Alexander Timans

Email: a.r.timans@uva.nl
Website: alextimans.github.io
Current location: Amsterdam, The Netherlands

EDUCATION

PhD Candidate in Machine Learning Oct 2022 – ongoing
University of Amsterdam, Amsterdam Machine Learning Lab (AMLab)
Thesis Topic: Principled Uncertainty Quantification for Structured Objects.
Supervision: Eric Nalisnick (JHU) & Christian A. Naesseth, in co-op. with the Bosch Center for AI.

M.Sc. Statistics Sep 2020 – Sep 2022
ETH Zurich, Department of Mathematics
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), Department of Economics
Grade: ∅ 1.5/5 (1 highest, Top 10%)
Thesis Topic: Forecasting U.S. Stock Market Illiquidity using Machine Learning Techniques.
Key courses: Statistics, Operations Research, Advanced Programming

RESEARCH PUBLICATIONS

J. Brouwers, X. Xing, **A. Timans**.
Towards Integrating Uncertainty for Domain-Agnostic Segmentation.
In the *2nd Workshop on Frontiers in Probabilistic Inference* at NeurIPS, 2025.

A. Timans*, R. Verma*, E. Nalisnick, C. A. Naesseth.
On Continuous Monitoring of Risk Violations under Unknown Shift [Link].
In *Proceedings of the Conference on Uncertainty in Artificial Intelligence* (UAI), 2025.

P. A. van der Linden, **A. Timans**, E. J. Bekkers.
CP^2: Leveraging Geometry for Conformal Prediction via Canonicalization [Link].
In *Proceedings of the Conference on Uncertainty in Artificial Intelligence* (UAI), 2025.

P. A. van der Linden, **A. Timans**, D. Tailor, E. J. Bekkers.
On Equivariant Model Selection through the Lens of Uncertainty [Link].
In the *8th Workshop on Tractable Probabilistic Modeling* at UAI, 2025.

A. Timans, C.-N. Straehle, K. Sakmann, C. A. Naesseth, E. Nalisnick.
Max-Rank: Efficient Multiple Testing for Conformal Prediction [Link].
In *Proceedings of the Int'l Conference on Artificial Intelligence and Statistics* (AISTATS), 2025.

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.

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.

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 3%)**.

OTHER RESEARCH PROJECTS

A. Timans, N. Wiedemann, N. Kumar, Y. Hong, M. Raubal.
Uncertainty Quantification for Image-based Traffic Prediction across Cities [Link].
Master Thesis, 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 Jan 2025 – Apr 2025
RIKEN Center for Advanced Intelligence Project, Tokyo
I revisited Sparse Bayesian Learning as part of the Adaptive Bayesian Intelligence Team [Link].

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
Association for the Advancement of Artificial Intelligence (AAAI) 2026
Transactions of Machine Learning Research (TMLR) 2025
Int'l Conference on Machine Learning (ICML) 2025
Int'l Conference on Artificial Intelligence and Statistics (AISTATS) 2025, 2026
Int'l Conference on Learning Representations (ICLR) 2025
Neural Information Processing Systems (NeurIPS) 2024 (**Top Reviewer**), 2025
Int'l Conference on Computer Vision (ICCV) 2023

Supervision
MSc Thesis on 'Sequential Testing for Object Tracking', A. Muñoz, 2025
MSc Thesis on 'Fairness in Two-Sided Marketplaces', D. Šeputis, 2025
MSc Thesis on 'Uncertainty for Segment Anything Models', J. Brouwers, 2025
BSc Thesis on 'Conformal Prediction for Time Series', D. Prinzhorn, 2023 (**AI Thesis Award**)

Teaching
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
Deep Learning II, Master course @ University of Amsterdam, 2023
Analysis of Variance (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.