# LUKAS HEDEGAARD MORSING

## Employment History

### Ph.D. Fellow at Department of Electrical and Computer Engineering, Aarhus University, DK

2020/2 – 2023/3

- Published works at ECCV, ECCV-W, ICPR, and TIP.
- Design and teaching of course materials on Statistical Learning and Machine Learning.
- Specification, purchase, and setup of GPU infrastructure for research group.
- Contributions to EU project and interactions with partner institutions in Europe.
- Research exchange with globally distributed team of scientists and engineers at Cactus Communications.
- Development of multiple open-source libraries (Python, JavaScript, total downloads > 300k)

### Software Engineering Consultant at Bojer Innovativ Ingeniør Rådgivning, DK

2018/2 – 2020/2

- Use case mining, Requirement Specification and System Architecture for Cloud service.
- Project Manager, Scrum Master, and Lead Developer of solution (Azure, JavaScript, MSSQL).
- Development of in-house job market analytics platform (Python, Elasticsearch).

### Software Engineer at Music Group, DK

2016/2 – 2018/2

- Development of cross-platform mobile applications.
- Development of embedded systems firmware (C++).
- Test automation (HW & SW) of digital amplifiers.

## Education

### Ph.D. in Machine Learning and Computational Intelligence

2020 – 2023 Aarhus University

### Certified Scrum Master

2019 Certification ID: 1043951

### M.Sc. Computer Engineering

2018 – 2020 Aarhus University WGPA 11.4 / 12.0

### B.Eng. Electrical Engineering

2013 – 2017 Aarhus University WGPA 11.2 / 12.0


**Deep Learning Researcher**
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## Profile

Scientist and engineer committed to improving deep learning efficiency via scientific and open-source contributions on network acceleration and Transfer Learning finding applications in Computer Vision and Natural Language Processing. Team-player with a well-rounded perspective on the R&D process and his fellow colleagues with a background in multidisciplinary agile engineering teams.

## References

**Dr. Alexandros Iosifidis, Full Prof. at Aarhus University**
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**Henning Johnsen, MBA, Design Center Manager Europe at Ballard Power Systems**
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## Languages

English – proficient (C2)
Danish – proficient (C2)
German – upper interm. (B2)
Polish – intermediate (B1)

## Scientific Publications

- **L. Hedegaard**, O. Sheikh-Omar, and A. Iosifidis, "Supervised Domain Adaptation using Graph Embedding," in *International Conference of Pattern Recognition (ICPR)*, 2021.
- **L. Hedegaard**, O. Sheikh-Omar, and A. Iosifidis, "Supervised Domain Adaptation: A Graph Embedding Perspective and a Rectified Experimental Protocol," in *IEEE Transactions on Image Processing (TIP)*, 2021.
- **L. Hedegaard** and A. Iosifidis, "Continual 3D Convolutional Neural Networks for Real-time Processing of Videos," in *European Conference on Computer Vision (ECCV)*, 2022.
- **L. Hedegaard** and A. Iosifidis, "Continual Inference: A Library for Efficient Online Inference with Deep Neural Networks in PyTorch," in *European Conference on Computer Vision Workshop (ECCVW)*, 2022.
- **L. Hedegaard**, N. Heidari, and A. Iosifidis, "Human Activity Recognition", in *Deep Learning for Robot Perception and Cognition*, Elsevier, 2022.
- N. Heidari, **L. Hedegaard**, and A. Iosifidis, "Graph Convolutional Networks", in *Deep Learning for Robot Perception and Cognition*, Elsevier, 2022.
- **L. Hedegaard**, N. Heidari, and A. Iosifidis, "Online Skeleton-based Action Recognition with Continual Spatio-Temporal Graph Convolutional Networks," *preprint arXiv:2004.11262*, 2022.
- **L. Hedegaard**, A. Bakhtiarnia, and A. Iosifidis, "Continual Transformers: Redundancy-Free Attention for Online Inference," *preprint arXiv:2203.11009*, 2022.

## Open-source libraries

github.com/lukashedegaard/

- continual-inference
- ride
- datasetops
- pytorch-benchmark
- co-rider
- supers

github.com/opendr-eu/

- opendr

github.com/sovrasov/

- flops-counter.pytorch

github.com/garblovians/

- react-native-svg-pan-zoom
- redux-maybe
- redux-blabber