

VIETNAM NATIONAL UNIVERSITY, HO CHI MINH CITY
UNIVERSITY OF TECHNOLOGY
FACULTY OF COMPUTER SCIENCE AND ENGINEERING



Machine Learning - CO3001

Assignment

Semantic and Instance Segmentation using

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Class: CC01 - Group 1
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Abstract

Briefly summarize your report here. The abstract should provide an overview of the objectives, methodology, results, and conclusion of your report.

1 Introduction

Introduce the topic, provide background information about YOLOv8, and discuss the purpose and scope of your report.

2 Literature Review

Review the existing literature related to semantic and instance segmentation, and how YOLOv8 contributes to this field.

3 SegmentYOLOv8 Architecture

Describe the architecture of SegmentYOLOv8, focusing on its unique features and capabilities in semantic and instance segmentation.

4 Datasets

Discuss the datasets used for training and testing the model, such as COCO, PASCAL VOC, Cityscapes, etc.

5 Implementation

Detail the implementation process, including preprocessing steps, training details, and any challenges faced.

6 Results and Discussion

Present the results obtained using SegmentYOLOv8. Include performance metrics and comparative analysis with other models.

7 Conclusion and Future Work

Summarize the findings of your report and suggest directions for future research.

8 References

List all the references used in your report.