

Maxim Khomiakov, PhD

Copenhagen, Denmark
[@maximkhv](#) | [maxims.dev](#)

WORK EXPERIENCE

Apple

ML Engineer

- Project under NDA.

Malmö, Sweden
April 2024 - Present

Otovo

Industrial PhD & ML Researcher, Product Insights

- Headed the Data Science efforts from the first employee to a team of 5 FTEs. Built ML based software applications leveraging python frameworks such as PyMC, PyTorch, Scikit-Learn. Designed and deployed modern CI/CD ML software stack using Prefect, PostgreSQL, ClearML, BentoML and Kubernetes in an AWS hosted setting.

Oslo, Norway
2018 - 2024

Sunmapper

Co-founder

- Developed software to estimate photovoltaic energy production. Utilizing image and weather data with geospatial analysis techniques, Sunmapper simulated yield curves from PV systems and presented the economic impacts for the customer on demand. Product stack was built with Azure, Python, NodeJS. Sunmapper was acquired in 2018 by Otovo.

Copenhagen, Denmark
2015 - 2018

EDUCATION

Technical University of Denmark / National University of Singapore

PhD in Machine Learning

Supervised by [Assoc. Professor Michael Riis Andersen](#), [Assoc. Professor Jes Frellsen](#)

- Thesis: Deep Learning in Remote Sensing. Developing deep generative models for 3D and 2D shape inference.
- Visiting researcher at National University of Singapore with [Assis. Professor Filip Biljecki](#)

Copenhagen, Denmark
2024

Imperial College London

MSc. in Biomedical Engineering (Neuroscience)

London, United Kingdom
2016

Technical University of Denmark

B.Eng & MSc. in Computer Science and Applied Mathematics

Copenhagen, Denmark
2015

PUBLICATIONS

- **Khomiakov, M.**, Andersen, M.R. and Frellsen, J., 2024. *GeoFormer: A Multi-Polygon Segmentation Transformer*. BMVC 2024.
- **Khomiakov, M.**, Andersen, M.R. and Frellsen, J., 2024. *GAST: Geometry-Aware Structure Transformer*. In Proceedings of the IEEE/CVF Winter Conference on Applications of Computer Vision (WACV) Workshops (pp. 785-793).
- **Khomiakov, M.**, Andersen, R.M., Frellsen, J. 2023. *Polygonizer: An auto-regressive building delineator*. ICLR 2023 Workshop on Machine Learning in Remote Sensing
- **Khomiakov, M.**, Mahou, A.V., Sánchez, A.R., Frellsen, J. and Andersen, M.R., 2023, June. *Learning To Generate 3D Representations of Building Roofs Using Single-View Aerial Imagery*. In ICASSP 2023 IEEE International Conference on Acoustics, Speech and Signal Processing
- **Khomiakov, M.**, Radzikowski, J.H., Schmidt, C.A., Sørensen, M.B., Andersen, M., Andersen, M.R. and Frellsen, J., 2022. *SolarDK: A high-resolution urban solar panel image classification and localization dataset*. NeurIPS 2022 Workshop: Tackling Climate Change with Machine Learning

OTHER ACTIVITIES

- Best Oral Presentation: “Learning to Generate 3D Representations of Building Roofs Using Single-View Aerial Imagery” at Nordic AI Meet 2022
- Winner of DTU Big Data Hackathon 2014 and Copenhagen Fintech InsurTech Hackathon 2017
- Winner of Kearney case competition ‘Engineers in Consulting’ 2014
- Completed Deloitte Øresund Triathlon 2014 – Half Ironman distance. Finish top 25 of age bracket.

SKILLS, ACTIVITIES & INTERESTS

Languages: Fluency in English, Danish and Russian. Speaking proficiency in German, Swedish and Norwegian

Interests: I enjoy cooking, playing golf, scuba diving and music.