PAULIUS SKAISGIRIS

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PROFILE

MSc Logic graduate seeking to build provably safe AI through scalable formal methods. Experienced leader with a strong track record in demanding environments. Passionate about simplifying and conveying complex concepts.

HIGHER EDUCATION

MSc in Logic (Logic and Computation track)

University of Amsterdam, Institute for Logic, Language and Computation

Sep 2022 – Apr 2025

Thesis: Inductive Learning of Temporal Advice Formulae for Guiding Planners

Supervisors: Balder ten Cate and Daniele Meli

Selected logic courses: modal logic • computational learning theory • logics for safe AI • dynamic epistemic logic • computational complexity • topology, logic, and learning • mathematical structures in logic • functional programming.

Selected AI courses: information theory • advanced topics in computational semantics • causality • reinforcement learning • deep learning for NLP • machine learning 1.

Regularly attended the Logic and Interactive Rationality as well as Formalisation, Optimisation, Algorithms, Mechanisms seminars at the ILLC.

BSc in Data Science and Artificial Intelligence

Maastricht University

Sep 2018 – Jul 2021

Thesis: Formal Verification of Neural Networks for Sentiment Classification

Supervisor: Pieter J. Collins

Selected courses: probability & statistics • software engineering • linear algebra • linear programming • calculus • game theory • natural language processing • software and systems verification • reasoning techniques

Worked as faculty student ambassador, active in student association MSV Incognito as tech committee member and in '20/'21 as the board president.

PUBLICATIONS

- **Skaisgiris, P.**, Simoncini, W., Barbero, F., Ahangi A., Möckel R. (2021). "Pyseidon - A Data-Driven Maritime Port Simulation Framework". *Proceedings of the International Conference on Computer Modeling and Simulation (ICCMS)*, ACM.
- Fan, J., Cadigan, L., **Skaisgiris, P.**, Arias, S. U. (2024). "Reproducibility Study of 'Learning Perturbations to Explain Time Series Predictions'". *Transactions on Machine Learning Research*.

OTHER EDUCATION

Here is a list of non-university curricula I've completed:

- Applied time series forecasting
- Artificial General Intelligence Safety Fundamentals
- Artificial General Intelligence Safety Fundamentals 201
- Introduction to Machine Learning Safety
- AI Safety, Ethics and Society

PROGRAMMING

Competent:

- Python
  - NumPy, SciPy, Pandas
  - Sci-kit learn, Tensorflow, PyTorch
  - Statsmodels, Kats
  - Matplotlib, Seaborn, Plotly
- C#
  - ArcObjects
  - Windows Forms
  - COM objects
- Java
  - swing

Familiar:

- Haskell
- Logic and answer set programming
- julia
- R
- PostgreSQL
- C
  - OpenMP
  - MPI

AWARDS

- The Amrapali Zaveri Award for Future Data Scientist 2022

LANGUAGES

Lithuanian	Native
English	Professional working proficiency

REFERENCES

Professional and academic references available upon request.

WORK EXPERIENCE

Python Teacher

CodeAcademy

Feb 2023 – Present | Remote

- Teaching Python basics as well as advanced topics such as Data analysis, Flask, Django, and Linux to career-shifting professionals.

Conceptual research lead

AI Safety Camp

Jan 2024 – May 2024 | Remote

- Worked on a project where we developed standards that should facilitate the development of effective safeguards for huge AI (foundation) models.

Course Facilitator

Center for AI Safety

Jun 2023 – Aug 2023, Jul 2024 – Sep 2024 | Remote

- Facilitated the Intro to ML safety course and AI Safety, Ethics and Society Course. Leading discussions and grading assignments about topics on Machine Learning Safety Engineering, Robustness, Monitoring, Alignment and others.

Machine Learning Engineer & Team Lead

IconPro GmbH

Aug 2021 – Aug 2022 | Aachen, Germany

- I was the core developer and supervised a team of seven to develop a time series analysis and forecasting tool in python end-to-end.
- Applying our product and time series know-how in various Predictive Quality/Maintenance use-cases including AI-NET-ANIARA research project.

GIS Developer

Progira

Jun 2018 – Aug 2018; May 2019 – Jul 2021 | Vilnius, Lithuania; Remote

- Developed software used for spectrum planning and optimization, geospatial analytics, and Graphical User Interfaces for GIS object editing.

Teacher

ICANCODE School

Oct 2020 – Jun 2021 | Maastricht, The Netherlands

- Taught algorithmic thinking to 7-9 year olds through creative and fun exercises using technologies such as Scratch, Minecraft code builder, Lego WEDO, basic HTML and CSS.

Research Student (Honours Research track)

Maastricht University

Sep 2019 – Jul 2020, Sep 2020 – Jan 2021 | Maastricht, The Netherlands

- Developed PySeidon, a data-driven framework in Python to simulate maritime port infrastructure and its agents, created methods for the tool to simulate anomalous situations in the port as well as tools to detect these non-standard behaviours.
- Carried out a simulation study for Port of Rotterdam using PySeidon to recommend the best course of action in a given port situation. Wrote a paper on the findings which got published at a conference.

PROJECTS

For a more complete list and descriptions of the projects, please visit the portfolio section of my website.

- Bridging statistical learning theory and dynamic epistemic logic (currently private)
- Investigating the cross-lingual sharing mechanism of multilingual models through their subnetworks
- InferSent sentence representations from scratch
- Causality study - how social networks influence one's decision to insure
- Measuring and mitigating factual hallucinations for text summarization
- Towards counterfactual logics for machine learning
- Topomodels in Haskell
- Aspect-Based Sentiment Analysis

INTERESTS

- AI Safety. I am actively involved in AI Safety initiatives, especially the ones in Amsterdam, attending retreats, EA events. In March-April 2024 I led the organizational efforts for an AI Safety retreat in the Netherlands for which we received a grant from Open Philanthropy.
- Music. I regularly attend concerts and have been playing electric bass guitar for over a decade. In the past I have played in a brass orchestra and a jazz big band.
- Plant-care. Currently, I own and nurture an indoor garden of 30+ plants.
- Travelling. I enjoy exploring the world sustainably, regardless of the challenges.
- Cooking. Enthusiastic about exploring international vegan recipes. In Summer 2024, I worked as a cook at a summer school catering to over 120 participants.