

Odysseas Krystalakos

AI Engineer

Work Experience

Data Scientist/Engineer, MX3D, Amsterdam Oct. 2020 – Present

- R&D for data-driven approaches for 3D printing with metal
- Data analysis and modeling with electrical DC data
- Development of automated pipelines for in-process data collection from multiple sensors
- Elasticsearch setup for log management and productivity insights
- Python software development and testing

Intern ML Researcher, Crownstone, Rotterdam Oct. 2019 – Jun. 2020

- Research and development of models for automatic electrical appliance identification
- Feature extraction and modeling of high-voltage AC time-series
- Development of Python package for automatic model training and testing

Teacher's Assistant, Radboud University, Nijmegen Mar. 2019 – Jul. 2020

- Lectures and student assistance for courses in AI and statistics

Freelancer Software Engineer Jun. 2014 – Dec. 2018

- Software development on a per-project basis for small companies and startups
- Topics computer vision, machine learning prototyping and front-end software development

Library software support, Aristotle University, Thessaloniki Mar. 2019 – Jul. 2020

- Support of librarian software and hardware with contributions in open-source librarian software

Education

MS Artificial Intelligence, Radboud University, Nijmegen Sep. 2018 – Jul. 2020

- Specialization on Cognitive Computing with electives on Neuroscience and Philosophy.
- External Thesis on Machine Learning for Automatic Electrical Appliance Identification.

BSc Informatics, Aristotle University, Thessaloniki Sep. 2013 – Feb. 2018

- Specialization on Informational Systems with electives on AI and Deep Learning.
- Master Thesis on deep learning models for Non-Intrusive Load Monitoring.
- Research work that resulted in three conference publications

Skills

Main Proficiencies: ML/DL for time-series, modelling, data analysis, software engineering and testing

Programming Languages: Python, Typescript, Rust

Frameworks/Platforms: PyTorch, Tensorflow, Pandas, React, Linux/Unix, (No)SQL, Git, Docker, AWS, Ansible, ElasticSearch, Matplotlib, Plotly,

Professional Skills: Agile, SCRUM master

Languages: English(Fluent), Greek (Native), Dutch(Elementary)

Interests

Research Interests: Machine Learning for Sensors, Smart Buildings & IoT, Privacy & AI Ethics

Personal Interests: Music production, bicycle touring, 3D-printing, open-source software

Academic Publications

1. N. Batra, R. Kukuluri, A. Pandey, R. Malakar, R. Kumar, O. Krystalakos, M. Zhong, P. Meira, O. Parson, "Towards reproducible state-of-the-art energy disaggregation", in Proceedings of the 6th ACM International Conference on Systems for Energy-Efficient Buildings, Cities, and Transportation (2019)
2. O. Krystalakos, C. Nalmpantis, and D. Vrakas, "Sliding Window Approach for Online Energy Disaggregation Using Artificial Neural Networks," in Proceedings of the 10thHellenic Conference on Artificial Intelligence (2018)
3. C. Nalmpantis, O. Krystalakos, and D. Vrakas, "Energy profile representation in vector space," in Proceedings of the 10thHellenic Conference on Artificial Intelligence (2018)