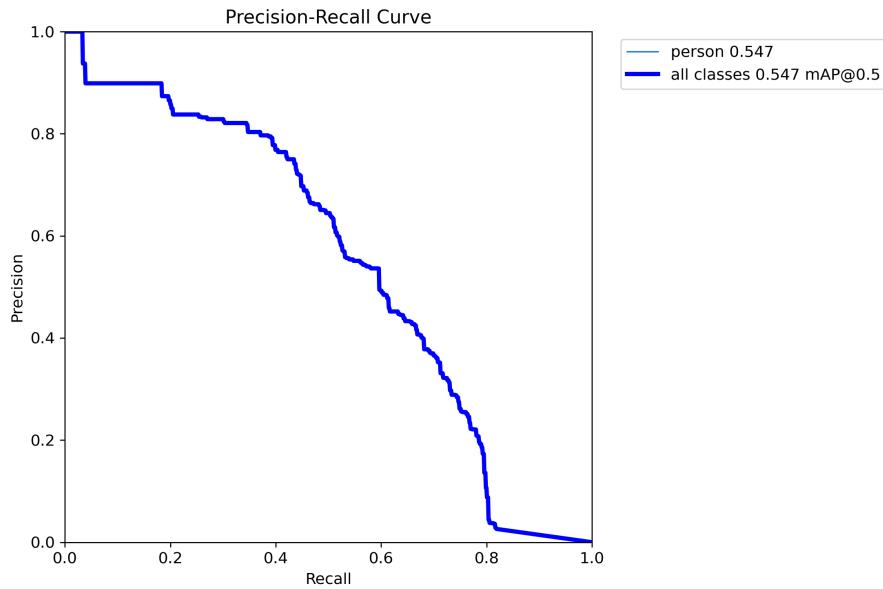


Figure s632. precision\_over\_confidence, yolov8n, pre-trained=False, epochs=50, data=duomo, hyperparameter-tuned=True

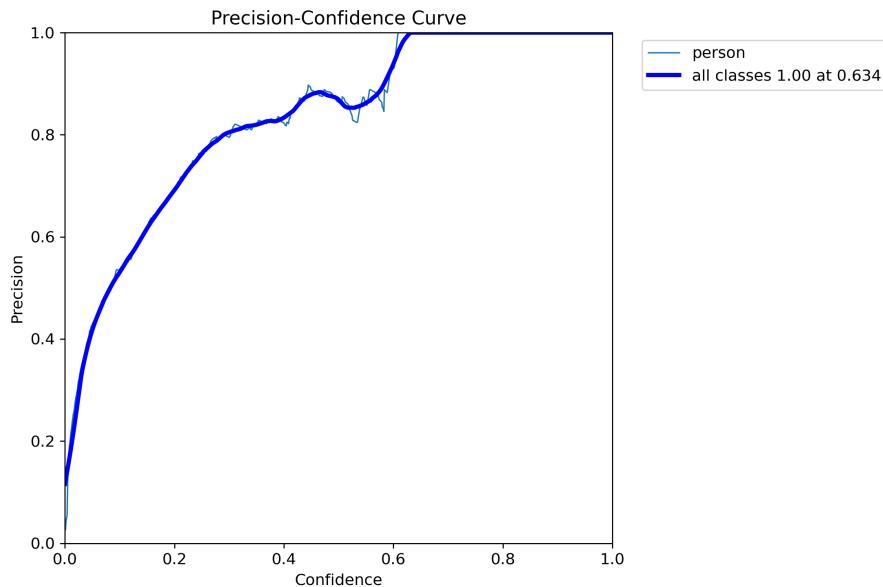


Figure s633. recall\_over\_confidence, yolov8n, pre-trained=False, epochs=50, data=duomo, hyperparameter-tuned=True

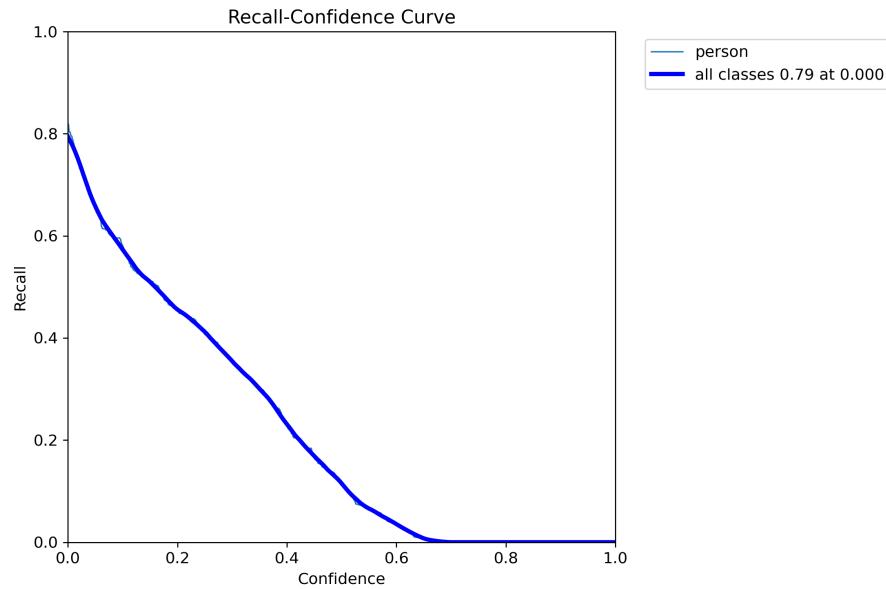


Figure s634. confusion\_matrix, yolov8n, pre-trained=False, epochs=50, data=duomo, hyperparameter-tuned=True

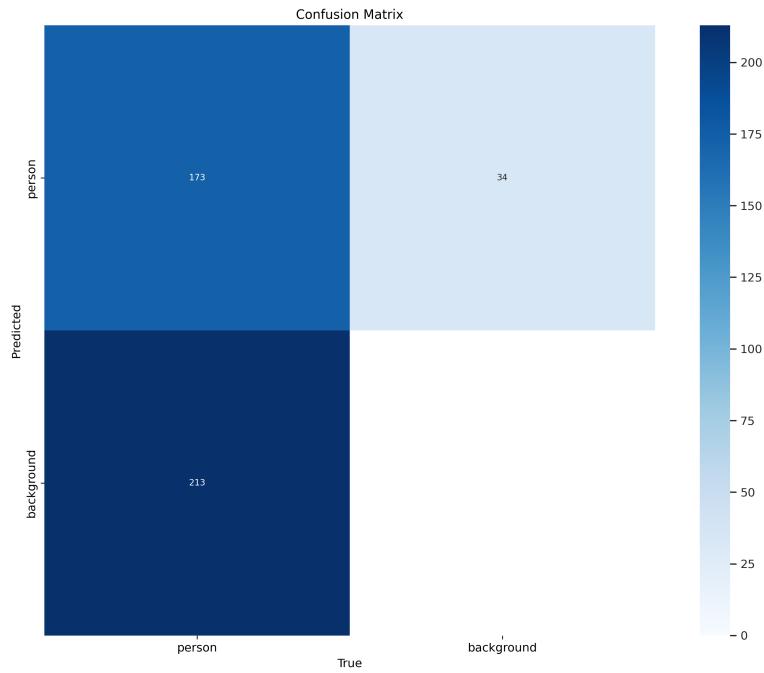


Figure s635. confusion\_matrix\_normalized, yolov8n, pre-trained=False, epochs=50, data=duomo, hyperparameter-tuned=True

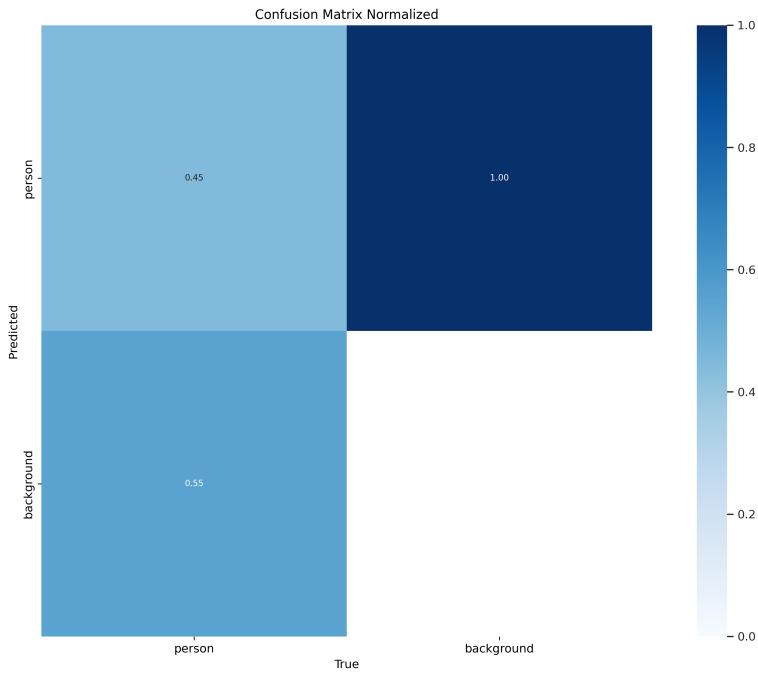


Figure s636. f1\_over\_confidence, yolov8n, pre-trained=False, epochs=100, data=duomo, hyperparameter-tuned=True

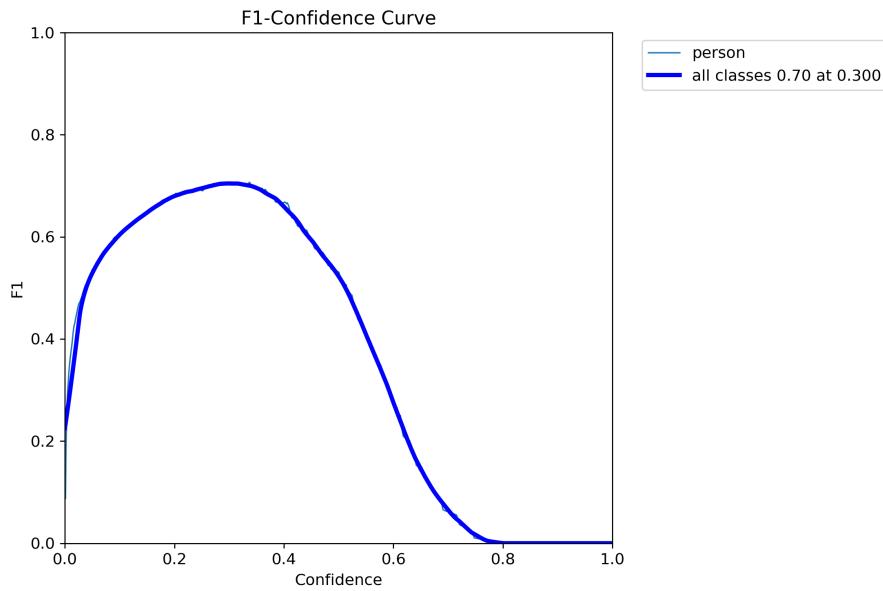


Figure s637. precision\_over\_recall, yolov8n, pre-trained=False, epochs=100, data=duomo, hyperparameter-tuned=True

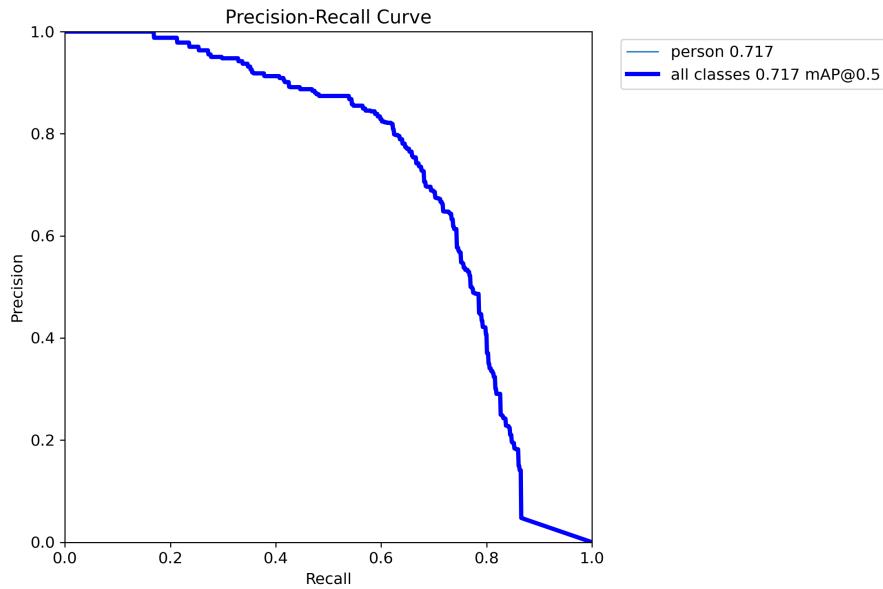


Figure s638. precision\_over\_confidence, yolov8n, pre-trained=False, epochs=100, data=duomo, hyperparameter-tuned=True

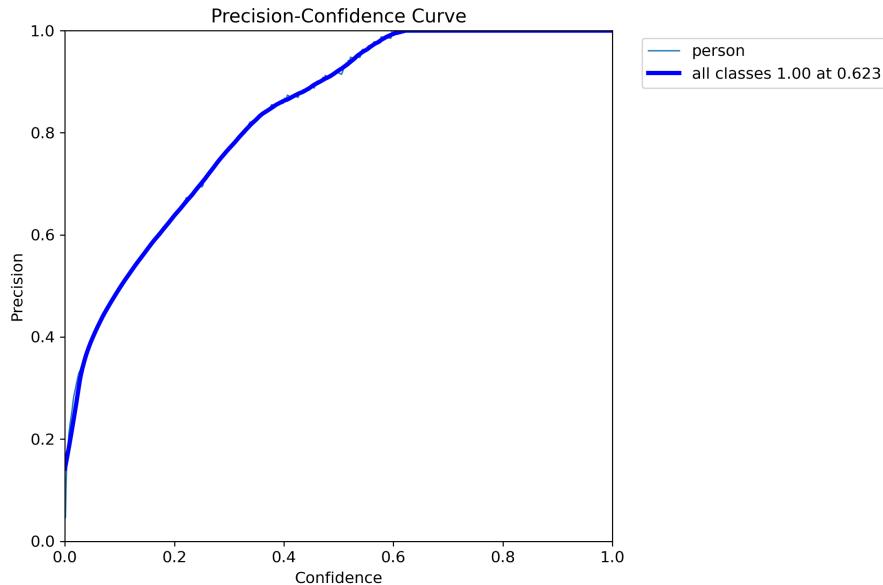


Figure s639. recall\_over\_confidence, yolov8n, pre-trained=False, epochs=100, data=duomo, hyperparameter-tuned=True

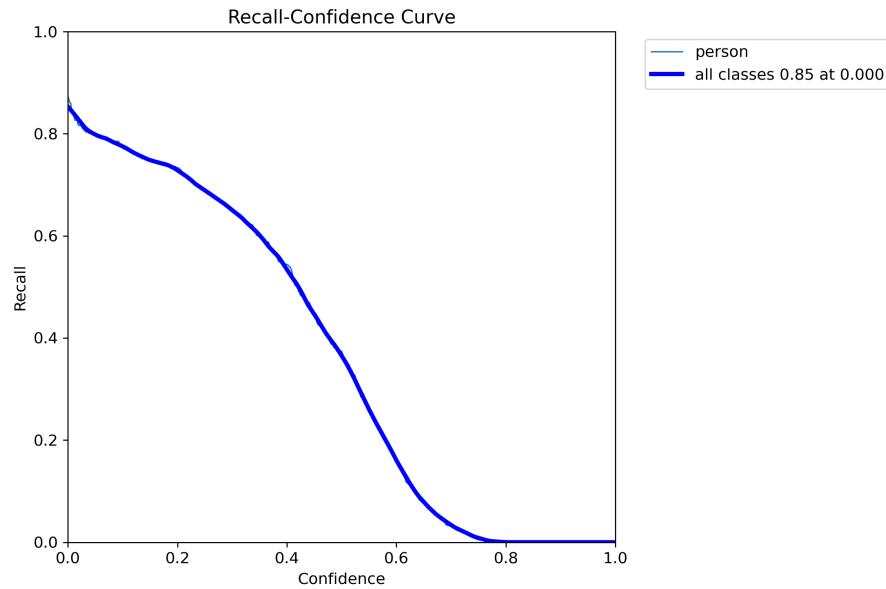


Figure s640. confusion\_matrix, yolov8n, pre-trained=False, epochs=100, data=duomo, hyperparameter-tuned=True

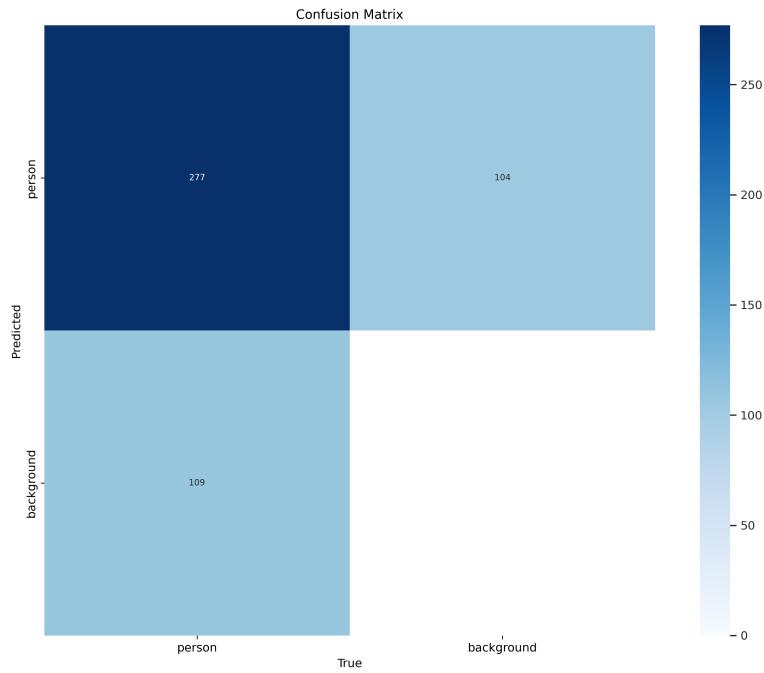


Figure s641. confusion\_matrix\_normalized, yolov8n, pre-trained=False, epochs=100, data=duomo, hyperparameter-tuned=True

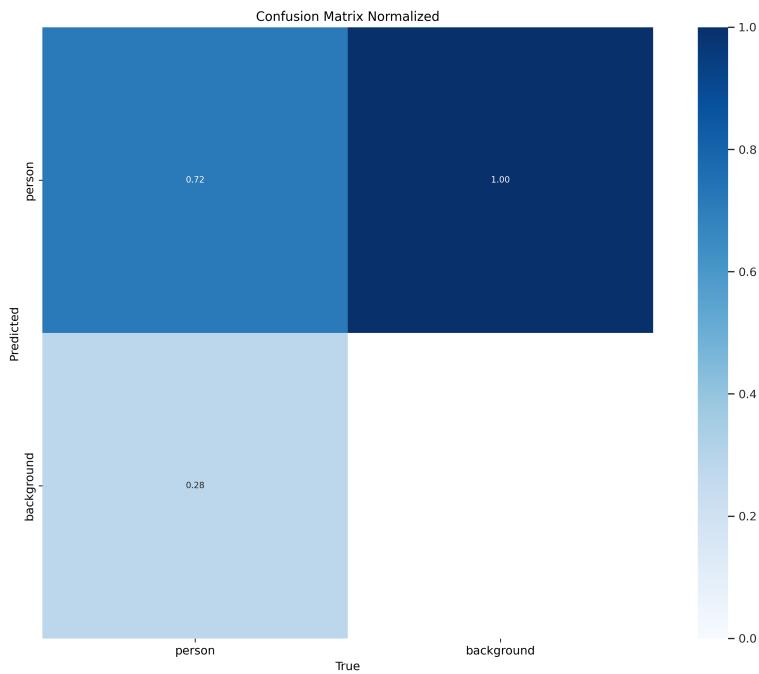


Figure s642. f1\_over\_confidence, yolov8n, pre-trained=False, epochs=150, data=duomo, hyperparameter-tuned=True

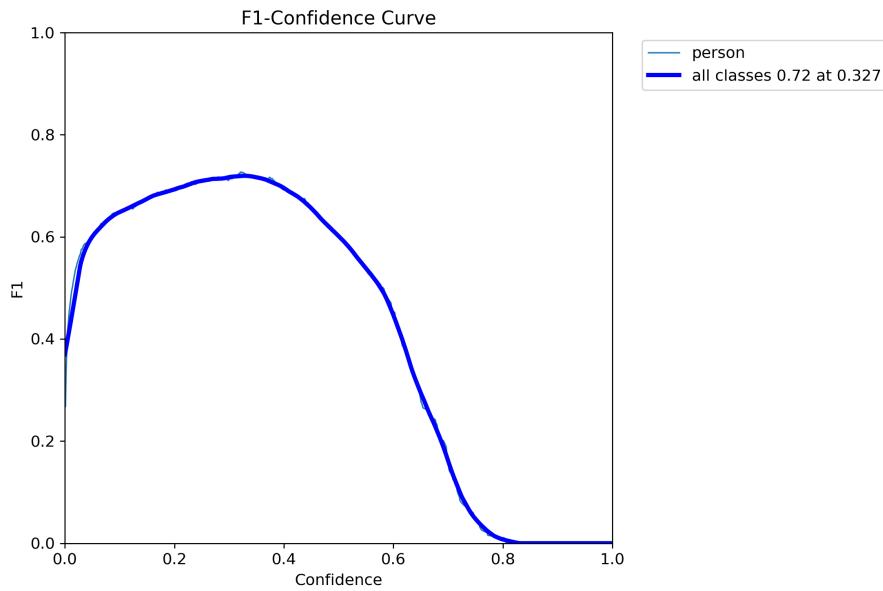


Figure s643. precision\_over\_recall, yolov8n, pre-trained=False, epochs=150, data=duomo, hyperparameter-tuned=True

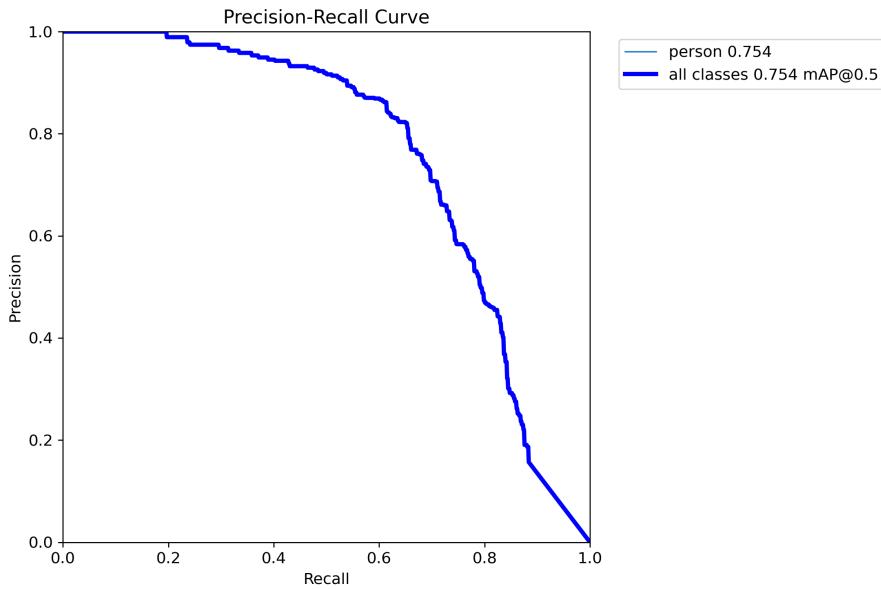


Figure s644. precision\_over\_confidence, yolov8n, pre-trained=False, epochs=150, data=duomo, hyperparameter-tuned=True

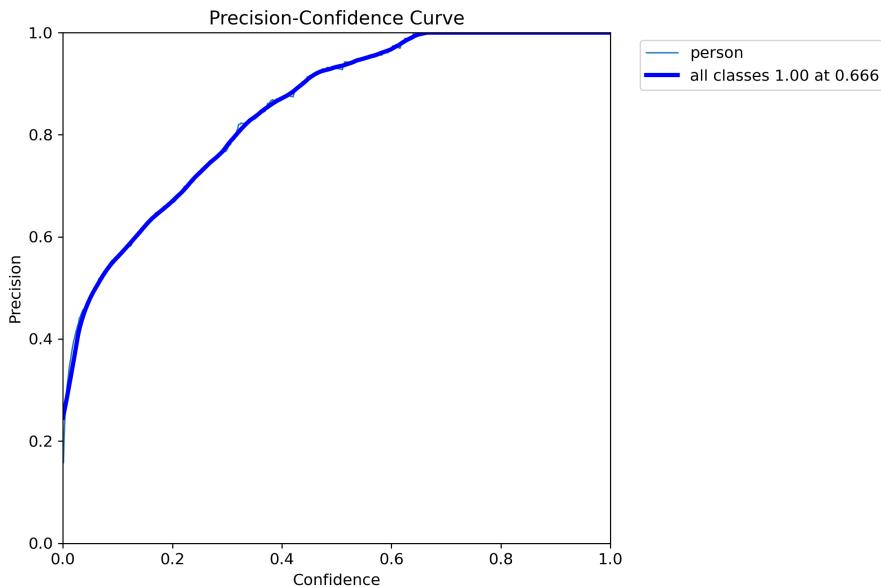


Figure s645. recall\_over\_confidence, yolov8n, pre-trained=False, epochs=150, data=duomo, hyperparameter-tuned=True

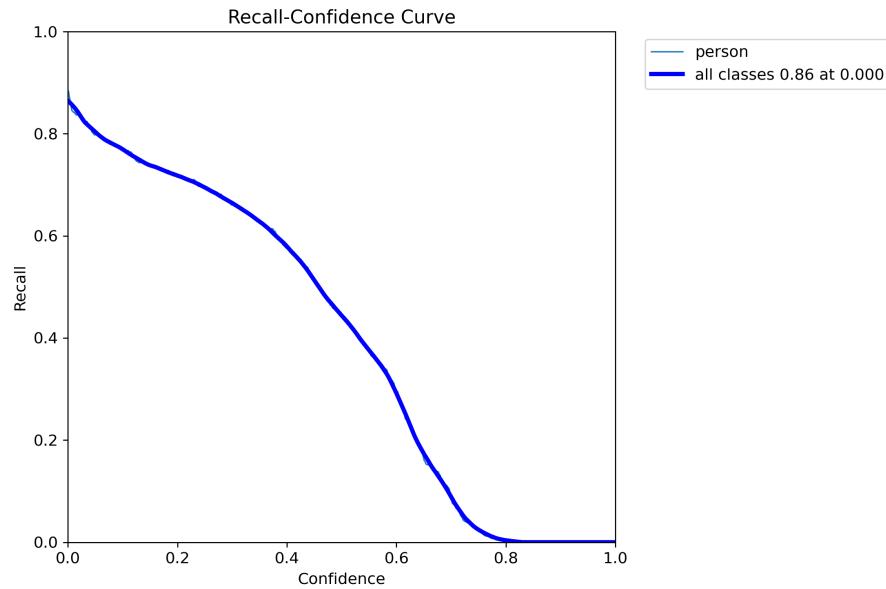


Figure s646. confusion\_matrix, yolov8n, pre-trained=False, epochs=150, data=duomo, hyperparameter-tuned=True

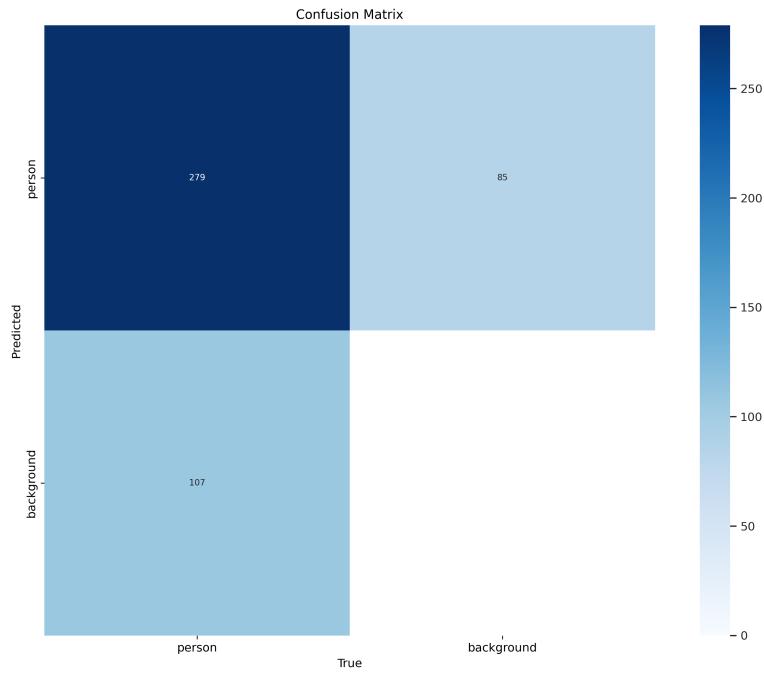


Figure s647. confusion\_matrix\_normalized, yolov8n, pre-trained=False, epochs=150, data=duomo, hyperparameter-tuned=True

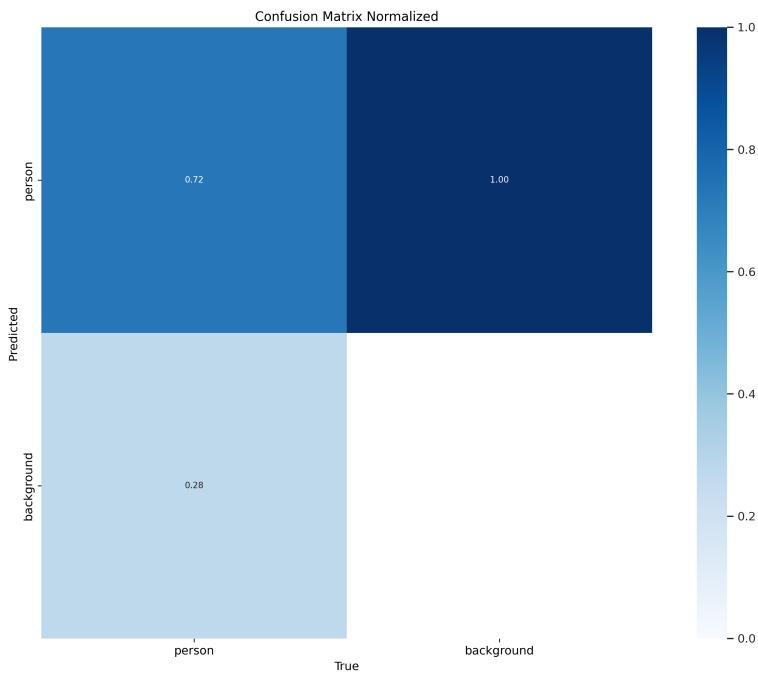


Figure s648. f1\_over\_confidence, yolov8n, pre-trained=False, epochs=50, data=hadji\_dimitar\_square, hyperparameter-tuned=True

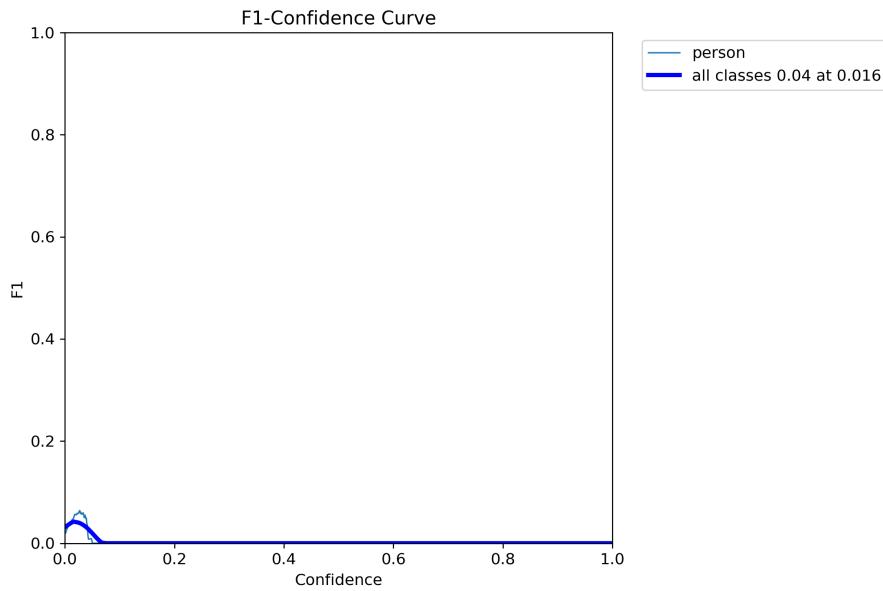


Figure s649. precision\_over\_recall, yolov8n, pre-trained=False, epochs=50, data=hadji\_dimitar\_square, hyperparameter-tuned=True

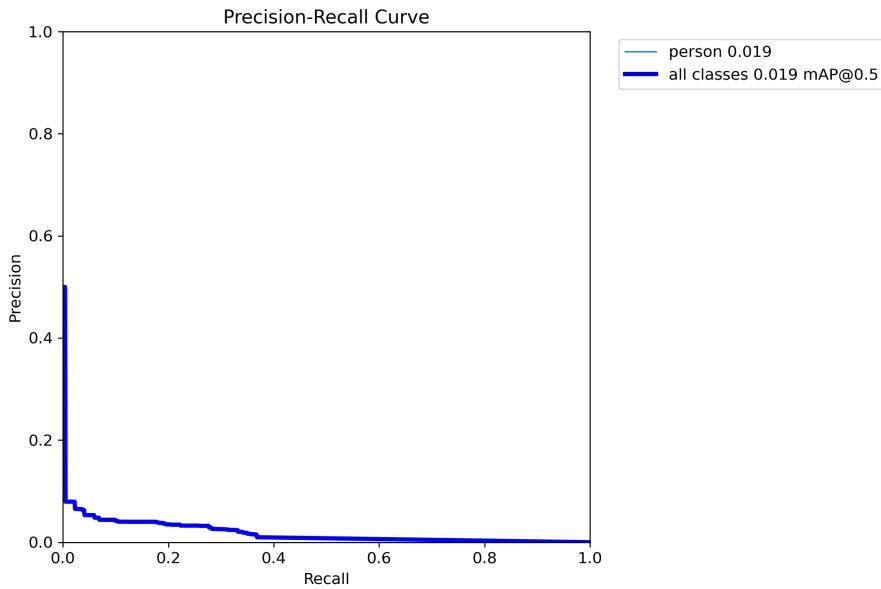


Figure s650. precision\_over\_confidence, yolov8n, pre-trained=False, epochs=50, data=hadji\_dimitar\_square, hyperparameter-tuned=True

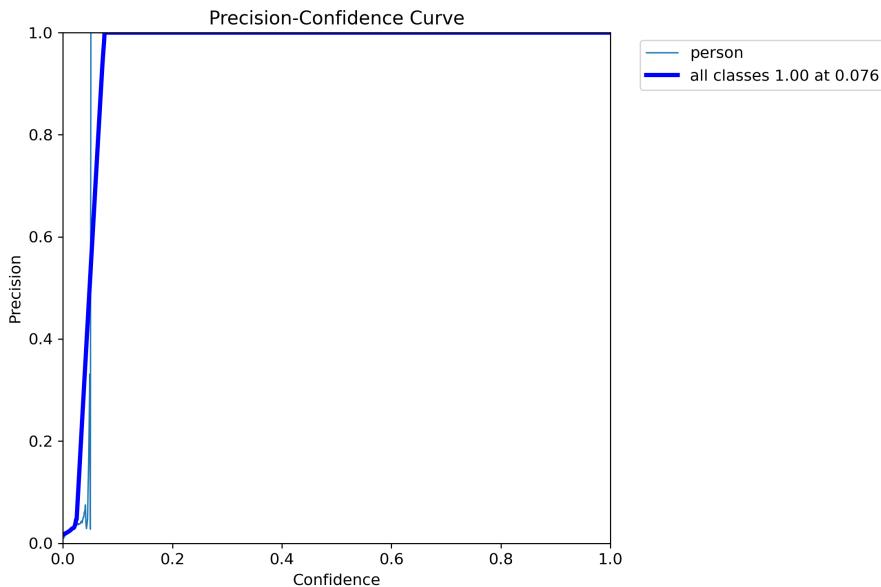


Figure s651. recall\_over\_confidence, yolov8n, pre-trained=False, epochs=50, data=hadji\_dimitar\_square, hyperparameter-tuned=True

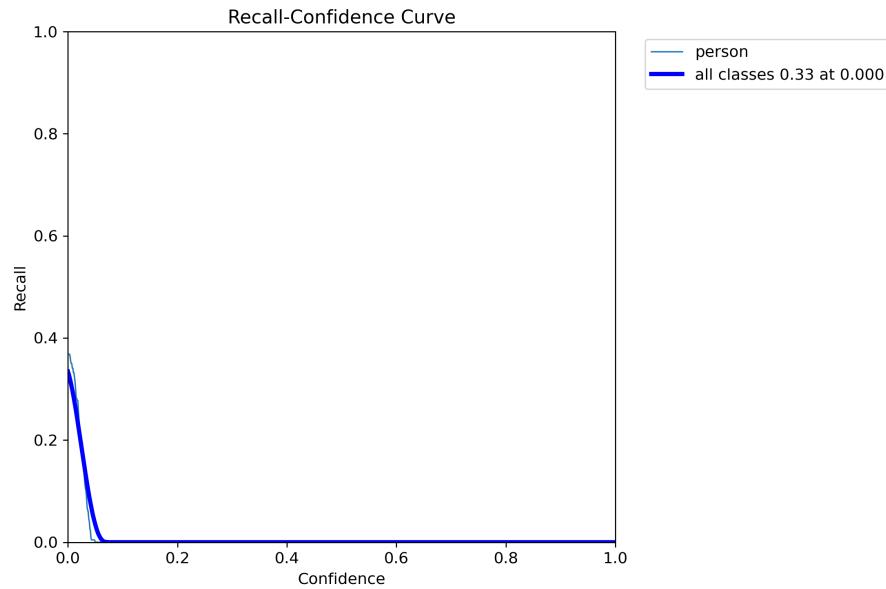


Figure s652. confusion\_matrix, yolov8n, pre-trained=False, epochs=50, data=hadji\_dimitar\_square, hyperparameter-tuned=True

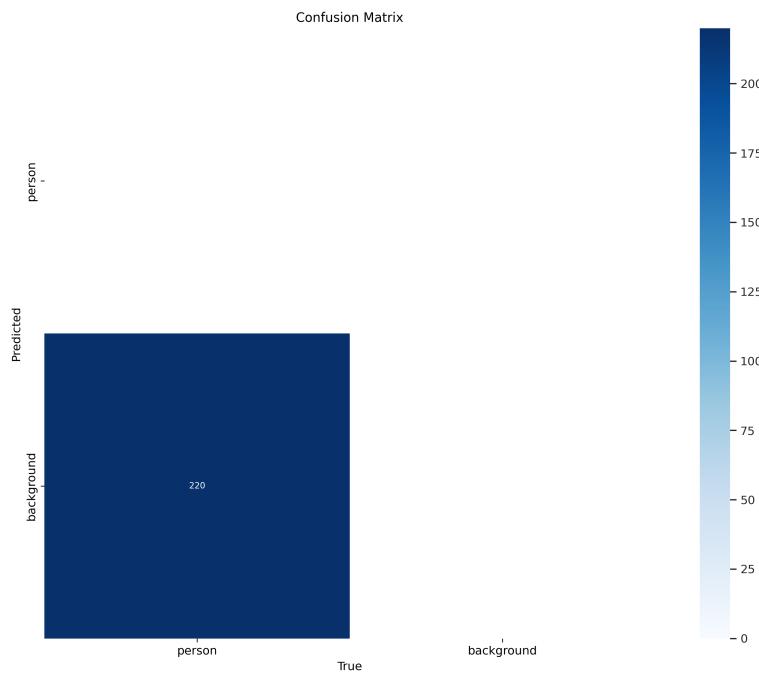


Figure s653. confusion\_matrix\_normalized, yolov8n, pre-trained=False, epochs=50, data=hadji\_dimitar\_square, hyperparameter-tuned=True

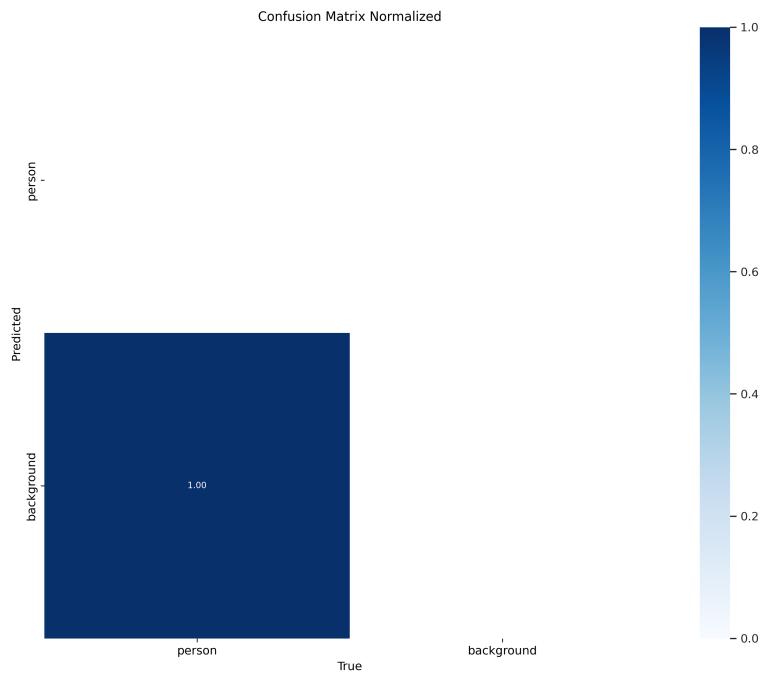


Figure s658. `confusion_matrix`, `yolov8n`, `pre-trained=False`, `epochs=100`,  
`data=hadji_dimitar_square`, `hyperparameter-tuned=True`

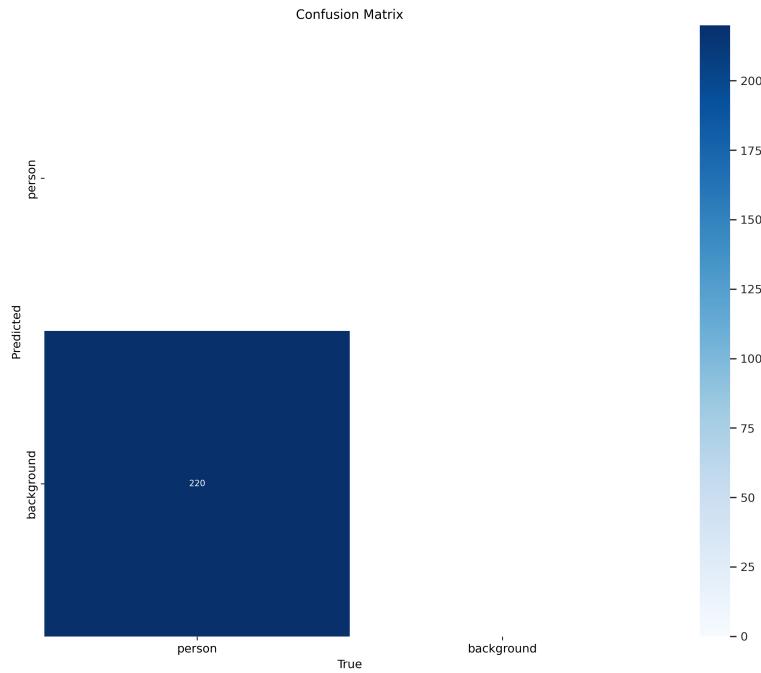


Figure s659. confusion\_matrix\_normalized, yolov8n, pre-trained=False, epochs=100, data=hadji\_dimitar\_square, hyperparameter-tuned=True

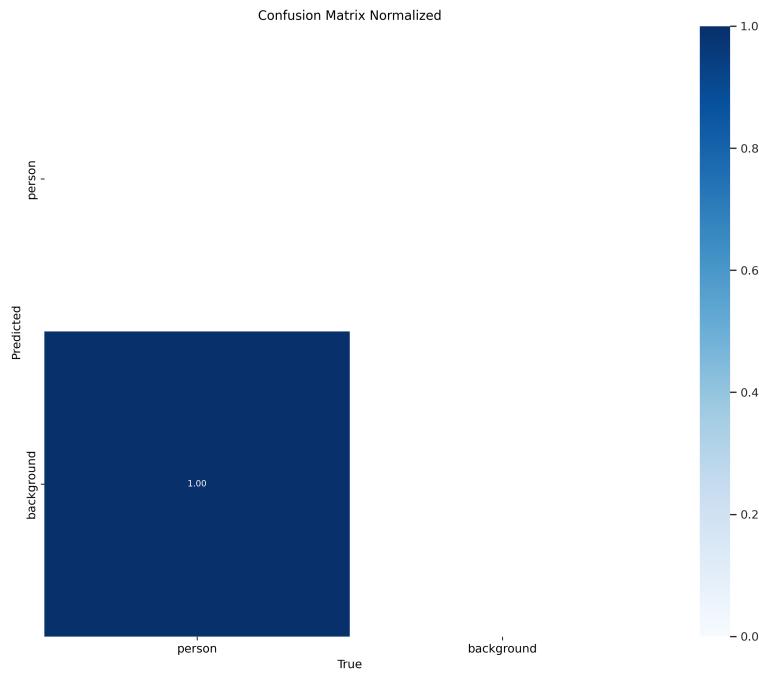


Figure s664. confusion\_matrix, yolov8n, pre-trained=False, epochs=150, data=hadji\_dimitar\_square, hyperparameter-tuned=True

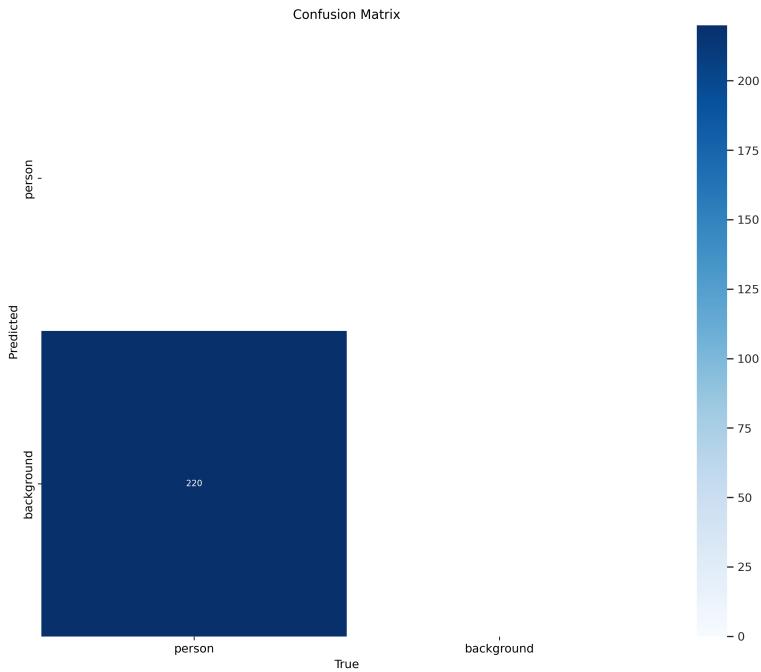


Figure s665. confusion\_matrix\_normalized, yolov8n, pre-trained=False, epochs=150, data=hadjidimitar\_square, hyperparameter-tuned=True

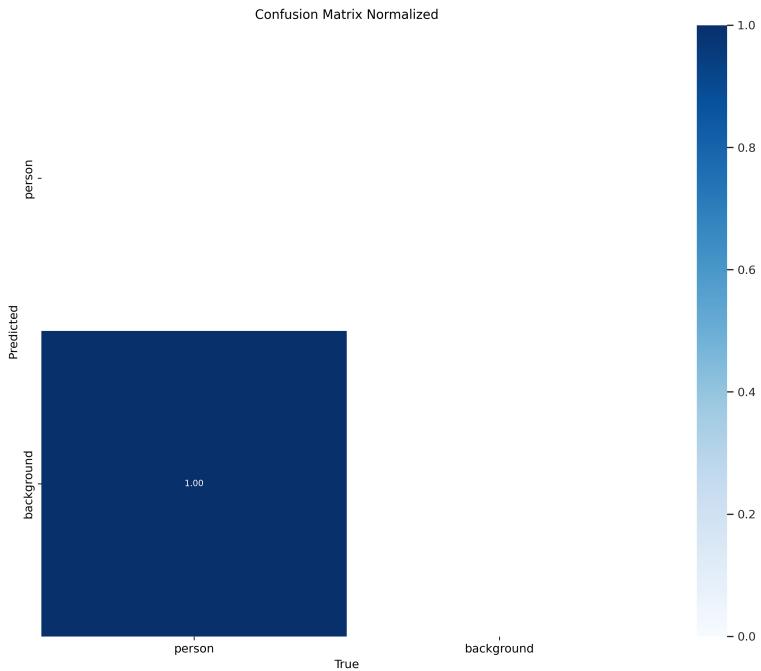


Figure s670. confusion\_matrix, yolov8n, pre-trained=False, epochs=50, data=keskvaljak, hyperparameter-tuned=True

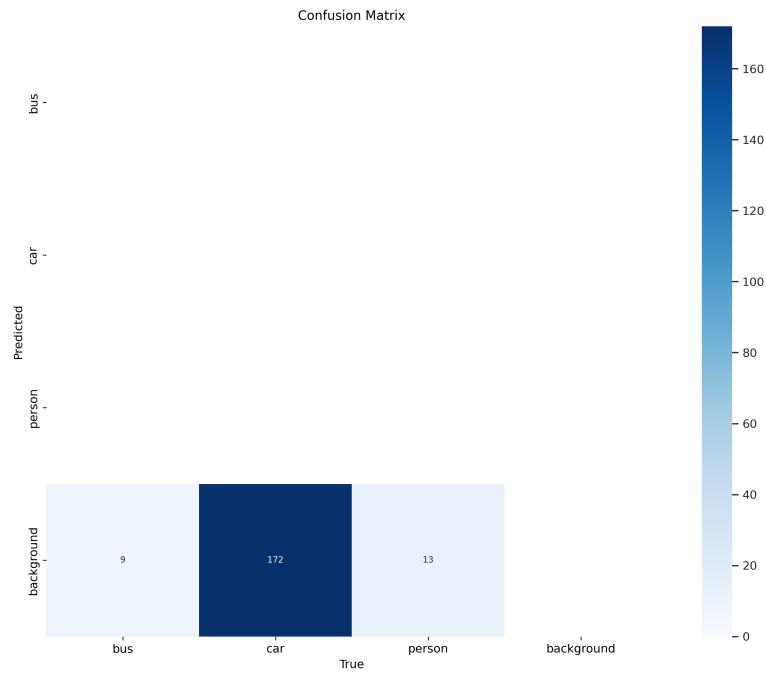


Figure s671. confusion\_matrix\_normalized, yolov8n, pre-trained=False, epochs=50, data=keskvaljak, hyperparameter-tuned=True

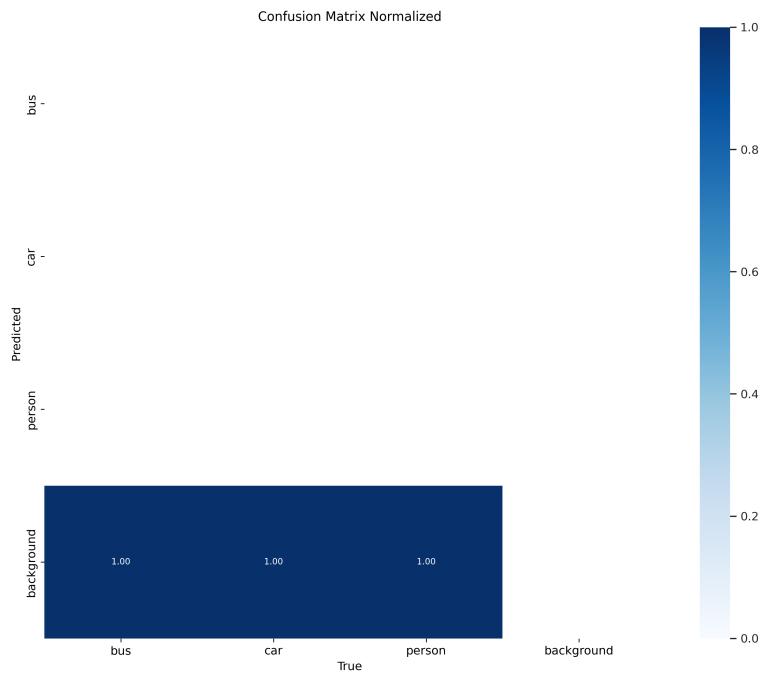


Figure s676. confusion\_matrix, yolov8n, pre-trained=False, epochs=100, data=keskvaljak, hyperparameter-tuned=True

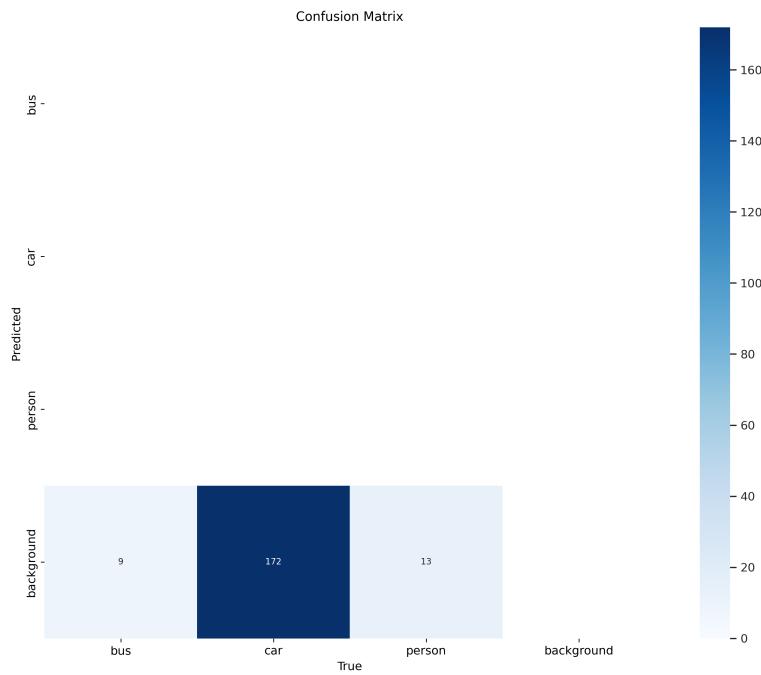


Figure s677. confusion\_matrix\_normalized, yolov8n, pre-trained=False, epochs=100, data=keskvaljak, hyperparameter-tuned=True

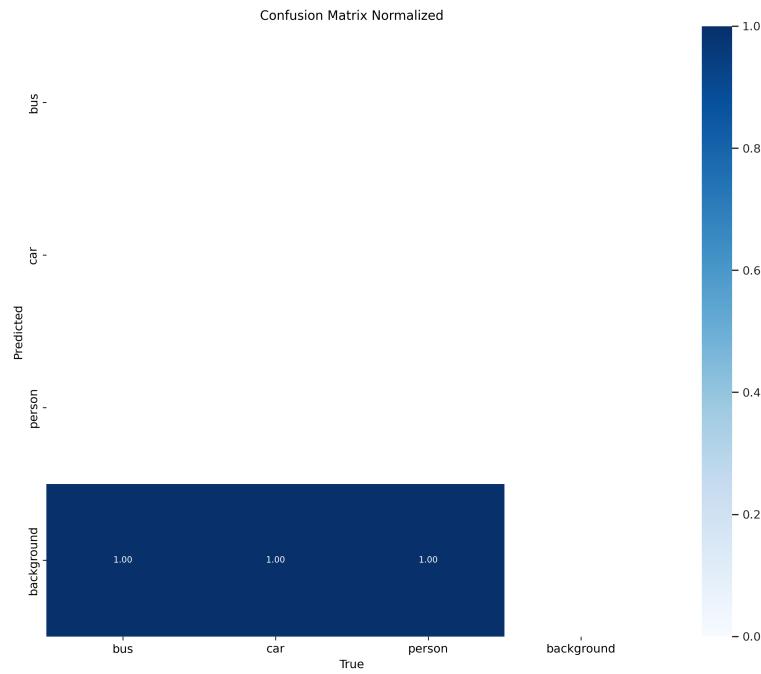


Figure s682. confusion\_matrix, yolov8n, pre-trained=False, epochs=150, data=keskvaljak, hyperparameter-tuned=True

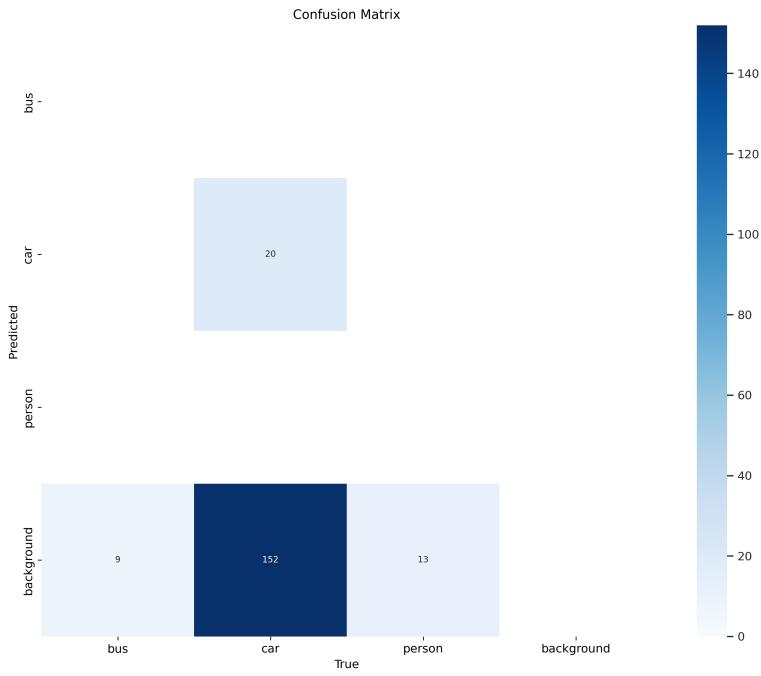


Figure s683. confusion\_matrix\_normalized, yolov8n, pre-trained=False, epochs=150, data=keskvaljak, hyperparameter-tuned=True

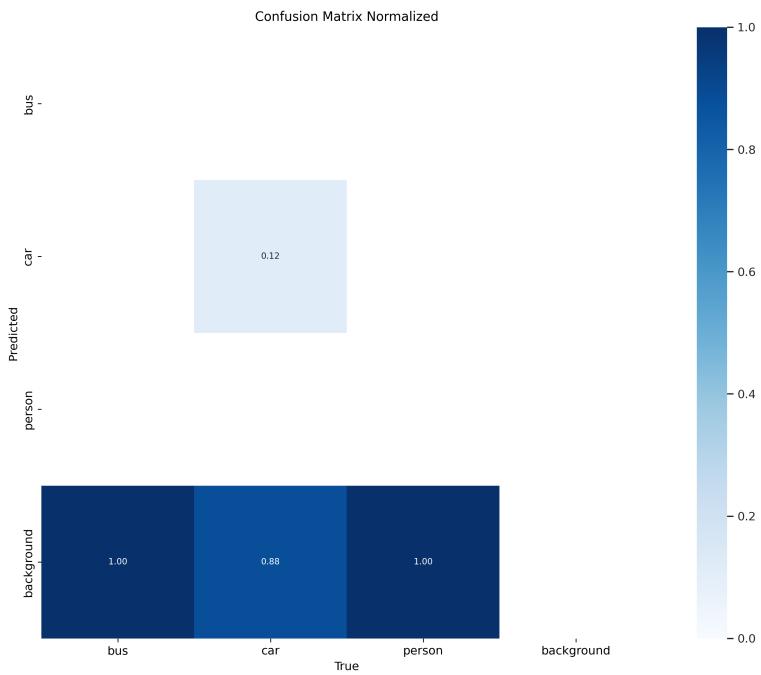


Figure s688. confusion\_matrix, yolov8n, pre-trained=False, epochs=50, data=kielce\_university\_of\_technology, hyperparameter-tuned=True

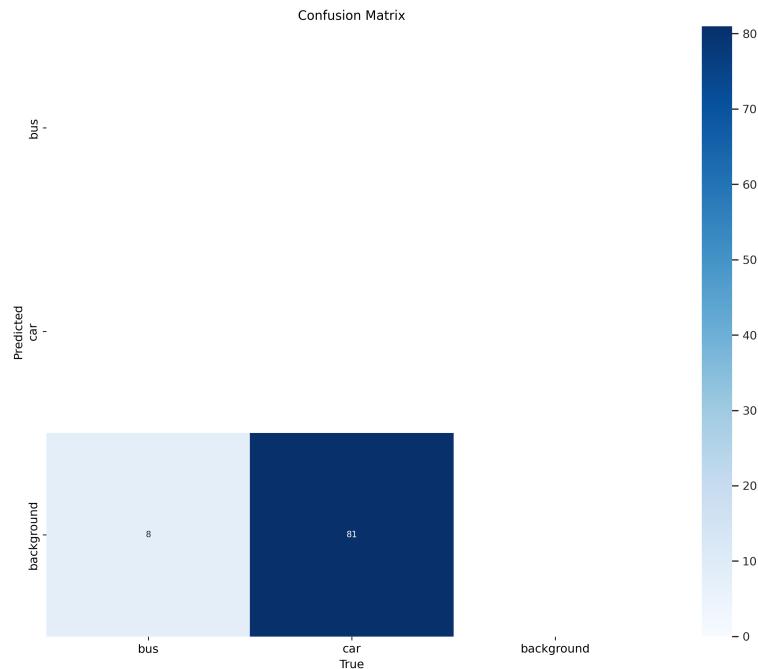


Figure s689. confusion\_matrix\_normalized, yolov8n, pre-trained=False, epochs=50, data=kielce\_university\_of\_technology, hyperparameter-tuned=True

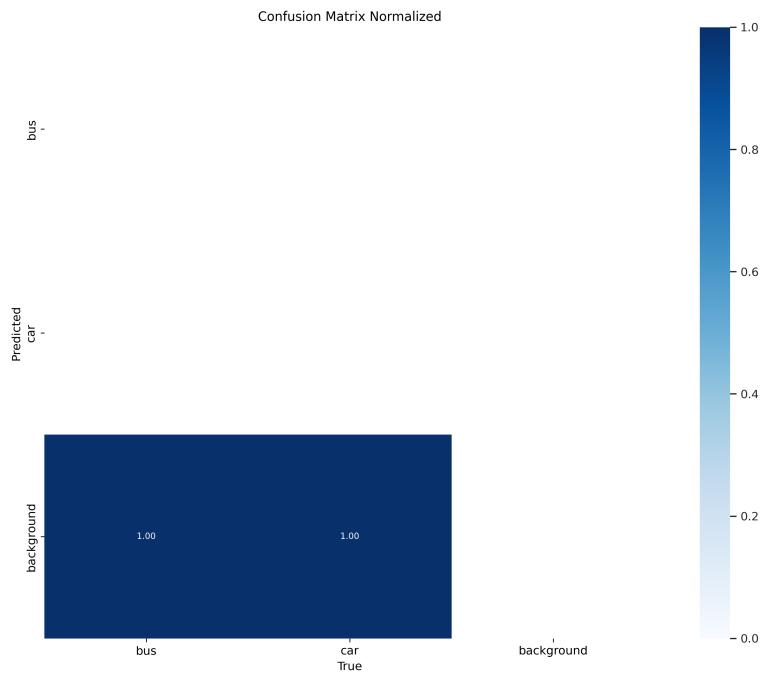


Figure s694. confusion\_matrix, yolov8n, pre-trained=False, epochs=100, data=kielce\_university\_of\_technology, hyperparameter-tuned=True

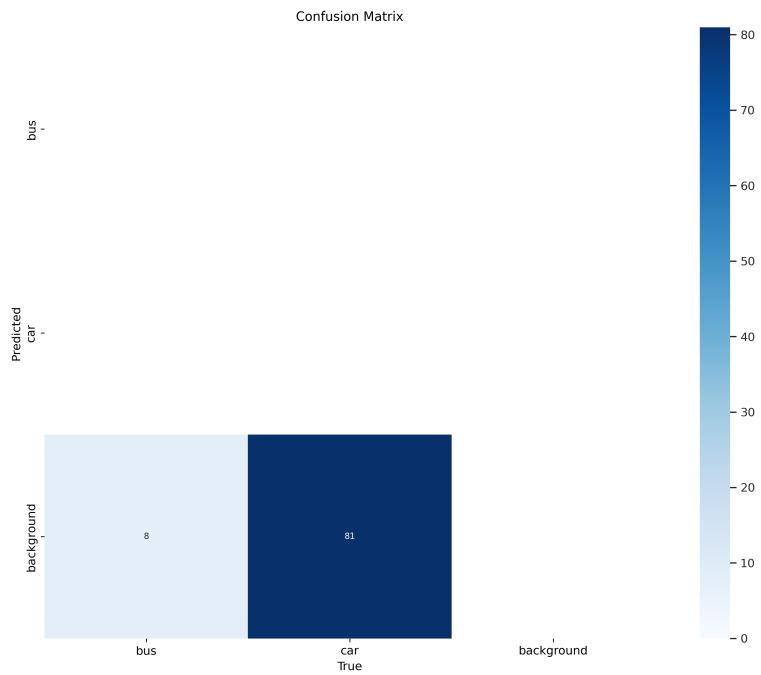


Figure s695. confusion\_matrix\_normalized, yolov8n, pre-trained=False, epochs=100, data=kielce\_university\_of\_technology, hyperparameter-tuned=True

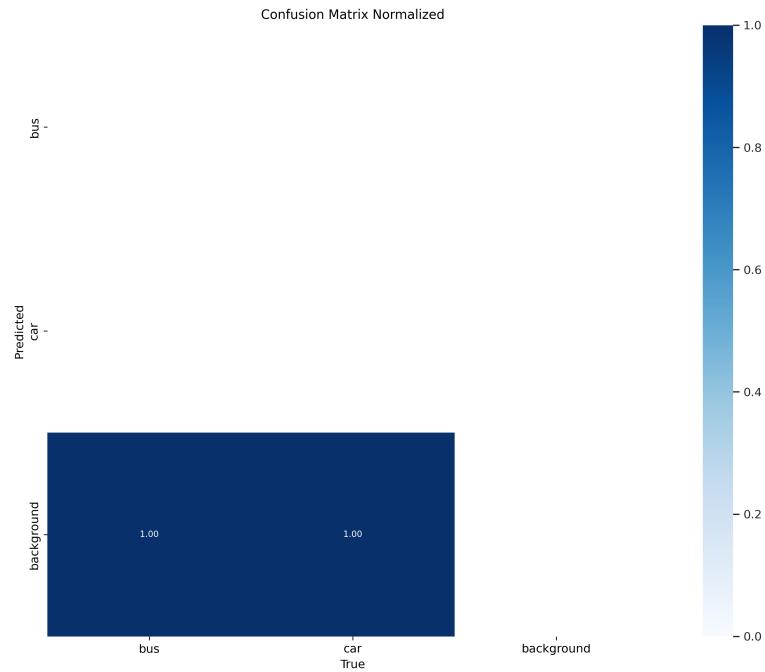


Figure s696. f1\_over\_confidence, yolov8n, pre-trained=False, epochs=150, data=kielce\_university\_of\_technology, hyperparameter-tuned=True

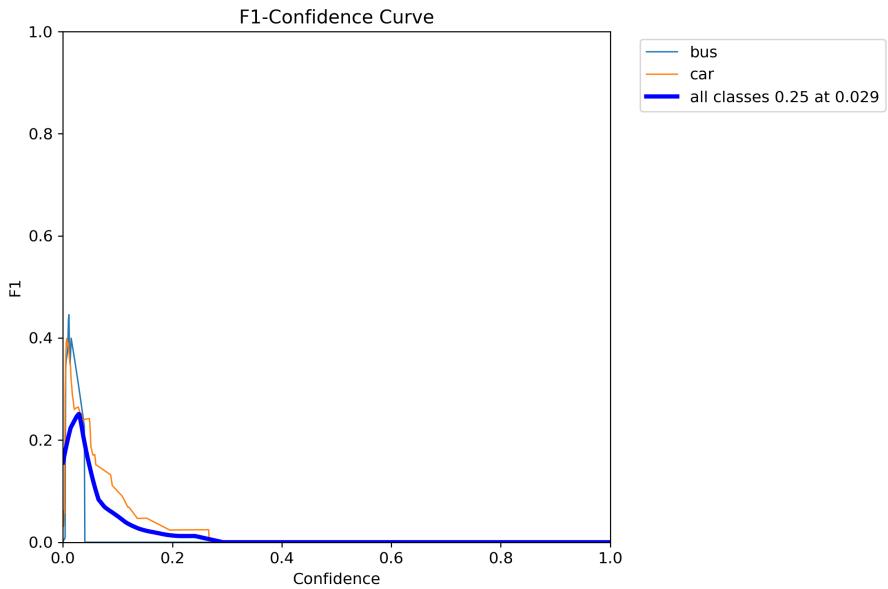


Figure s697. precision\_over\_recall, yolov8n, pre-trained=False, epochs=150, data=kielce\_university\_of\_technology, hyperparameter-tuned=True

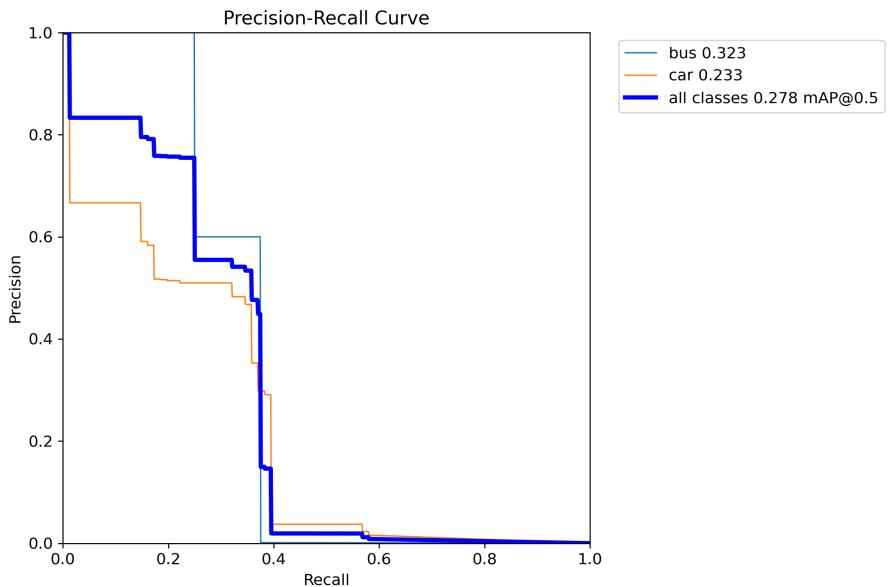


Figure s698. precision\_over\_confidence, yolov8n, pre-trained=False, epochs=150, data=kielce\_university\_of\_technology, hyperparameter-tuned=True

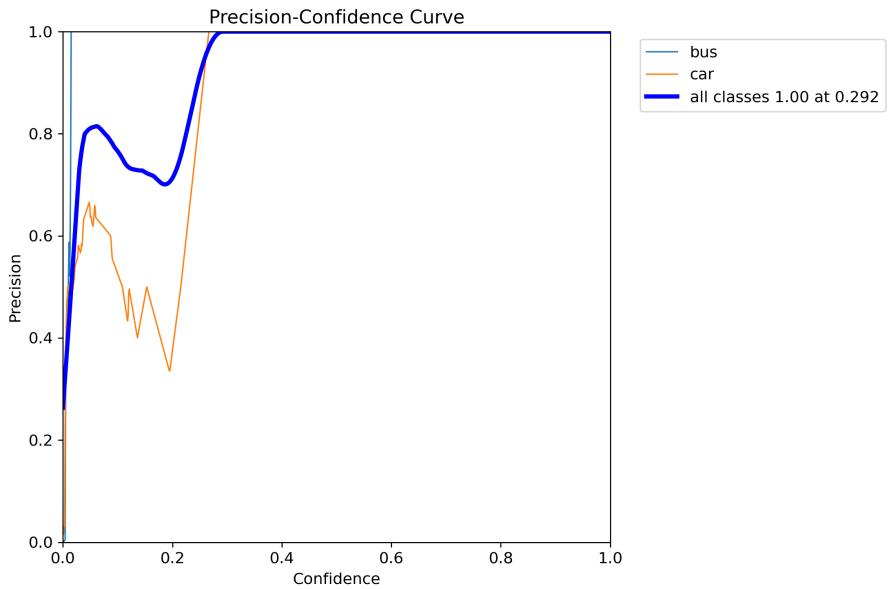


Figure s699. recall\_over\_confidence, yolov8n, pre-trained=False, epochs=150, data=kielce\_university\_of\_technology, hyperparameter-tuned=True

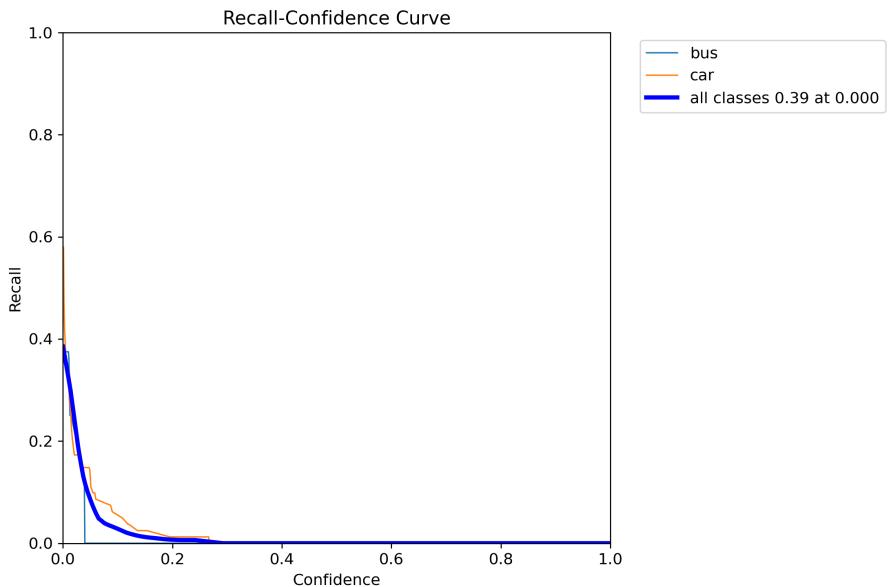


Figure s700. confusion\_matrix, yolov8n, pre-trained=False, epochs=150, data=kielce\_university\_of\_technology, hyperparameter-tuned=True

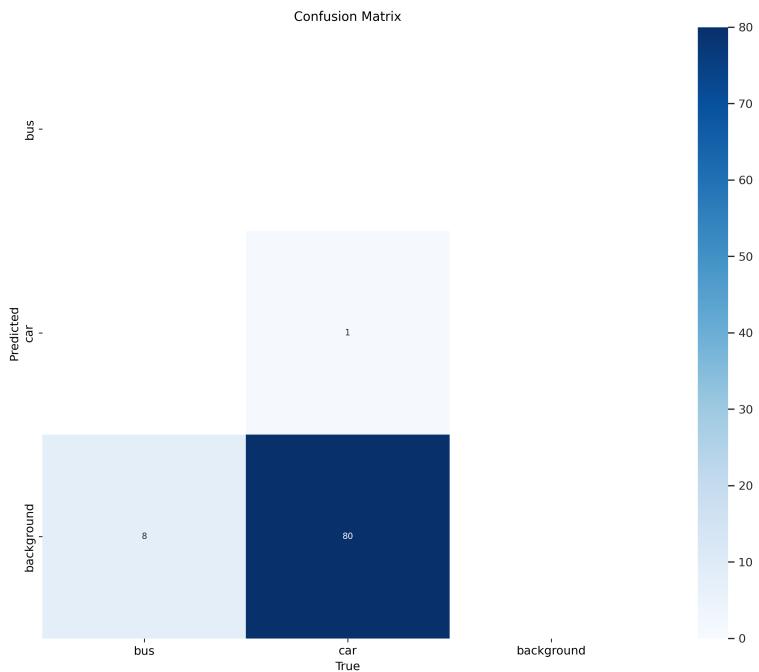


Figure s701. confusion\_matrix\_normalized, yolov8n, pre-trained=False, epochs=150, data=kielce\_university\_of\_technology, hyperparameter-tuned=True

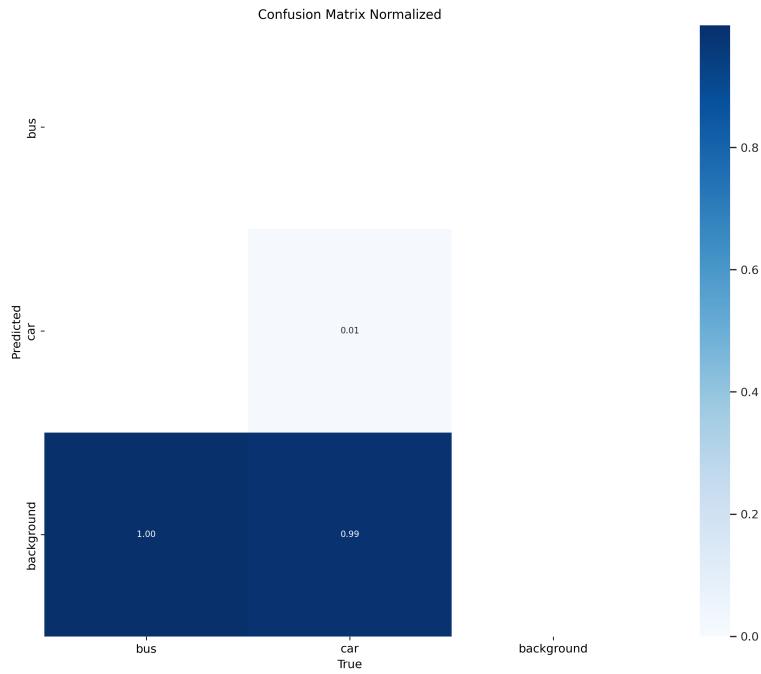


Figure s706. confusion\_matrix, yolov8n, pre-trained=False, epochs=50, data=toggenburg\_alpaca\_ranch, hyperparameter-tuned=True

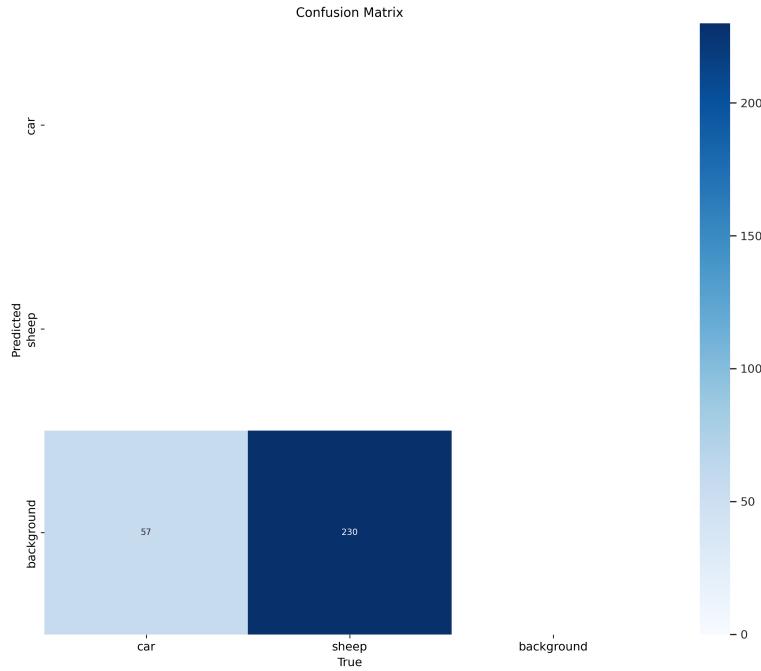


Figure s707. confusion\_matrix\_normalized, yolov8n, pre-trained=False, epochs=50, data=toggenburg\_alpaca\_ranch, hyperparameter-tuned=True

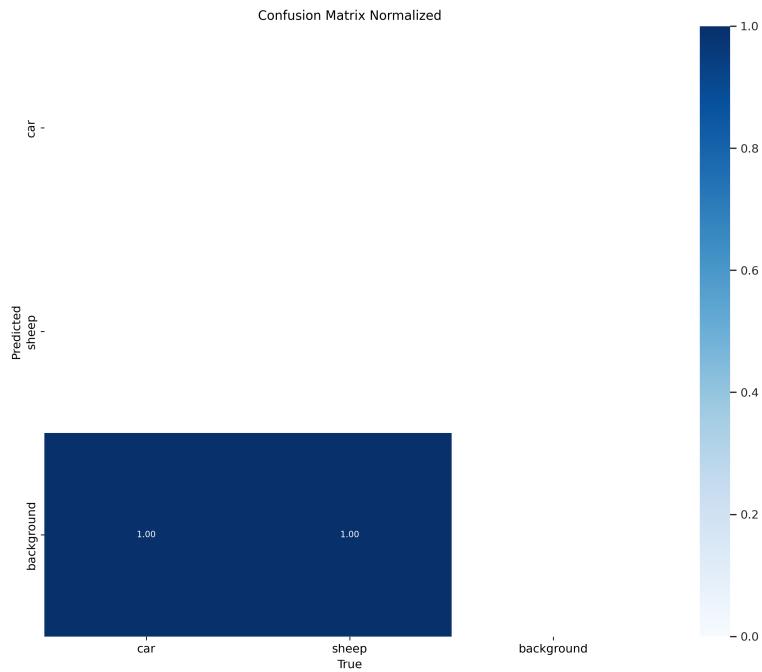


Figure s708. f1\_over\_confidence, yolov8n, pre-trained=False, epochs=100, data=toggenburg\_alpaca\_ranch, hyperparameter-tuned=True

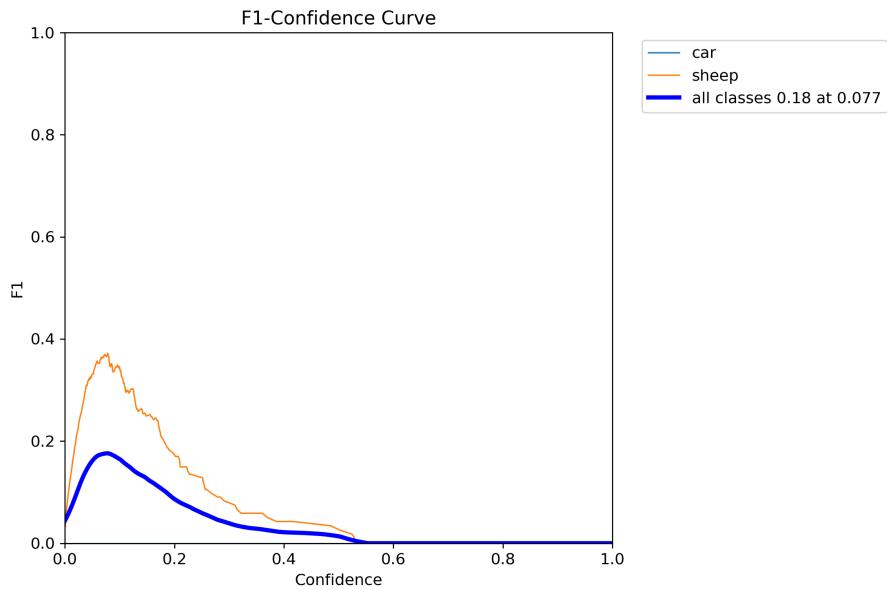


Figure s709. precision\_over\_recall, yolov8n, pre-trained=False, epochs=100, data=toggenburg\_alpaca\_ranch, hyperparameter-tuned=True

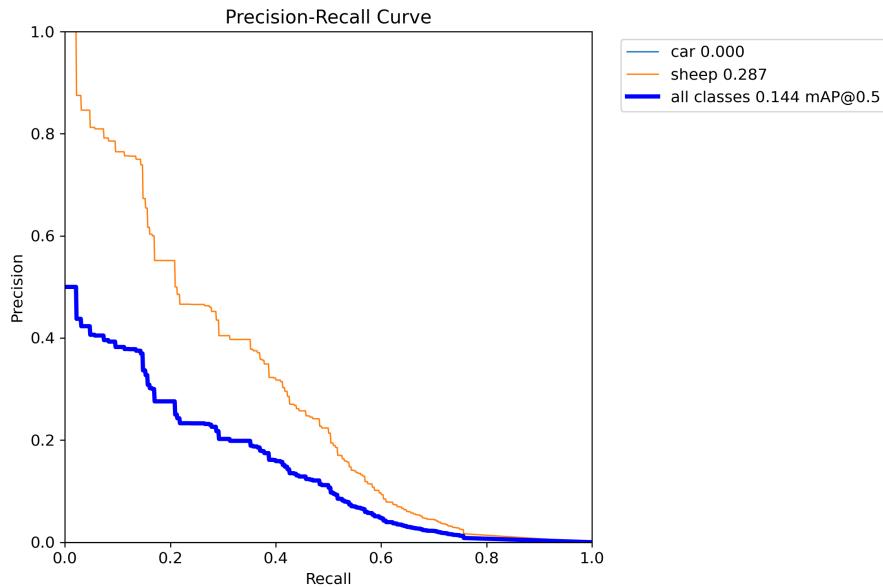


Figure s710. precision\_over\_confidence, yolov8n, pre-trained=False, epochs=100, data=toggenburg\_alpaca\_ranch, hyperparameter-tuned=True

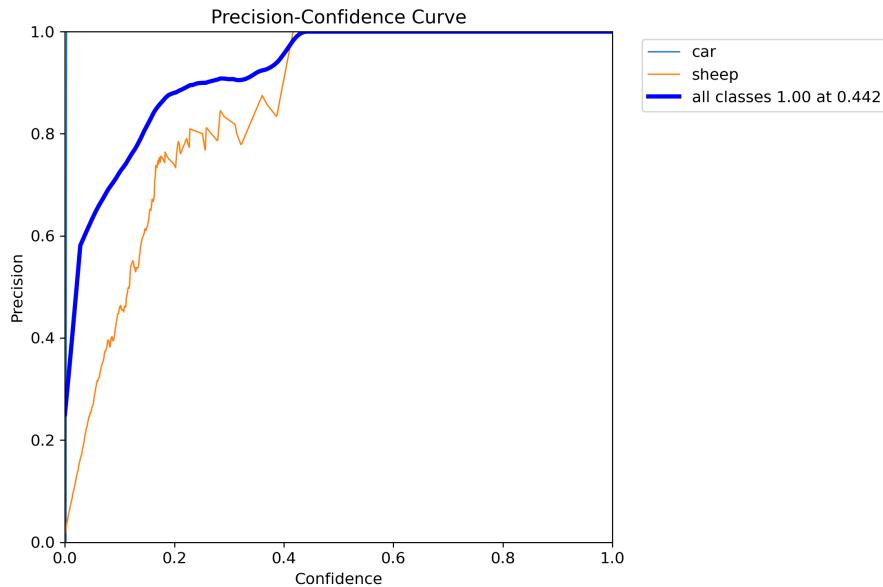


Figure s711. recall\_over\_confidence, yolov8n, pre-trained=False, epochs=100, data=toggenburg\_alpaca\_ranch, hyperparameter-tuned=True

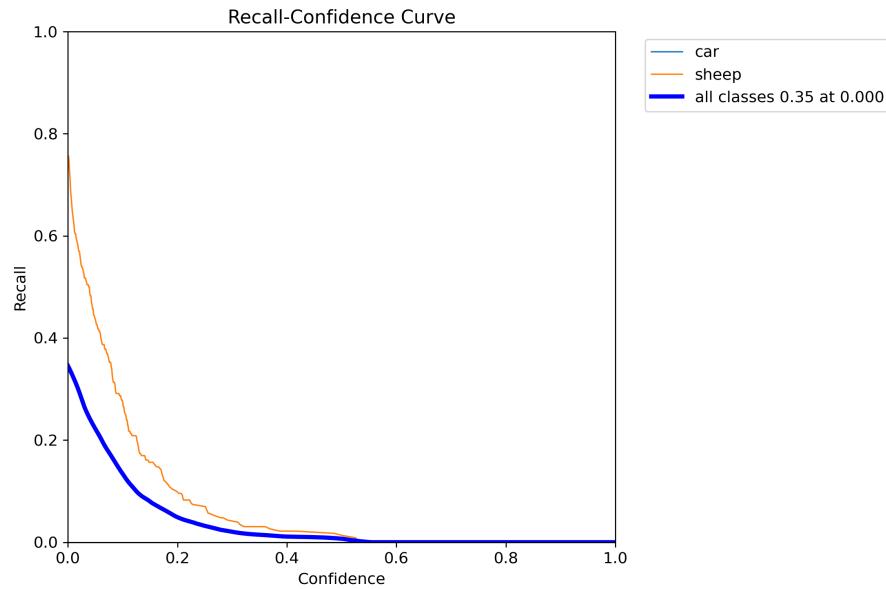


Figure s712. confusion\_matrix, yolov8n, pre-trained=False, epochs=100, data=toggenburg\_alpaca\_ranch, hyperparameter-tuned=True

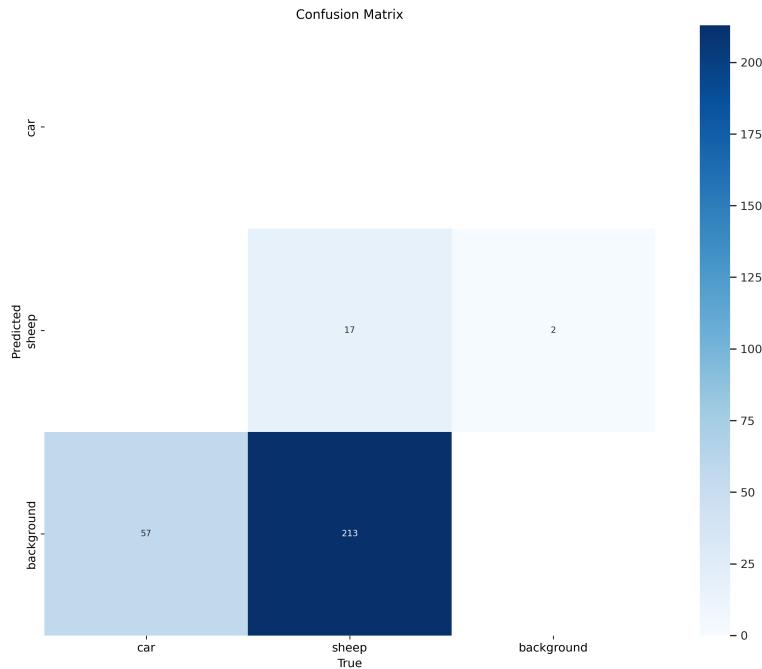


Figure s713. confusion\_matrix\_normalized, yolov8n, pre-trained=False, epochs=100, data=toggenburg\_alpaca\_ranch, hyperparameter-tuned=True

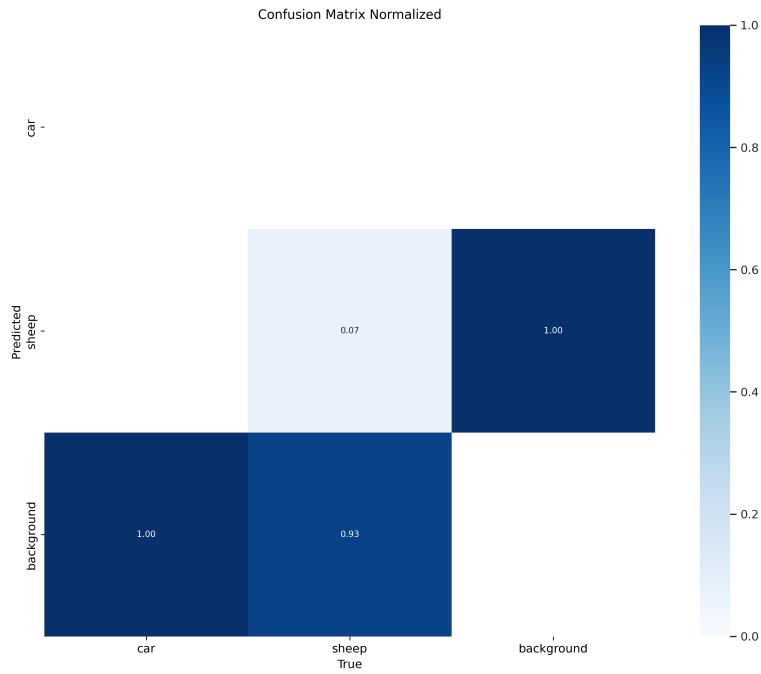


Figure s714. f1\_over\_confidence, yolov8n, pre-trained=False, epochs=150, data=toggenburg\_alpaca\_ranch, hyperparameter-tuned=True

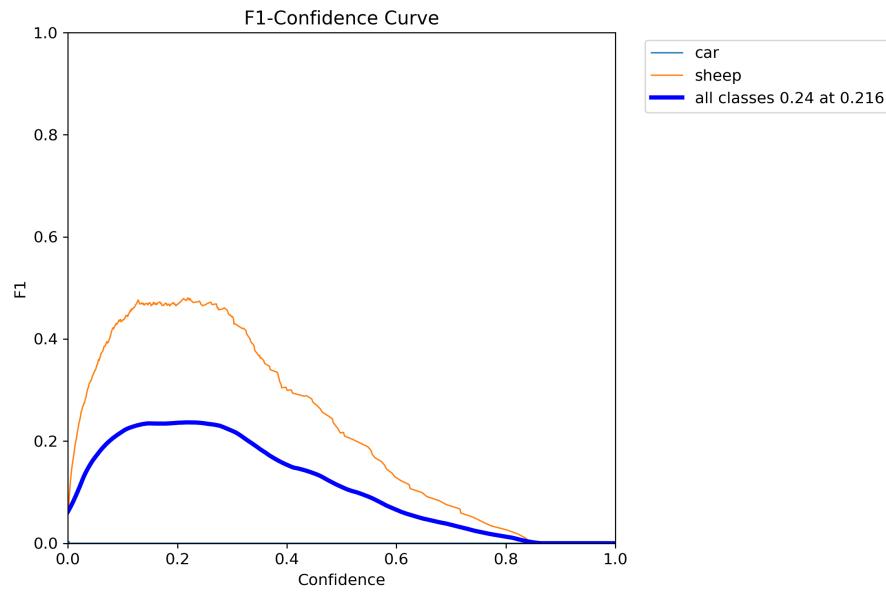


Figure s715. precision\_over\_recall, yolov8n, pre-trained=False, epochs=150, data=toggenburg\_alpaca\_ranch, hyperparameter-tuned=True

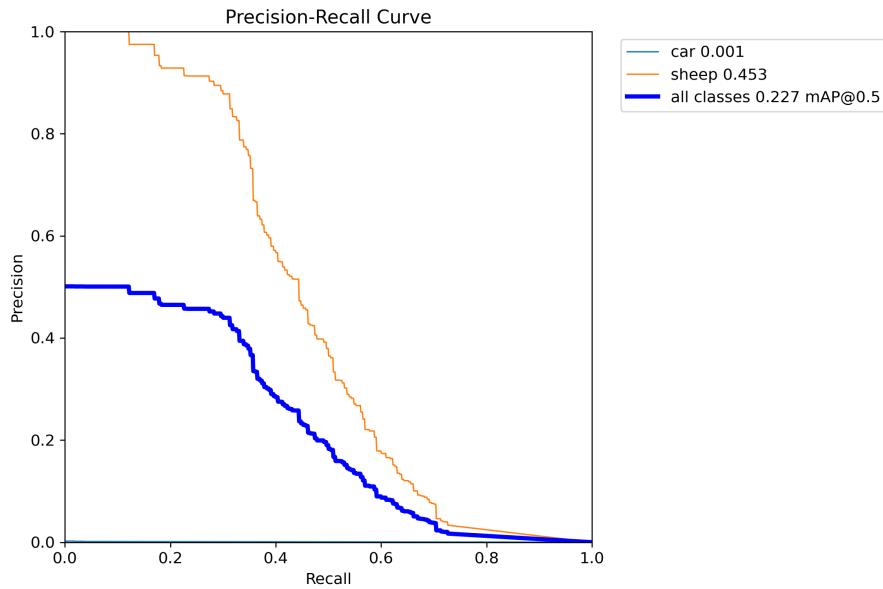


Figure s716. precision\_over\_confidence, yolov8n, pre-trained=False, epochs=150, data=toggenburg\_alpaca\_ranch, hyperparameter-tuned=True

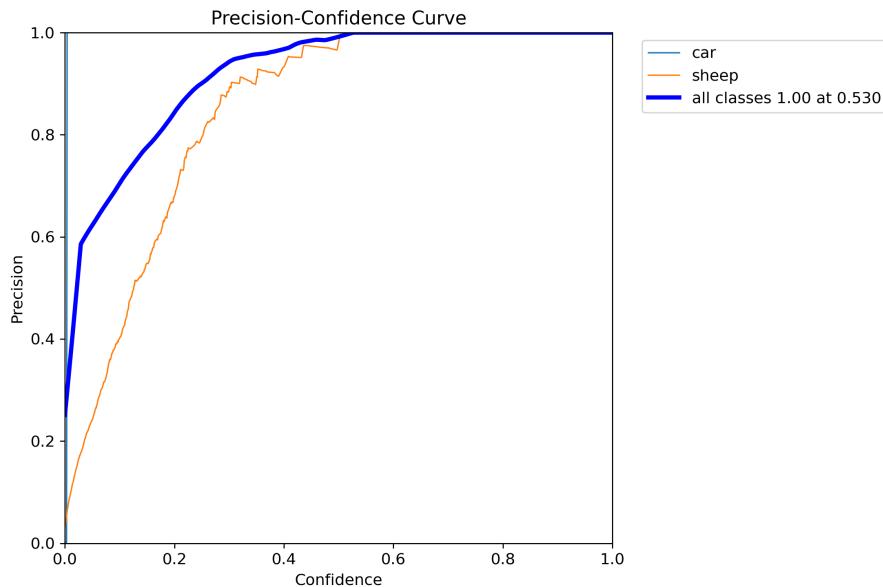


Figure s717. recall\_over\_confidence, yolov8n, pre-trained=False, epochs=150, data=toggenburg\_alpaca\_ranch, hyperparameter-tuned=True

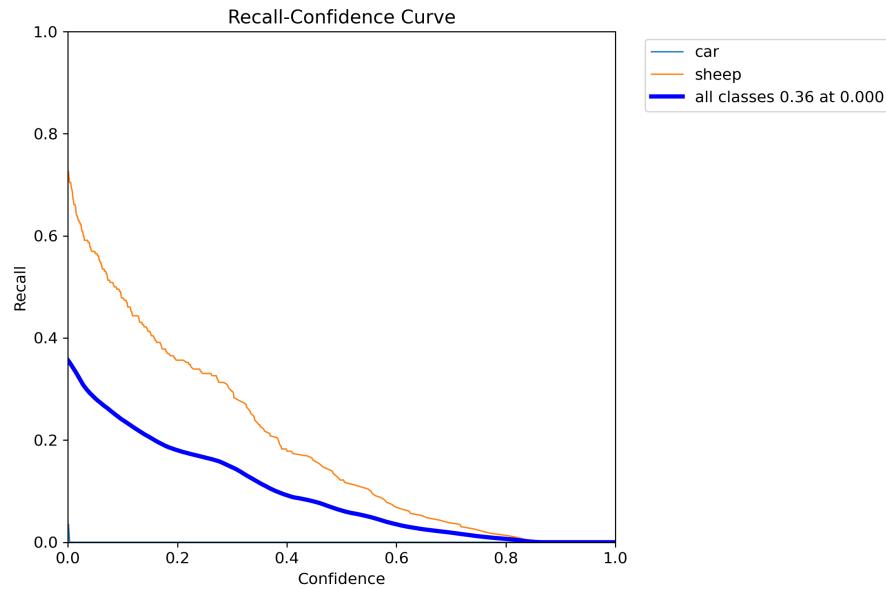


Figure s718. confusion\_matrix, yolov8n, pre-trained=False, epochs=150, data=toggenburg\_alpaca\_ranch, hyperparameter-tuned=True

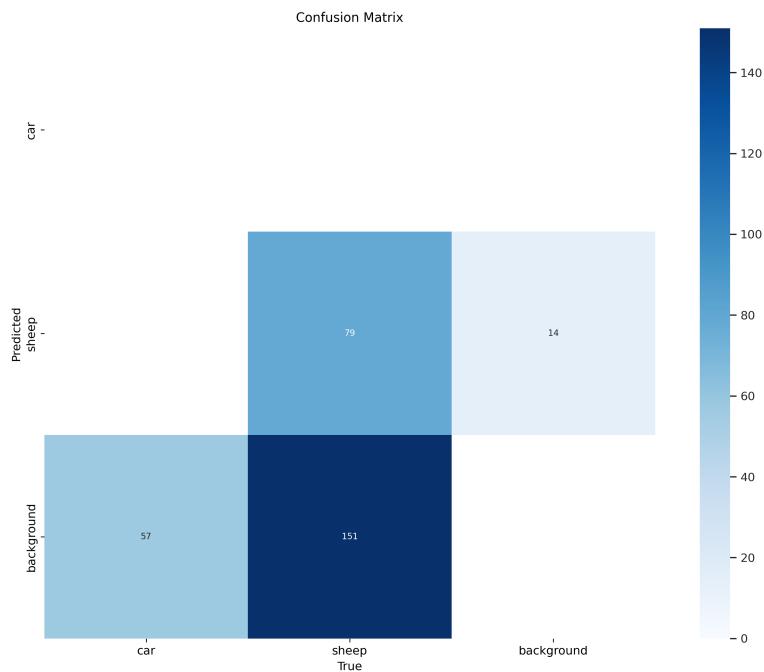


Figure s719. confusion\_matrix\_normalized, yolov8n, pre-trained=False, epochs=150, data=toggenburg\_alpaca\_ranch, hyperparameter-tuned=True

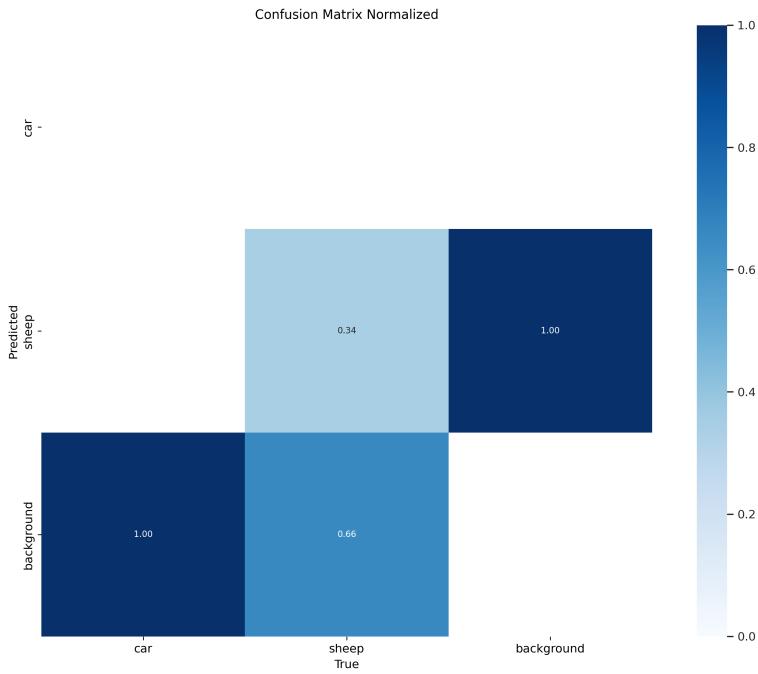


Figure s720. f1\_over\_confidence, yolov8n, pre-trained=True, epochs=0, data=duomo, hyperparameter-tuned=False

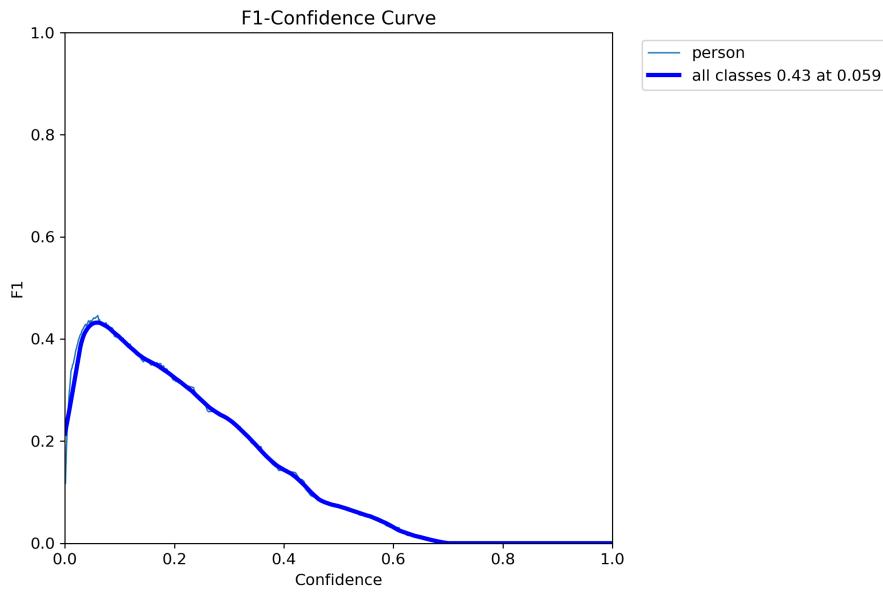


Figure s721. precision\_over\_recall, yolov8n, pre-trained=True, epochs=0, data=duomo, hyperparameter-tuned=False

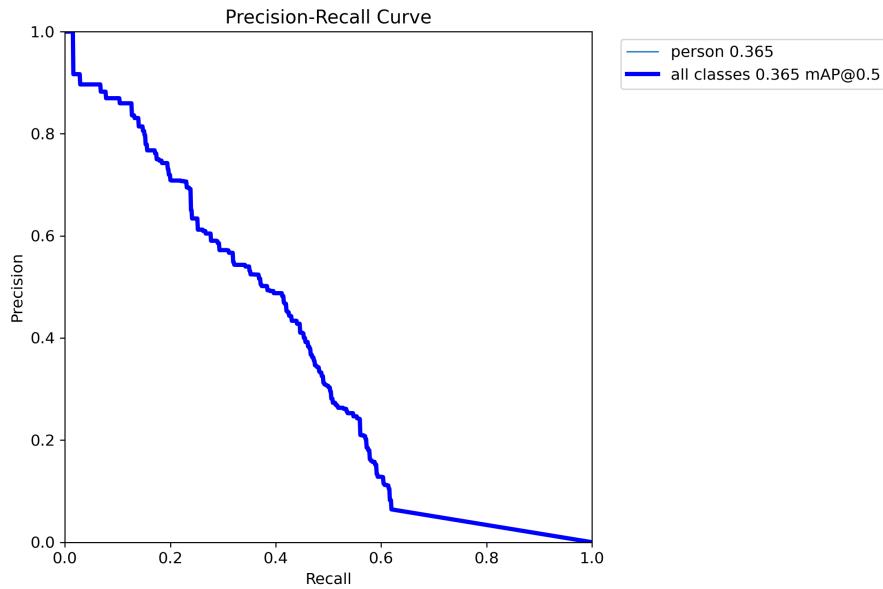


Figure s722. precision\_over\_confidence, yolov8n, pre-trained=True, epochs=0, data=duomo, hyperparameter-tuned=False

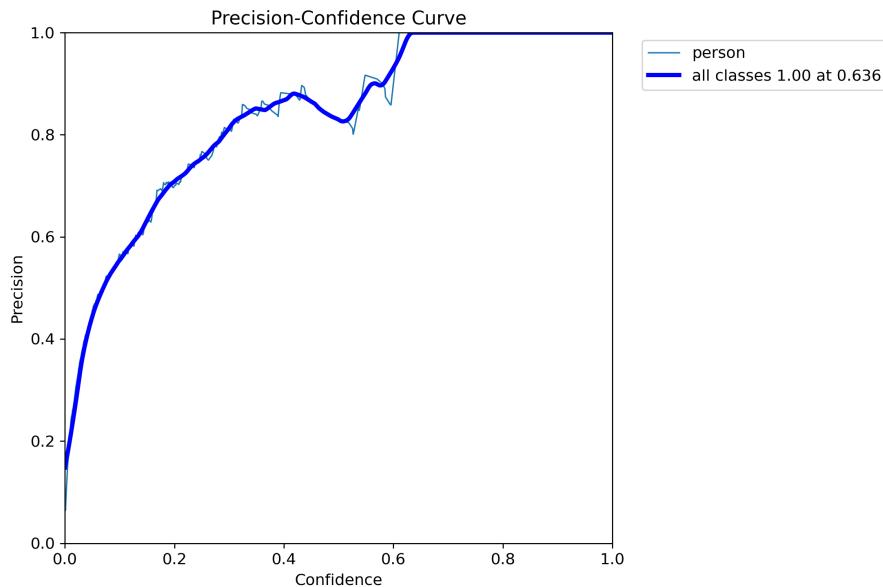


Figure s723. recall\_over\_confidence, yolov8n, pre-trained=True, epochs=0, data=duomo, hyperparameter-tuned=False

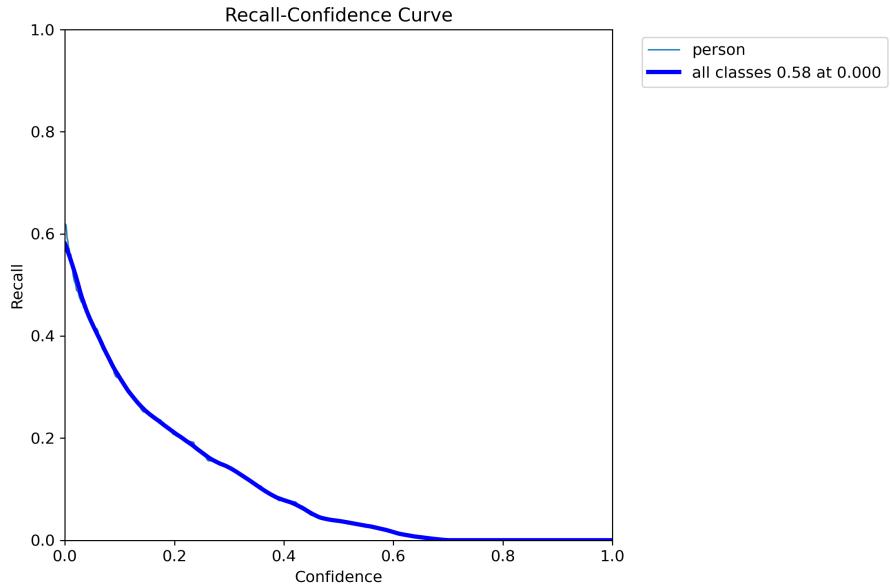


Figure s724. confusion\_matrix, yolov8n, pre-trained=True, epochs=0, data=duomo, hyperparameter-tuned=False

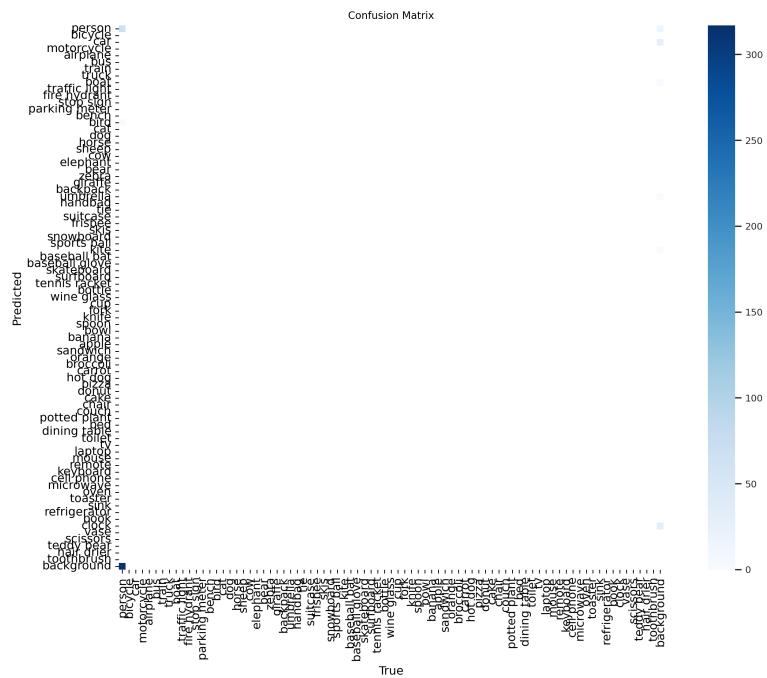


Figure s725. confusion\_matrix\_normalized, yolov8n, pre-trained=True, epochs=0, data=duomo, hyperparameter-tuned=False

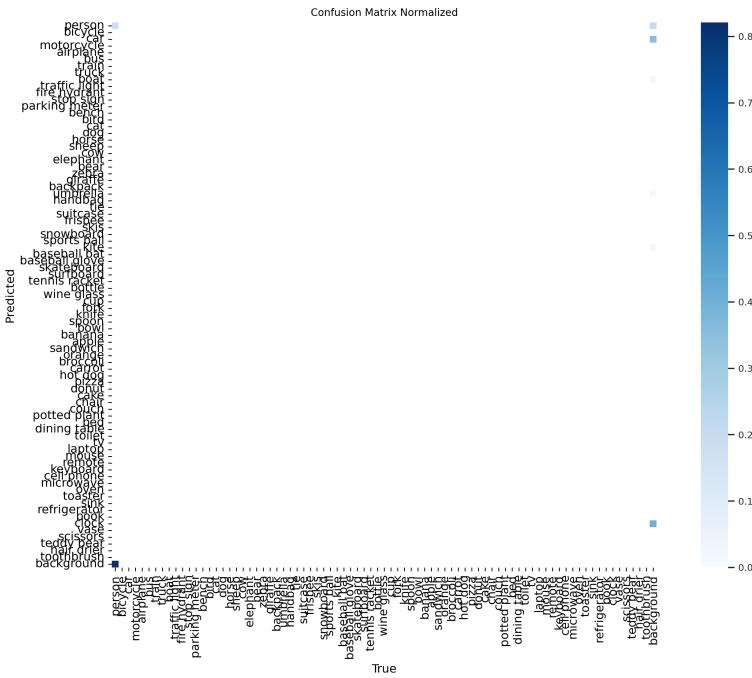


Figure s726. f1\_over\_confidence, yolov8n, pre-trained=True, epochs=0, data=hadji\_dimitar\_square, hyperparameter-tuned=False

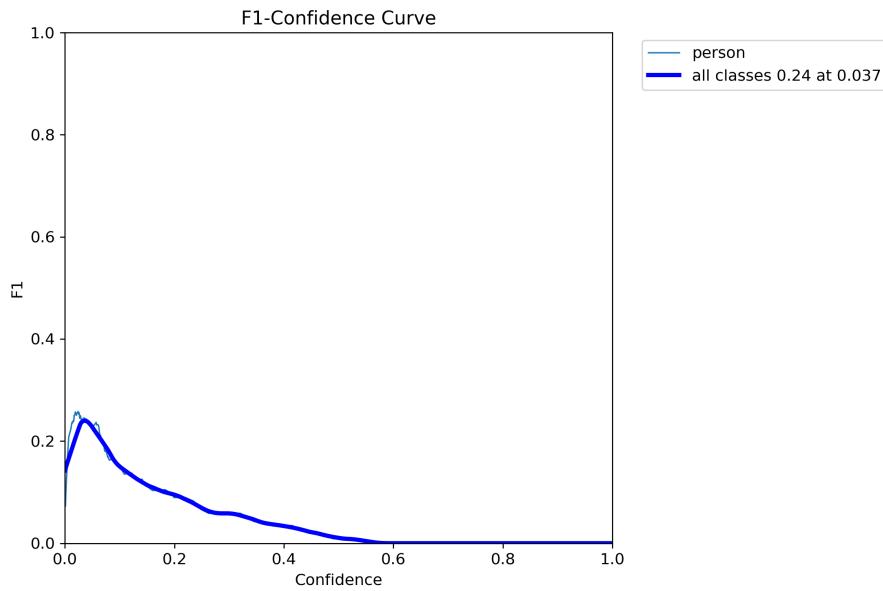


Figure s727. precision\_over\_recall, yolov8n, pre-trained=True, epochs=0, data=hadji\_dimitar\_square, hyperparameter-tuned=False

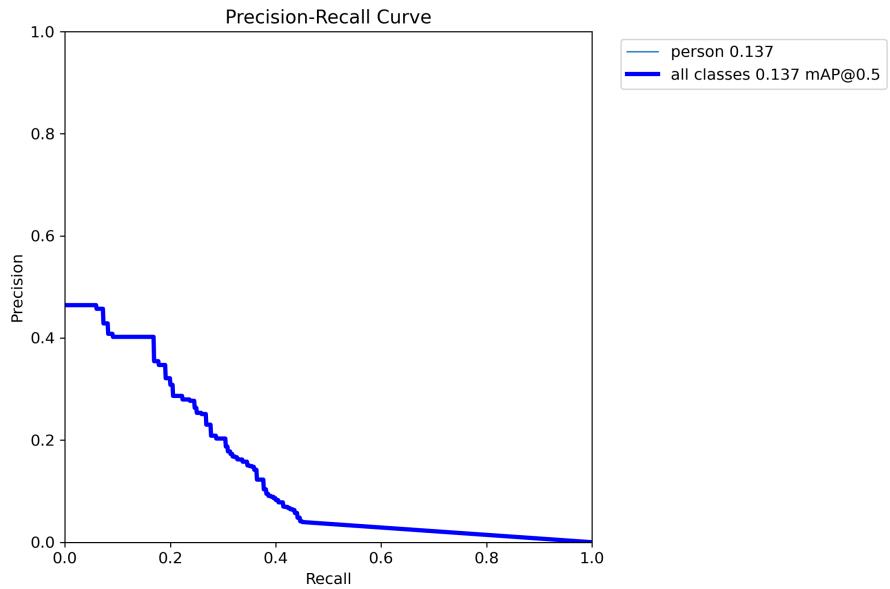


Figure s728. precision\_over\_confidence, yolov8n, pre-trained=True, epochs=0, data=hadji\_dimitar\_square, hyperparameter-tuned=False

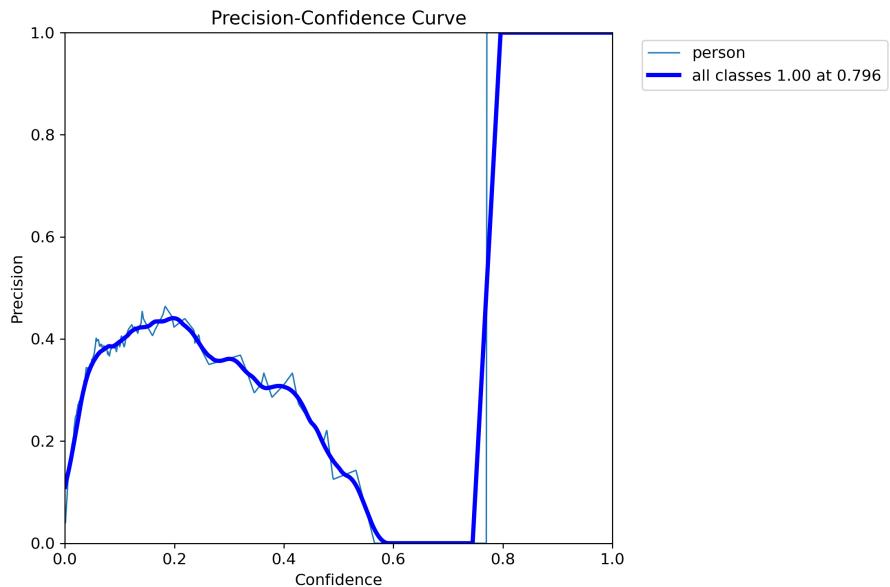


Figure s729. recall\_over\_confidence, yolov8n, pre-trained=True, epochs=0, data=hadji\_dimitar\_square, hyperparameter-tuned=False

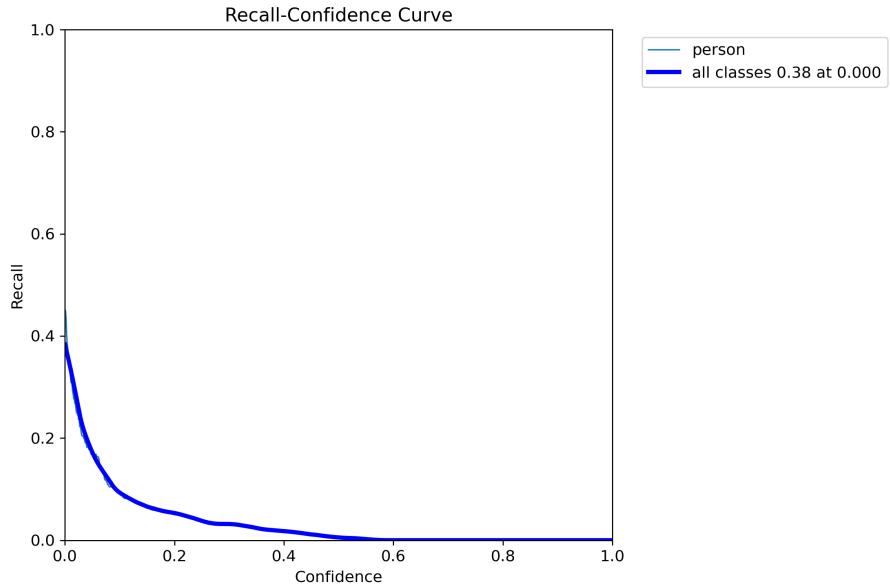


Figure s730. confusion\_matrix, yolov8n, pre-trained=True, epochs=0, data=hadjidimitar\_square, hyperparameter-tuned=False

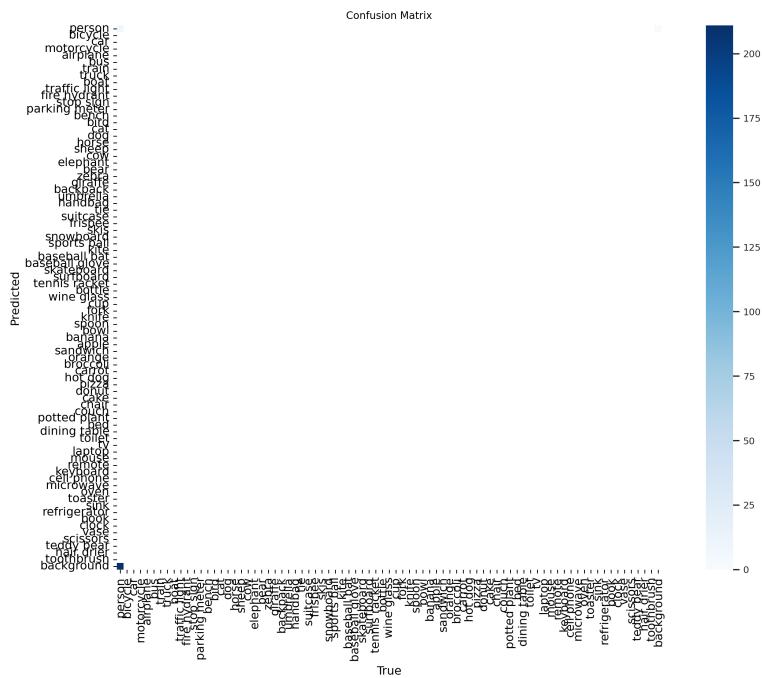


Figure s731. confusion\_matrix\_normalized, yolov8n, pre-trained=True, epochs=0, data=hadjidimitar\_square, hyperparameter-tuned=False

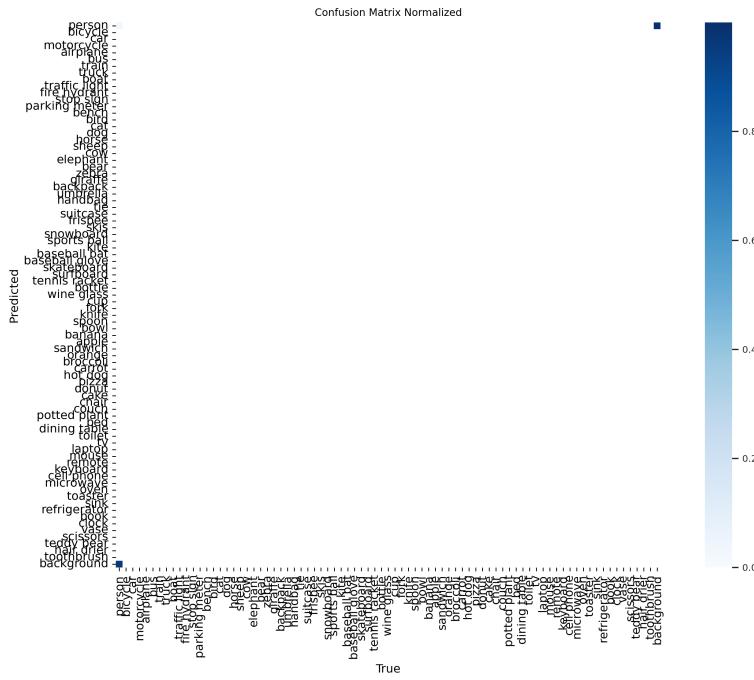


Figure s732. f1\_over\_confidence, yolov8n, pre-trained=True, epochs=0, data=keskvaljak, hyperparameter-tuned=False

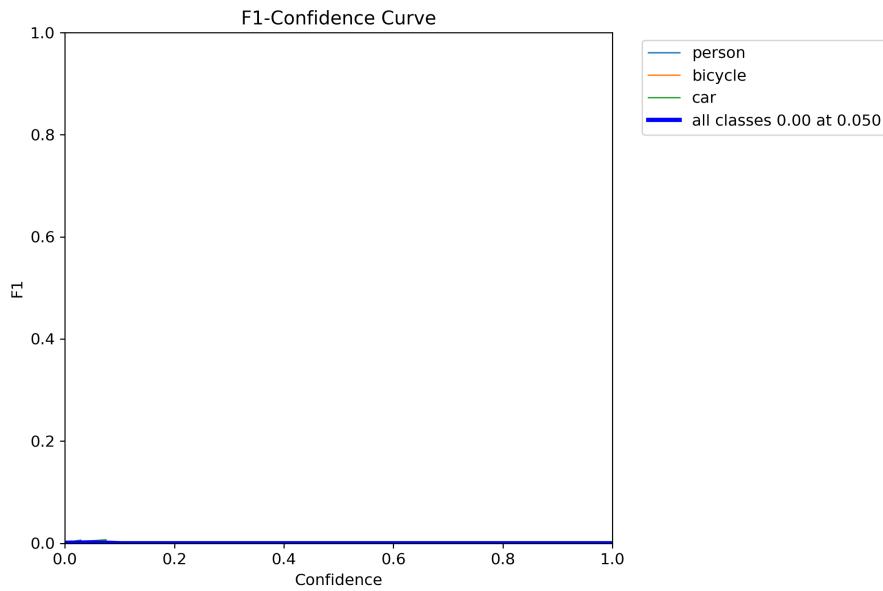


Figure s733. precision\_over\_recall, yolov8n, pre-trained=True, epochs=0, data=keskvaljak, hyperparameter-tuned=False

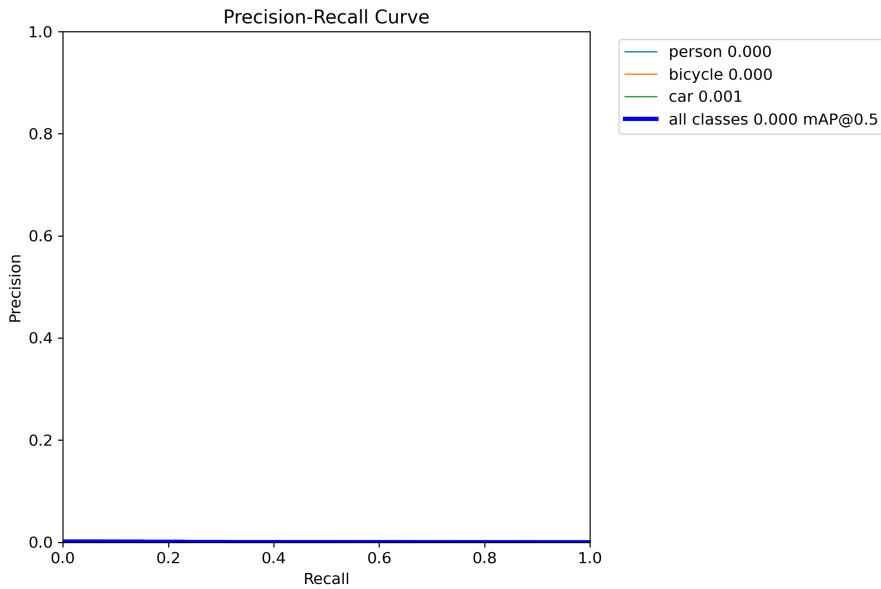


Figure s734. precision\_over\_confidence, yolov8n, pre-trained=True, epochs=0, data=keskvaljak, hyperparameter-tuned=False

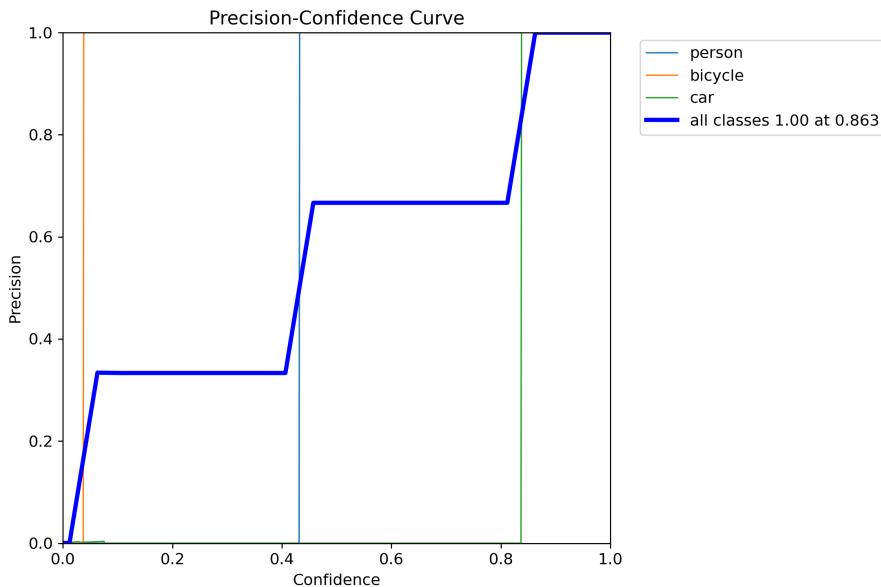


Figure s735. recall\_over\_confidence, yolov8n, pre-trained=True, epochs=0, data=keskvaljak, hyperparameter-tuned=False

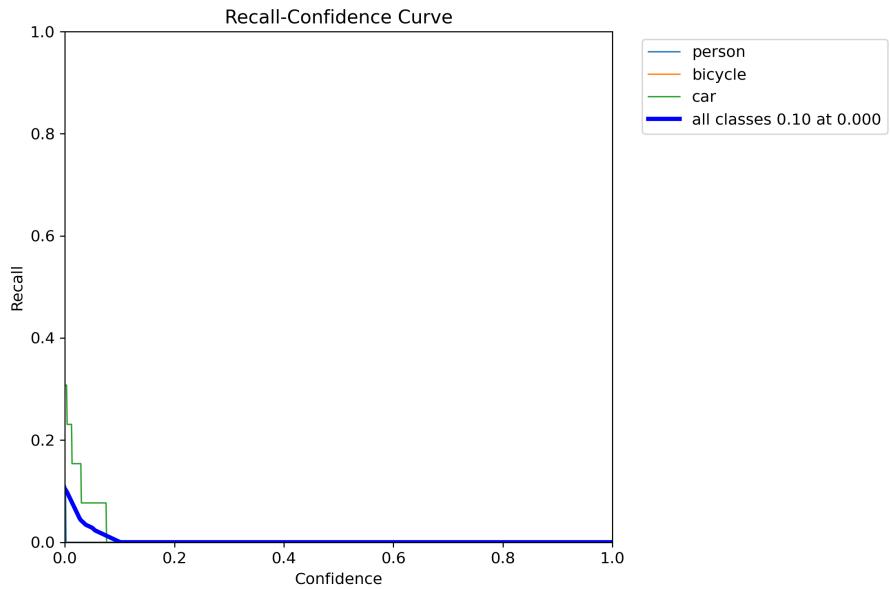


Figure s736. confusion\_matrix, yolov8n, pre-trained=True, epochs=0, data=keskvaljak, hyperparameter-tuned=False

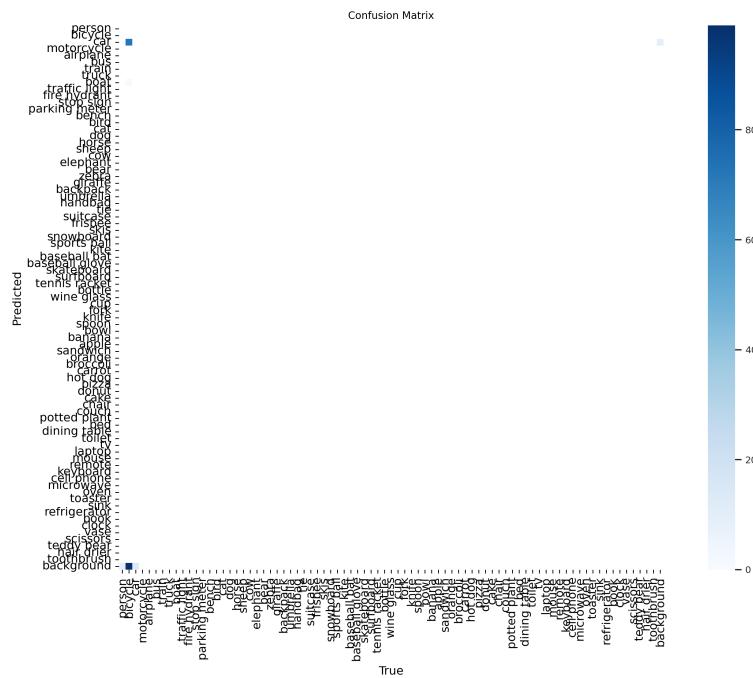


Figure s737. confusion\_matrix\_normalized, yolov8n, pre-trained=True, epochs=0, data=keskvaljak, hyperparameter-tuned=False

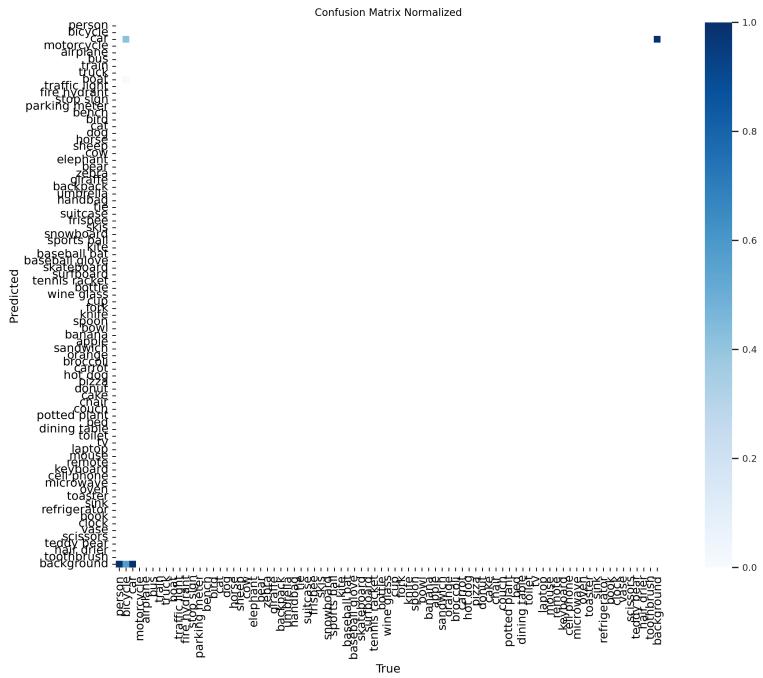


Figure s738. f1\_over\_confidence, yolov8n, pre-trained=True, epochs=0, data=kielce\_university\_of\_technology, hyperparameter-tuned=False

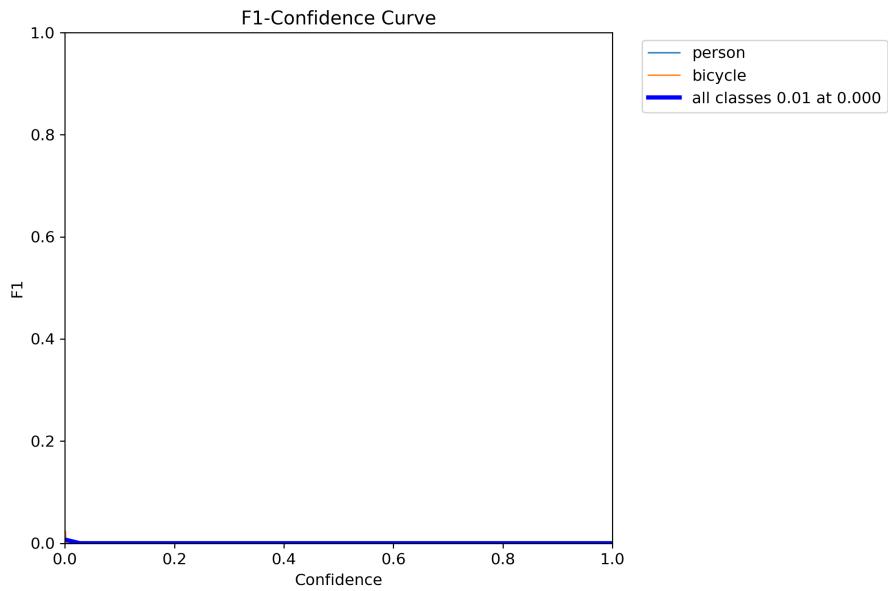


Figure s739. precision\_over\_recall, yolov8n, pre-trained=True, epochs=0, data=kielce\_university\_of\_technology, hyperparameter-tuned=False

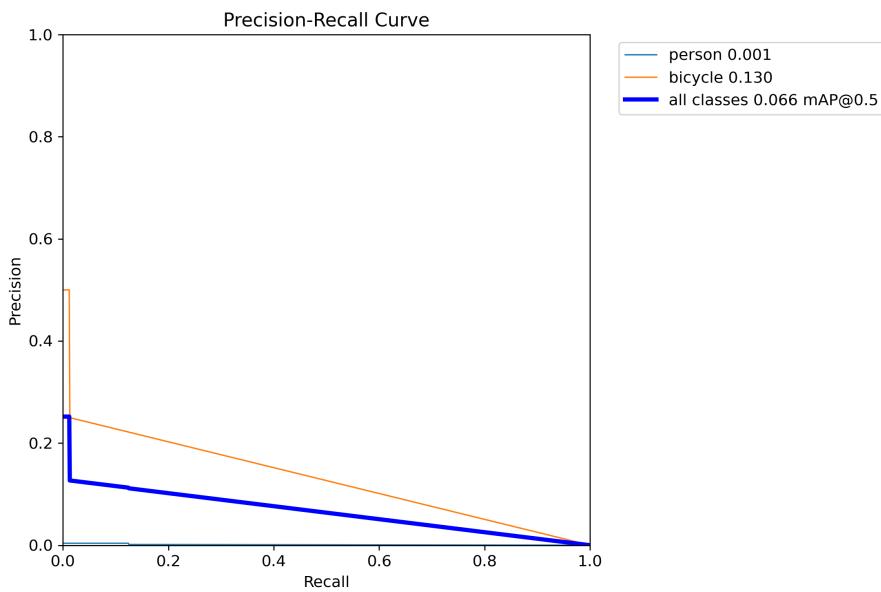


Figure s740. precision\_over\_confidence, yolov8n, pre-trained=True, epochs=0, data=kielce\_university\_of\_technology, hyperparameter-tuned=False

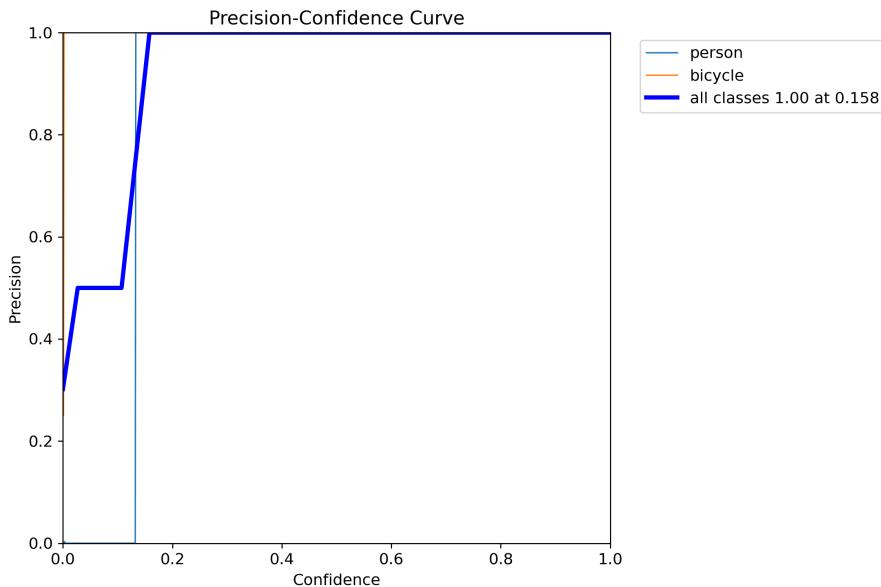


Figure s741. recall\_over\_confidence, yolov8n, pre-trained=True, epochs=0, data=kielce\_university\_of\_technology, hyperparameter-tuned=False

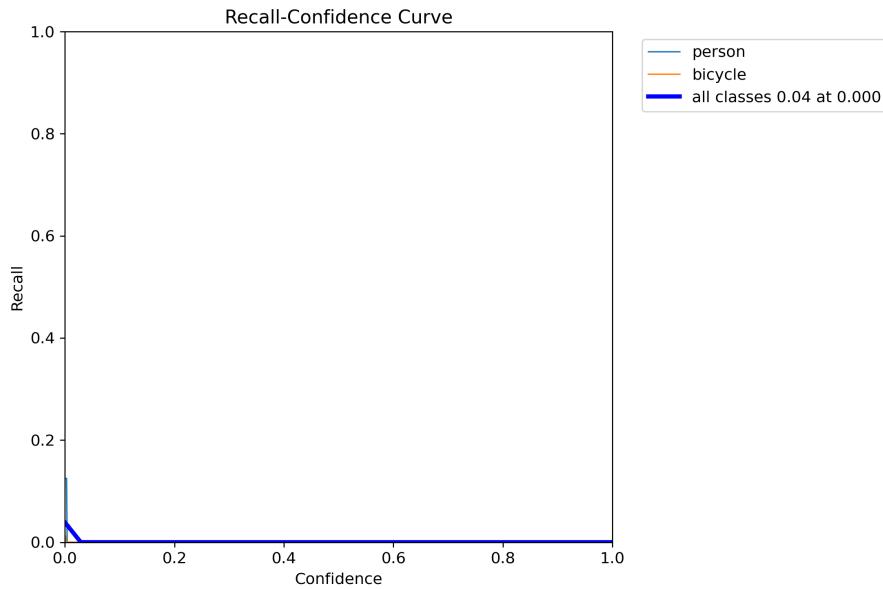


Figure s742. confusion\_matrix, yolov8n, pre-trained=True, epochs=0, data=kielce\_university\_of\_technology, hyperparameter-tuned=False

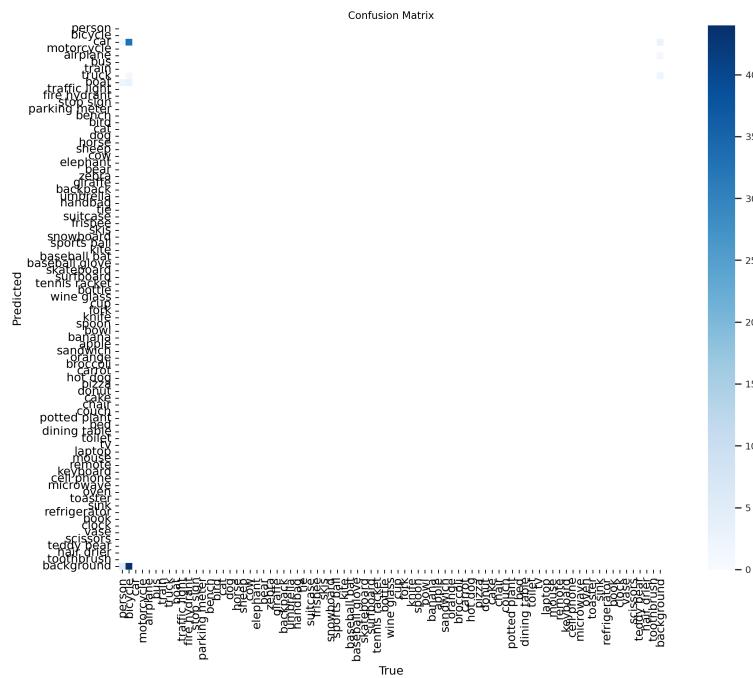


Figure s744. confusion\_matrix\_normalized, yolov8n, pre-trained=True, epochs=0, data=kielce\_university\_of\_technology, hyperparameter-tuned=False

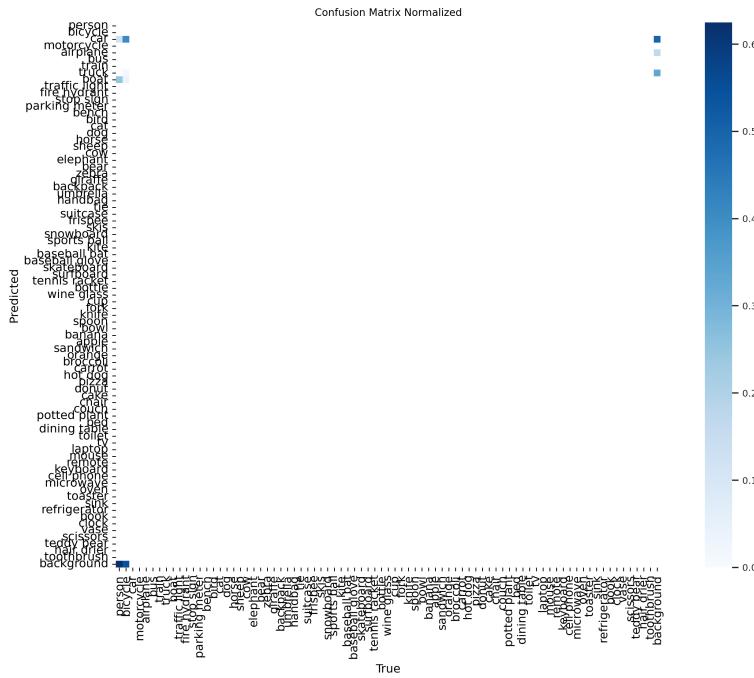


Figure s745. f1\_over\_confidence, yolov8n, pre-trained=True, epochs=0, data=toggenburg\_alpaca\_ranch, hyperparameter-tuned=False

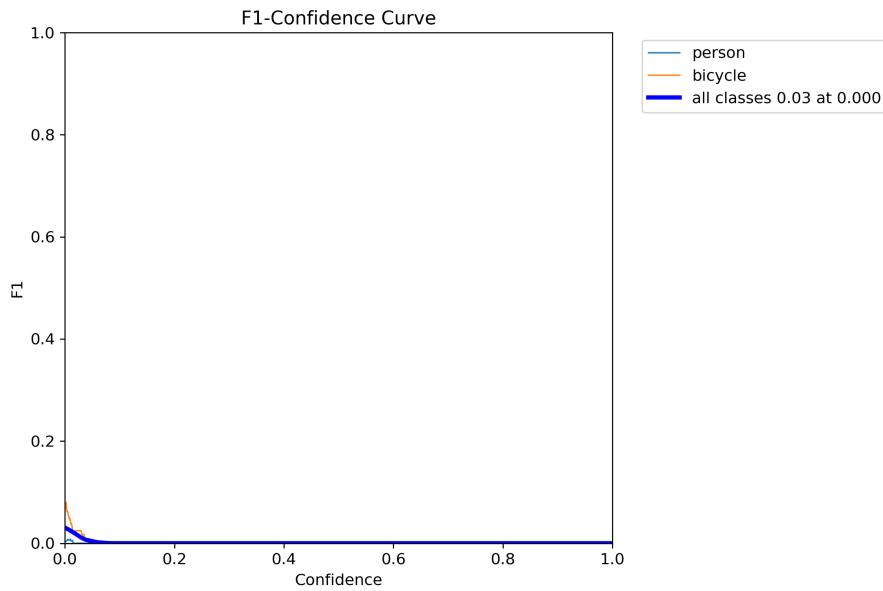


Figure s746. precision\_over\_recall, yolov8n, pre-trained=True, epochs=0, data=toggenburg\_alpaca\_ranch, hyperparameter-tuned=False

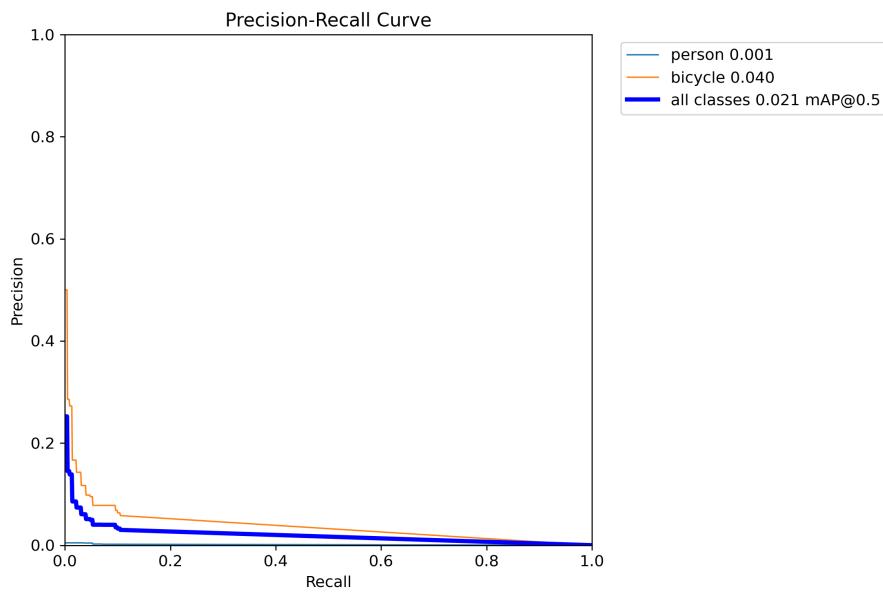


Figure s747. precision\_over\_confidence, yolov8n, pre-trained=True, epochs=0, data=toggenburg\_alpaca\_ranch, hyperparameter-tuned=False

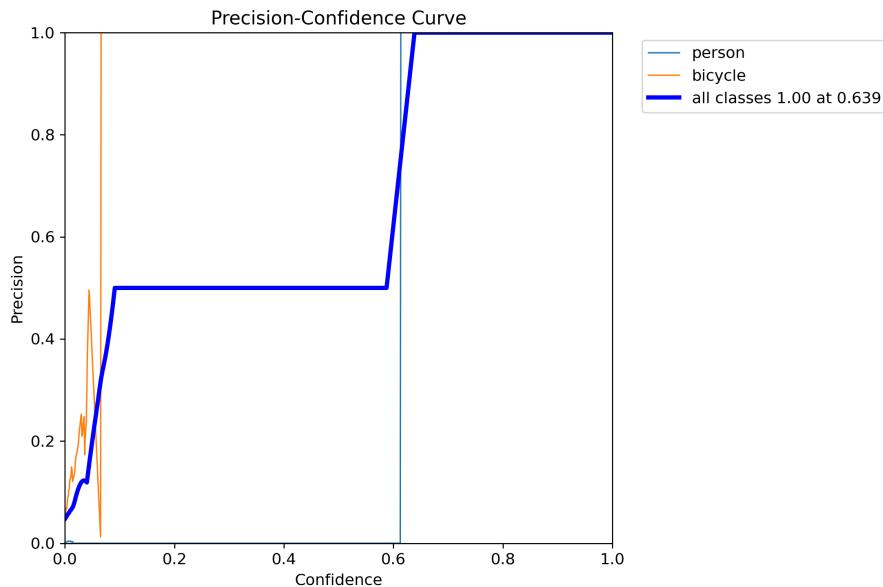


Figure s748. recall\_over\_confidence, yolov8n, pre-trained=True, epochs=0, data=toggenburg\_alpaca\_ranch, hyperparameter-tuned=False

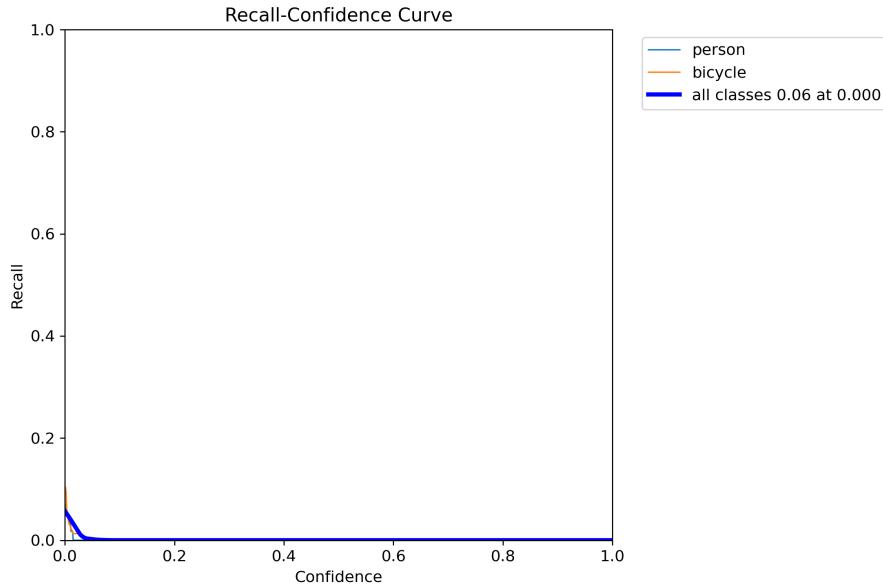


Figure s749. confusion\_matrix, yolov8n, pre-trained=True, epochs=0, data=toggenburg\_alpaca\_ranch, hyperparameter-tuned=False

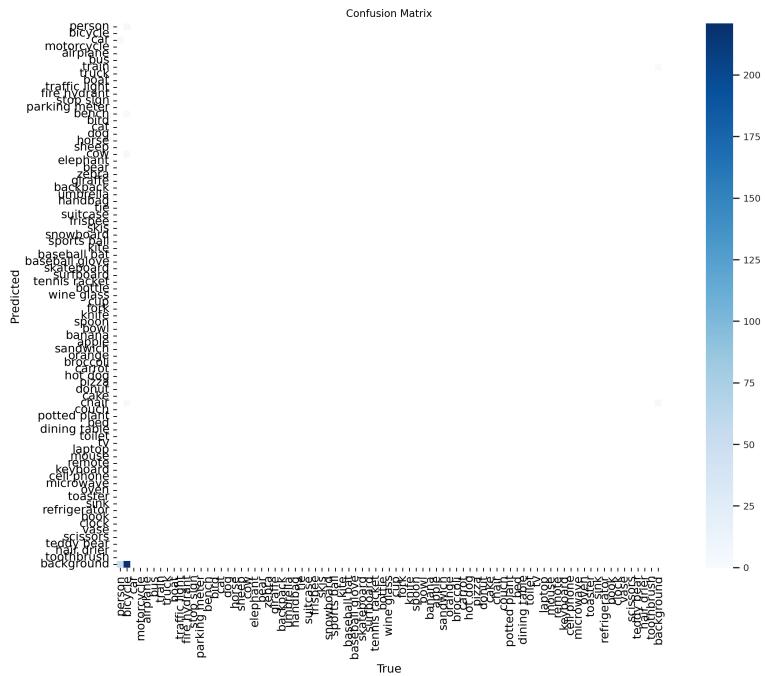


Figure s750. confusion\_matrix\_normalized, yolov8n, pre-trained=True, epochs=0, data=toggenburg\_alpaca\_ranch, hyperparameter-tuned=False

