

Karl Kaspar Haavel

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Estonia | Tallinn | Estonian/English

Data Scientist with a track record of developing and deploying forecasting and computer vision models in production. Looking for roles to push boundaries and create real impact.

Experience

- 5/2024-12/2025 **Renewcast SRL Senior Data Scientist**
Time-series analysis. Built and deployed renewables power forecasting models actively used in balance market trading across multiple power markets and clients using diverse data sources.
- 9/2021-4/2024 **Proekspert AS Data Scientist**
Enlighten (ARIANE) - Time series analysis. Fault detection and localisation for a reusable rocket engine. Progressed the project from TRL2 to TRL5, demonstrating readiness for operational use.
THOR - Computer Vision. Satellite data-based roof detection (shape/size/pitch) to speed up sales processes. Client reported accelerated sales and a significant increase in inventory turnover.
City of Oslo - Computer Vision. Was apart of building and deploying a methodologies for detecting, tracking and localising traffic signs for automated pre-labelling.
- 7/2018-8/2020 **Socar Trading SA Middle Officer**
Risk management. Development and maintenance of market risk and valuation models for oil&gas trading. Exposure and P&L reporting for various trading desks across the world.
- 3/2018-6/2018 **Socar Trading Services AS Junior Middle Officer**
- 6/2016-12/2016 **Eesti Energia AS. Financial Analyst**
Internship: Fundamental analysis of multiple energy markets, creating statistical models to help traders make investment decisions.



PROEKSPERT



Education

- 9/2020-6/2022 **Tartu University** Cum Laude. Faculty of Computer Science. MsC. Data Science.
Thesis: "Exploring Out-of-Distribution Detection using Vision Transformers"
Publication: "Probability Density from Latent Diffusion Models for Out-of-Distribution Detection"
- 9/2020-6/2022 **Tartu University** Faculty of Economics. BSS. Economics.
Thesis: "Expiration Effect of Currency Options on the Currency Market: The Example of EUR/CAD"
- 9/2020-6/2022 **Gustav Adolf Grammar School**

Software

- Expert Python (Pytorch, Numpy, Scipy, Pandas, Xarray, OpenCV, MLflow), SQL, Docker
Advanced Azure, Spark, DataBricks, GIT, Kubeflow
Beginner C++ (CUDA), Kubernetes, Google Cloud

Projects (Public)

Pattern Based Trading with Similarity Measures
Transformers and CNN in analysing microscopy images
Audio Thumbnail
Extractive Text Summarisation Methods in Estonian

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