Ervin Macić

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EDUCATION

University of Oxford

Oct 2024 – Jun 2027 Oxford, United Kingdom

Bachelor of Science in Mathematics and Computer Science

Distinction (ranked 11th out of 51)

University of Sarajevo

Oct 2023 - Jul 2024

Bachelor of Engineering in Computer Science

9.8/10.0 - Top of class

Sarajevo, Bosnia and Herzegovina

SKILLS

Programming: Python (PyTorch, TensorFlow, NumPy), C++, C, Haskell, Scala, JavaScript, Git, LaTeX

Languages: Bosnian (native) | English (professional proficiency) | German (limited proficiency)

PROJECTS AND EXPERIENCES

Discover Citadel

Mar 2025

Participant

London, United Kingdom

• Gained insight into the Citadel and Citadel Securities business, and won 1st place in the engineering and 2nd place in the trading competition out of 10 teams

AI Alignment Research Bootcamp Oxford

Jan 2025

Participant

Oxford, United Kingdom

- Developed research skills in AI safety during a 2-week intensive bootcamp
- Built GPT-2-small, applied cutting-edge interpretability and AI safety techniques like Sparse Autoencoders and Reinforcement Learning from Human Feedback (RLHF)

Isaac code - Cow Gazer

Feb 2021 – Oct 2024

Junior Machine Learning and IoT Engineer

Glamoč, Bosnia and Herzegovina

- Worked on a smart cattle monitoring system "Cow Gazer" making extensive agriculture more efficient while increasing animal welfare, co-funded by the European Union through the EU4AGRI grant
- Configured weight scales, cameras, and Raspberry Pi devices with AI accelerators to enable automated data collection and processing
- Implemented object detection to identify cattle and developed forecasting algorithms on weight data to notify farmers of trends and anomalies

ARTI Analytics

Sep 2023 – Oct 2024

AI Research Associate

Sarajevo, Bosnia and Herzegovina

- Developed an extension to the TensorFlow neural network module allowing the creation, visualisation, and analysis of graph neural networks while maintaining training efficiency
- Sped up model training with minor losses in accuracy using decomposition and quantization algorithms

Bosnian-Herzegovinian Math Olympiad Society

Sep 2022 - Present

Lecturer and Problem Proposer

Sarajevo, Bosnia and Herzegovina

- Lectured and made mock exams at the International Math Olympiad (IMO) preparation camp for the Bosnian-Herzegovinian team. Proposed and graded three of the six problems for the IMO Team Selection Test 2024
- Acted as the leader of the IMO team during the 3-week International Math Summer Camp 2024 in Beijing, China

SELECTED AWARDS AND HONOURS

Bronze medal, International Mathematical Olympiad 2023

Silver medal, Balkan Mathematical Olympiad 2021

Cyprus (Online)

Bronze medal, International Mathematical Olympiad 2021

St Petersburg, Russia (Online)

Second prize, Non-Trivial Fellowship 2023

Open Philanthropy Undergraduate Scholarship 2024

BIG Scholar, Global Talent Fund 2024

Online

Chiba, Japan