Łukasz Sawala

lukaszsawala2003@gmail.com +48781488408 Łukasz Sawala LukaszSawala

Personal Statement

AI Engineer with proven leadership experience, managing 3–5 person teams in robotics and AI projects. Strong track record in building production-ready models and prototypes, applied in real-world contexts with impact on 100+ users and stakeholders. Skilled in deep learning, reinforcement learning, and LLMs. Recognized for combining technical expertise with the ability to guide teams, align stakeholders, and deliver innovative, data-driven solutions.

Experience

Subteam Navigation Lead, Makercie Space Rover Team — October 2024 – Jun 2025

- Coordinated a team of 5 engineers to develop a navigation system for a fully functional, NASA-inspired independent Mars rover, preparing the student team for the European Rover Challenge. Website
- **Developed Systems:** Sensor Fusion via SLAM, Object Detection and Avoidance, Teleoperation, Autonomous Driving, covering 25% of mission functionality.

Teaching Assistant, University of Groningen — Feb 2024 – Jun 2025

- **Topics:** Signals and Systems for AI, Algorithms and Data Structures in Python, Robotics
- Led, taught and evaluated $\sim$100 Bachelor AI students
- Earned multiple explicit positive mentions in course evaluations, reflecting high respect among students.

Education

MSc **Artificial Intelligence**, University of Amsterdam — Sept 2025 - Current

- **Coursework:** Deep Learning, Data Science, NLP, Programming, Mathematics

BSc **Artificial Intelligence**, University of Groningen — Sept 2022 - Jun 2025

- GPA: 9 - ***Cum Laude*** distinction
- **Nominations:** GUF-100 2025 for best students at the university, TA of the Year 2024
- **Extracurriculars:** Honours College, a diverse 2-year program with deepening and broadening courses for the best students within the university
- **Activities:** Elected Councilman at the Faculty of Science and Engineering, representing a body of over 6000 students at the faculty, drove vital improvement of the TA policies and faculty financial efficiency.

  2-year member of the Committee of External Affairs (ComExA) of Study Association Cover, obtaining and maintaining key sponsorship deals for the association.

Projects

Low-Latency Language-Action Foundation Models via Upside-Down RL — GitHub Repo

- Pioneered two novel transformer-based architectures for scalable and easy command-conditioned control in high-dimensional continuous environments, achieving superior alignment, generalization, and efficiency over baselines.
- Developed transfer learning and self-imitation pipelines enabling robust adaptation to stochastic, goal-conditioned tasks, demonstrating potential for real-world

deployment in low-resource and embedded settings.

- Skills Gained: PyTorch, Offline RL, Transfer Learning, Transformer Architectures, HDF5 Data Pipelines

Data-Driven Forecasting in Urban Environments GitHub Repo

- Developed an end-to-end SaaS project to predict NO2 and O3 levels in Utrecht, contributing to the open-source environmental sustainability initiative Open Sustainable Technology.
- Skills Gained: MLflow, StreamLit, fastAPI

Outpacing the Market with Automated Financial News Sentiment Analysis GitHub Repo

- Developed an end-to-end programming project applying SOTA LLM-based methods to predict market responses to live-fetched biotech company press releases.
- Skills Gained: HuggingFace, HPC, Python

Exploring the role of artificial Theory of Mind in human-agent negotiations GitHub Repo

- Developed a reusable research environment that enabled testing of 30+ distinct human-agent interaction hypotheses using the Colored Trails game.
- Skills Gained: Java, UI, and OOP design

Cover Career Day 2023 & 2024

- Connecting 200+ AI&CS students at the University with potential employers from multiple tech companies via a full day of talks, lectures, and info markets.

Awards

Cognitive Model Blackjack competition winner 2024

- Developed the winning cognitive model for the blackjack challenge using the Adaptive Control of Thought-Rational (ACT-R) framework.
- Tied for the first place as all-time best in the course history, achieving a winrate of 45.7%

RDW Lego Self-Driving challenge winner 2023

- Utilizing sensor fusion in a time-intensive, in-office, self-driving challenge.
- Combating data scarcity with clever heuristics.

Skills

Technical Skills: Python, Java, PyTorch, Transformers, FastAPI, Signal Processing, Statistics, Deep Learning, NLP, Git, Streamlit, Robotics.

Soft Skills: Project Management, Efficient Teamworking, Communication, Conflict Management.

Languages: Polish (Native), English (Proficient).