

EDEN BELOUADAH, PH.D.

PERSONAL INFORMATION

ADDRESS: Paris, France
EMAIL: eden.belouadah@yahoo.fr
LINKS: [Scholar](#) | [GitHub](#) | [LinkedIn](#) | [Kaggle](#)

EDUCATION

Ph.D. in Artificial Intelligence - Continual Learning DEC. 2021
IMT Atlantique, Brest & CEA-LIST, Paris-Saclay, France.

Master's degree in Machine Learning - Ranked 2/40 SEP. 2018
University of Paris-Saclay, Orsay, France.

Master's degree in Artificial Intelligence - Ranked 1/40 JUNE 2017
University of Sciences and Technology Houari Boumediene (USTHB), Algiers, Algeria.

Bachelor's degree in Mathematics and Computer Science - Ranked 2/80 JUNE 2015
University of Sciences and Technology Houari Boumediene (USTHB), Algiers, Algeria.

PROFESSIONAL EXPERIENCE

Deep Learning Researcher | Datakalab, Paris, France DEC. 2021 - PRESENT
Tools: Continual Learning, Object Detection, LLMs, Jira, Git, Tensorflow, Pytorch, AWS, GCP, SLURM

RESEARCH AND DEVELOPMENT INTERNSHIPS

Continual Deep Learning | CEA-LIST, Paris-Saclay, France MAR. 2018 - SEP. 2018
Tools: Convolutional Neural Networks, Support Vector Machines, Python
Pytorch, Git, SpaCy, Numpy, Scikit-Learn, Latex

Adaptation of "Bee Swarm Optimization" for continuous problems | LRIA, Algeria JAN. 2017 - JUN. 2017
Tools: Meta-heuristics, Continuous Optimization Problems, Java, GUI, Latex, Git.

Fall detection of elderly people using Kinect sensor | LRIA, Algeria JAN. 2015 - JUN. 2015
Tools: C, C#, QtCreator, OpenCV, Microsoft SDK, Visual Studio, Matlab, Kinect

THEORETICAL AND TECHNICAL SKILLS

Operating Systems : Linux, Windows, MacOS

Computer Vision : Classification, object detection, segmentation, image generation

Natural Language Processing: Large Language Models, Parameter-Efficient Fine-Tuning, Named Entities Recognition, Sentiment Analysis, CRF Wapiti, Text Mining

AI Models : Multi-Layer Perceptrons, Convolutional Neural Networks, Generative Adversarial Networks, Hidden Markov Models, Transformers, Decision Trees, KNN, Support Vector Machines

Languages : Python, C, Git, Latex

Frameworks : PyTorch, Keras

SELECTED PUBLICATIONS (SEE FULL LIST [HERE](#))

Belouadah, E., Dapogny, A., Bailly, K., "MultIOD: Rehearsal-free Multihead Incremental Object Detector". Under review. Pre-print: <https://arxiv.org/abs/2309.05334>

Lomonaco, V., Lorenzo, P., Cossu, A., Carta, A., Graffieti, G., Hayes, T., Belouadah, E., Popescu, A., (long list). "Avalanche: an End-to-End Library for Continual Learning". Proceedings of the Computer Vision and Pattern Recognition workshops (W-CVPR 2021).

Belouadah, E., Popescu, A. and Kanellos, I., 2020. A Comprehensive Study of Class Incremental Learning Algorithms for Visual Tasks. Elsevier's Neural Networks, t. 135, pp. 38-54.

Belouadah, E. and Popescu, A., 2020. **ScaIL: Classifier Weights Scaling for Class Incremental Learning**. The IEEE Winter Conference on Applications of Computer Vision (WACV 2020). pp. 1266-1275.

Belouadah, E. and Popescu, A., 2019. **IL2M: Class incremental learning with dual memory**. Proceedings of the IEEE International Conference on Computer Vision (ICCV 2019). pp. 583-592.

Belouadah, E. and Popescu, A., 2018. **DeeSIL: Deep-Shallow Incremental Learning**. Proceedings of the European Conference on Computer Vision workshops (W-ECCV 2018).

BOOKS

Belouadah, E., Abbad, H. and Zebbouchi, A., 2017. **Learn to program in C language**. Translated from French to Arabic (original title: 'Apprenez à programmer en C', Mathieu Nebra). ([link](#)).

SELECTED CERTIFICATIONS (SEE FULL LIST [HERE](#))

| | | |
|--|-----------------|-----------|
| Generative AI with Large Language Models (16 hours) | DeepLearning.AI | Ongoing |
| Deep Learning Specialization (122 hours) (cert. 1 cert. 2) | DeepLearning.AI | Ongoing |
| Advanced Python: going further (5 hours) (certificate) | Udemy | DEC. 2022 |
| Google Cloud Platform (GCP) Fundamentals for Beginners (4 hours) (certificate) | Udemy | NOV. 2022 |
| Git and Gitlab: from beginner to professional (9 hours) (certificate) | Udemy | JUL. 2022 |
| Deep Learning for Computer Vision with Tensorflow 2 (12 hours) (certificate) | Udemy | FEB. 2022 |
| AWS Machine Learning Course (8 hours) (certificate) | Udacity | JUL. 2020 |

TEACHING

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| Deep Learning Students of 2nd year of Master's, Centrale Supélec Superior School (Paris-Saclay) | DEC. 2020 - FEB. 2021 |
| Operating Systems (Unix) Students of 2nd year of Bachelor's, Paris-Sud university (Paris-Saclay). | SEP. 2020 - DEC. 2020 |

SUPERVISING

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| Research internship on Continual Learning without memory Habib Slim (habib.slim@grenoble-inp.org), ENSIMAG, Grenoble, France. | MAR. 2021 - SEP. 2021 |
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REVIEWING

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| Elsevier's Neurocomputing Journal | AUG. 2022-PRESENT |
| CLIVISON Workshop, Computer Vision and Pattern Recognition (W-CVPR). | MAR. 2023 |
| Winter Conference on Applications of Computer Vision (WACV) | AUG. 2022 |
| Winter Conference on Applications of Computer Vision (WACV). | AUG. 2021 |
| British Machine Vision Conference (BMVC 2021). | JUNE. 2021 |
| British Machine Vision Conference (BMVC 2020). | AUG. 2020 |

ACTIVITIES AND AWARDS

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| Virtual Participation in the NASA Space apps challenge. | OCT. 2019 |
| 3rd position in iFood-2019 Kaggle challenge with CEA-LIST Team, France | JUN. 2019 |
| 1st position in LEGO Mindstorms EV3 DZBOT challenge, Free Forward Team, Algeria. | DEC. 2015 |
| 4th position in video games development challenge (AGC), Brother & Sister Team. Algeria. | MAY 2015 |
| 1st position in the National Judo Championship, Médéa, Algeria. | JUL. 2010 |

LANGUAGES

Arabic - French - English

INTERESTS AND EXTRACURRICULAR ACTIVITIES

Traveling - reading - playing video games - practicing sports

SOFT SKILLS

Autonomy, team spirit, motivation, dedication