

Kival Mahadew

Computer Scientist



About me

I am a highly motivated and skilled computer science graduate student with a strong passion for optimisation and machine learning. I am adept at quickly grasping new concepts and applying them to solve complex problems. I am looking to further my studies in the field of artificial intelligence and machine learning, with a focus on Cooperative Multi-Agent Systems.

Personal

Kival Mahadew
Durban - South Africa
21 April 2003

Research Interests

Reinforcement Learning,
Multi-Agent Systems, Artificial
Intelligence, Computational
Cognition

Other Interests

Open-source projects, Backend
Programming, Optimisation,
WebAssembly, Competitive
Programming

Hobbies

Video Games, Reading, Guitar

Durban, South Africa

Contact

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 KivalM
 kivalm.com

EDUCATION

- 2024-Now **Bachelor of Science Honors in Computer Science**
UNIVERSITY OF KWA-ZULU NATAL ·
Coursework: Lattice Theory, Sequence Modelling, Computer Vision, Ontologies, Quantum Computing, Artificial Intelligence.
Research Focus: Cooperative Multi-Agent Reinforcement Learning.
- 2021-2023 **Bachelor of Science in Computer Science (Cum Laude)**
UNIVERSITY OF KWA-ZULU NATAL ·
Coursework: Software Design, Natural Language Processing, Machine Learning fundamentals.

RESEARCH EXPERIENCE

- 2024-now **Cooperative Multi-Agent Reinforcement Learning**
STUDENT · University of Kwa-Zulu Natal
Investigated the Zero-Shot Coordination problem in Cooperative Multi-Agent Reinforcement Learning, specifically focusing on the game Hanabi.
(in progress)

PROFESSIONAL EXPERIENCE

- 2022-2023 **Software Engineer (Lead)/ ML Engineer**
DEVELOPER · QuickAI
Lead software at a USA-based startup - a platform that provides Data Science and Machine Learning solutions to businesses. Developed a platform that allows users to perform statistical analysis, data visualisation, and machine learning tasks entirely in the browser.
Built a high performance system for log capture and analysis.
Contributed to a variety of major open-source projects, including porting key functionality to WebAssembly.
- 2020-2022 **Freelance Software Developer**
DEVELOPER · Upwork
Catered to startups internationally, providing expertise in backend programming, API development, and microservices. Developed web applications using React, Yew, SvelteKit, TypeScript, and TailwindCSS. Specialized in WebAssembly development with Rust. Worked with various databases including Postgres and SurrealDB. Deployed and inferred systems based on LLMs. Engaged in pair programming and tutoring positions.
- 2021-2022 **Competitive Programming Tutor**
EDUCATOR · Star College
Prepared high school students for the South African Programming Olympiad, guiding them in problem-solving and programming skills, leading to participation in the International Olympiad in Informatics (IOI).

ACHIEVEMENTS

- 2024** A2SV AI for Impact Challenge - Semi-Finalist (on-going)
- 2024** Entelect Hackathon - Fifth Place
- 2023** Cum Laude Graduate
- 2022** BBD Hackathon - Second Place
- 2020** South African Programming Olympiad Finalist

LANGUAGES

English	Native
Afrikaans	Limited working proficiency