## Martin Lumiste

Tallinn, Estonia (EU citizen) Updated: October 2023

### Achievements

NeurIPS Traffic4cast 2022 - 2nd place

#### **Publications**

Traffic4cast at NeurIPS 2022 (PMLR submitted)

#### Education

2016 MRes Economic Theory and Econometrics

> Toulouse School of Economics, *cum laude*, PhD track

2015 Master of Economics

Toulouse School of Economics, cum laude

2014 Master of Economics with Mathematical Statistics

University of Tartu, cum laude, unfinished

# Strengths

- o Machine learning
- o Research
- Python programming
- o Public presentation
- o Stakeholder management

## Experience

Jan. 2019 - current Staff ML Eng / Group Tech Lead @ Bolt

Mostly involved in an IC capacity on tasks such as:

- AutoGPT-like agent development for customer support automation.
- Building a semantic search based Slack chatbot stack from scratch.
- Fine-tuning multilingual language models for multiple downstream use cases.
- Improving travel time predictions and routing with machine learning (both gradient boosted and DL seq2vec models). Owning the production of ETA model - the most frequently called microservice in Bolt ML stack.
- Clickthrough rate optimisation for client destination suggestions, using a learning to rank (LTR) model architecture.
- Dynamic pricing on a marketplace and trip level.
  Implemented anomaly detection, demand forecasting, price sensitivity modelling, exploration-exploitation trade-off aware optimisation.

Working end to end on ML projects, including DAGs for data generation, optimising the inference code, load testing, live monitoring, running A/B tests etc. "Hands-on" Group Tech Lead for 47 strong Data Science team - biggest contributor in the number of commits in DS repo. Frequently interfacing with Product and Engineering teams and executive suite.

Tech stack: Python, PyTorch, Airflow, MLFlow, Docker, SageMaker, Redshift, AWS, Node.js, Grafana, OSRM, PySpark, LightGBM

Nov. 2017 - Dec. 2018. Head of Data Science @ Investorise

Bootstrapping the data function and contributing technically:

- Built a backend data science stack involving time series forecasting, clustering and portfolio optimisation.
- Kept in sync with stakeholders, provided some business intelligence capabilities for key KPIs, through periodically generated HTML reports.

Tech stack: Python, R, Airflow, Docker, MongoDB, kepler.gl