Rosco Hunter

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INTERNSHIPS AND COLLABORATIONS

Freelance AI Safety Projects

Jan. 2024 – Present

- Awarded a Technical Governance Fellowship at the Existential Risk Alliance (based at Cambridge University) to analyse the alignment of large language models (LLMs) in comparison to other safety-critical domains
- Researched the opportunities and risks of open-source LLMs with guidance from Ben Bucknall

Abacus.AI Jan. 2024 – Mar. 2024

- Analysed the precision of open-source LLMs at arithmetic tasks involving many-digit numbers
- Designed a mixture-of-experts to improve the efficiency and performance of LLaMA at arithmetic

Samsung AI Centre – Cambridge

Jan. 2023 – Dec. 2023

- Developed techniques for computer vision that achieve state-of-the-art efficiency, resulting in two papers:
 - o Fast Inference Through the Reuse of Attention Maps in Diffusion Models [pdf]
 - o Exploiting Network Compressibility and Topology in Zero-Cost NAS [pdf]

Oxford Centre for Computational Neuroscience

Jun. 2021 – Dec. 2022

- Refined a causal model of the human connectome with supervision from Prof. Edmund Rolls (h-index: 178)
- Acknowledged in a collection of "Effective Connectivity" papers that have since accrued over 250 citations

EDUCATION

University of Warwick

Oct. 2019 - Present

PhD in Machine Learning (2022-Present)

- Thesis: "Neural Architecture Search for Efficient Computer Vision" Funded by the EPSRC
- Awarded 'Best Paper' at the International Conference on Automated Machine Learning (Berlin, 2023)

BSc Mathematics (2019-2022)

- First Class Degree (85.0%) receiving a first in all 25 assessed modules (top 5% of cohort)
- Key Modules: Mathematics of Machine Learning; Mathematical Biology; Neural Computing; Bifurcations & Symmetries; Modelling & Numerics; Measure Theory; Applied Dynamical Systems; Advanced Linear Algebra

Secondary Education

Oct. 2015 – Jul. 2019

- A-levels: 4 A*s in Mathematics, Further Mathematics, Physics, Psychology (top 1% of the UK)
- GCSEs: 10 A*s with a distinction in Further Mathematics (top 1% of the UK)

TEACHING & SPEAKING

- Graduate Teaching Assistant:
 - Mathematics of Machine Learning (MA3K1), University of Warwick, 2024
 - First-Year Mathematics Supervisor, University of Warwick, 2023
- Public Speaking:
 - Best Paper Talk, International Conference on Automated Machine Learning, Hasso-Plattner Institute, 2023
 - Zero-Cost Proxies for Neural Architecture Search, WPCCS, University of Warwick, 2022