

Derck Prinzhorn

Curriculum Vitae

Profile

MSc AI student with the ambition to innovate society. Recently finished my BSc thesis on conformal prediction for time series. Now I'm pursuing a MSc and possibly later a PhD in AI, for which I'm looking to gain research experience. Next to my studies I have several side jobs, working as a Machine Learning Architect, ML Engineer and Project Manager.

Education

2023 – 2026 **Master of Science Artificial Intelligence**, *University of Amsterdam*.

2020 – 2023 **Bachelor of Science Artificial Intelligence (3rd year)**, **162/180 EC**, *University of Amsterdam*, GPA: 8.2.

Electives

Search Engines, Speech Analysis and Synthesis, Causality and Common Sense Reasoning, Foundations of Multi-Agent Systems, AI for Society, Autonomous Mobile Robots

Thesis

My thesis called *benchmarking conformal prediction methods for time series regression* implements various adaptive conformal methods and benchmarks their performance in an empirical setting.

2014 – 2020 **VWO Gymnasium, N&G en N&T and economics**, *Het Amsterdams Lyceum*.

Experience

apr. 2023 – **Machine Learning Architect**, *Politie Nederland*, Amsterdam.

present Responsibilities include:

- AI Safety and Ethics
- MLOps

sep. 2022 – **Project Manager**, *Dutch Nao Team*, Amsterdam.

present Responsibilities include:

- Manage roadmap and projects
- Coordinate external collaboration
- Construct teams and facilitate teamwork
- Scrum master
- Working as an engineer on AI projects

aug. 2022 – jul. 2023 **Teaching Assistant**, *University of Amsterdam*, Amsterdam.

Teaching Assistant for the following courses:

- Bayesian Statistics for Machine Learning
- Introduction to Machine Learning
- Machine Learning and Decision making (ML Project)
- Datastructures and Algorithms
- Cognitive Modelling (Reinforcement Learning)
- Information Visualization

- sep. 2021 – apr. 2023 **Student Member Programme Committee AI**, *University of Amsterdam*, Amsterdam.
Responsibilities include:
- Discussing current events concerning the AI programme
 - Carry out course evaluations
 - Issue opinions
 - Assist with unresolved issues between students and teachers
- jul. 2022 – jan. 2023 **Software Team Lead**, *LeerLevels*, Amsterdam.
Responsibilities include:
- Managing project progress of our software team
 - Company supervisor for our app development project, working together with 5 computer science interns
- oct. 2021 – jul. 2022 **Software Engineer**, *LeerLevels*, Amsterdam.
Worked on several projects including:
- Developing an automatic grading algorithm
 - Building a custom search engine
 - Developing a physics topic predictor, based on text in an image
 - Recommender system for physics topics
- jan. 2022 **AI Intern**, *KR&A*.
One month AI project for KR&A. The goal was to find historic drivers of real estate valuation growth by using ML techniques.
- jan. 2020 – jun. 2021 **Senior Tutor**, *Bijles Aan Huis*, Amsterdam.
High school tutor in mathematics, chemistry, physics, economics, biology, Latin, Dutch language, arithmetic and homework assistance.

Projects

- June 2022 **Robotics Hackathon ERF2022, 2nd place**, *European Robotics Forum*, Rotterdam.
During the European Robotics Forum I participated in the Robotics Hackathon. My role was to be Scrum master & python developer. In two weeks time we created robot software for the Lely Juno robot, without any prior robotics experience. We became second, with our competition being robotics master students.

Volunteering

- jun. 2021 – may 2023 **Board Advisor**, *Stichting Hoormij*, Houten.
Advisor to the board of Hoormij.NVVS. Primarily focused on tinnitus and innovation within the organization. Discussing current events and planning strategies in monthly board meetings and biannual strategic sessions.
- jan. 2021 – apr. 2022 **Secretary committee Tinnitus Jong Network**, *Stichting Hoormij*, Houten.
Contributed to the establishment of TJN. For a long time I was secretary of the committee, in addition keeping an overview on proceedings of the committee. Furthermore I'm still involved in creating a campaign in relation to young people with tinnitus in education and I'm working on reintroducing a tinnitus master thesis award.
- feb. 2020 – oct. 2021 **Lifecoach**, *Stichting Studiezalen*, Amsterdam.
Lifecoach for high school student. This involved coaching and homework tutoring.
- oct. 2020 – aug. 2021 **Mentor**, *School's cool*, Amsterdam.
Personal mentor for primary school student. Focused on transition to high school, language and arithmetic backlogs and home situation.

Technical Skills

Programming Languages

Advanced Python

Basic Rust, C, HTML, CSS, JavaScript

Tools

Version Control GitHub

Scientific Jupyter, Numpy, Astropy, pandas, matplotlib

ML scikit-learn, PyTorch, TensorFlow, OpenCV, Jax

Database Firebase (Cloud firestore)

API Flask, Postman

Robotics ROS

Languages

Dutch **Native**

English **Professional**

Interests

Sports Ever since I went to high school, fitness has been one of my favourite things to do.

Education One of my passions is education. I believe the way education is set up is based on old fashioned techniques, which I hope to innovate.

Reading I like to read non-fiction books about all sorts of things. From philosophy to business.