Alexander Timans

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Current location: Amsterdam, Netherlands

EDUCATION

PhD candidate Oct 2022 – ongoing
Amsterdam Machine Learning Lab, University of Amsterdam
Supervision: Eric Nalisnick & Christian Naesseth, in co-op. with the Bosch Center for AI.
Topic: Uncertainty Quantification for Structured Objects.

M.Sc. Statistics Sep 2020 – Sep 2022
ETH Zurich
Grade: ∅ 5.5/6 (6 highest, 1 lowest)
Thesis Topic: Uncertainty Quantification for Image-based Traffic Prediction.
Key courses: Bayesian Statistics, Probabilistic AI, Deep Learning

B.Sc. Industrial Engineering and Management Oct 2015 – Mar 2019
Karlsruhe Institute of Technology (KIT)
Grade: ∅ 1.5/5 (1 highest, Top 10%)
Thesis Topic: Forecasting the U.S. Stock Market Illiquidity using Machine Learning Techniques.
Key courses: Statistics, Operations Research, Advanced Programming

PUBLICATIONS

M. Jazbec*, **A. Timans***, T. H. Veljković, K. Sakmann, D. Zhang, C. A. Naesseth, E. Nalisnick.
Fast yet Safe: Early-Exiting with Risk Control [Link].
In *Advances in Neural Information Processing Systems* (NeurIPS), 2024.

A. Timans, C.-N. Straehle, K. Sakmann, E. Nalisnick.
Adaptive Bounding Box Uncertainties via Two-Step Conformal Prediction [Link].
In *Proceedings of the European Conference on Computer Vision* (ECCV), 2024. **Oral paper (Top 8%)**.

D. W. E. Prinzhorn, T. Nijdam, P. A. van der Linden, **A. Timans**.
Conformal time series decomposition with component-wise exchangeability [Link].
In the *Symposium on Conformal and Probabilistic Prediction with Applications* (PMLR), 2024.

FURTHER RESEARCH PROJECTS

A. Timans, C.-N. Straehle, K. Sakmann, C. A. Naesseth, E. Nalisnick.
Max-Rank: Efficient Multiple Testing for Conformal Prediction [Link].
arXiv Preprint, 2024.

A. Timans, N. Wiedemann, N. Kumar, Y. Hong, M. Raubal.
Uncertainty Quantification for Image-based Traffic Prediction across Cities [Link].
arXiv Preprint, 2023.

D. Kamm, N. Muntwyler, **A. Timans**, M. Vandenhirtz (alphabetical order).
Fake image detectors are worse than you think [Link].
Course Project, 2021.

EMPLOYMENT

Research Intern (incoming) Jan 2024 – Mar 2024
RIKEN Center for Advanced Intelligence Project, Tokyo
Exploring novel applications of variational optimization with the Approximate Bayesian Inference Team.

Data Analysis & Media Intern Jul 2019 – Oct 2019
Applico Inc, New York City
I helped improve the Salesforce database quality and ran communication for a newly launched campaign.

Project Management Intern Apr 2019 – Jun 2019
AT Consult, New York City
I supported foreign direct investment clients with market research, lead identification and outreach.

Research Assistant Jun 2017 – Oct 2018
KIT Chair of Statistics, Karlsruhe
I assisted with developing exercise and lecture materials, research data collection, and student assistance.

Data Science Intern Sep 2017 – Dec 2017
Global Market Solutions & Commerzbank, Frankfurt am Main
I implemented a python prototype to compute risk measures following new regulations (MiFID II).

Financial Consulting Trainee Oct 2016 – Mar 2017
Tecis Financial Services, Karlsruhe
I worked on the side in financial consulting, sales and prospect generation.

COMMUNITY SERVICES

Reviewing
International Conference on Artificial Intelligence and Statistics 2025
International Conference on Learning Representations 2025
Conference on Neural Information Processing Systems 2024
International Conference on Computer Vision 2023

Teaching & Supervision
Master Thesis, Alejandro Monroy Muñoz (incoming), 2025
Master Thesis, Dominykas Šeputis (incoming), 2025
Master Thesis, Jesse Brouwers (incoming), 2025
Project AI, Master course @ University of Amsterdam, 2024
Human-in-the-Loop ML, Master course @ University of Amsterdam, 2023
Introduction to ML, Bachelor course @ University of Amsterdam, 2023
Bachelor Thesis (**Thesis award**), Derck Prinzhorn, 2023
Deep Learning II, Master course @ University of Amsterdam, 2023
ANOVA, Master course @ ETH Zurich, 2021
Econometrics, Bachelor course @ KIT, 2017

OTHER

Honors: ELLIS PhD Track, 'Deutschlandstipendium' Scholarships 2017 & 2018.
Spoken Languages: English, German, French, Russian.
Coding Languages: Python (incl. PyTorch, Scikit, Numpy, Scipy, Pandas, OpenCV), R, Java, HTML.
Past engagements: Model UN, Debating & Finance Societies, Student Council, Social Entrepreneurship.