Rosco Hunter

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INTERNSHIPS AND COLLABORATIONS

Existential Risk Alliance

Jul. 2024 - Aug. 2024

- Awarded a Technical Governance AI Fellowship, based at the University of Cambridge
- Developing policy recommendations to help identify and mitigate systemic risks from advanced AI

Abacus.AI Jan. 2024 – Mar. 2024

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

Samsung Cambridge AI Lab

Oct. 2022 - Dec. 2023

- Developed techniques for computer vision that achieve state-of-the-art efficiency, resulting in two papers:
 - o Fast Sampling 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 – Sep. 2022

- Refined a causal model of the human connectome with supervision from Prof. Edmund Rolls
- Acknowledged in a collection of "Effective Connectivity" papers that have since accrued over 300 citations

EDUCATION

University of Warwick

Oct. 2019 - Present

PhD in Machine Learning (2022-Present)

- Researching neural architecture search for efficient computer vision—Supervised by Prof. Hongkai Wen
- 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

- Seminar Tutor for the Mathematics of Machine Learning (University of Warwick, 2024)
- Mathematics Supervisor for eight first-year students (University of Warwick, 2023)

Public Speaking

- Talk: Exploiting Network Compressibility and Topology in Zero-Cost NAS (AutoML, 2023)
- Talk: Zero-Cost Proxies for Neural Architecture Search (WPCCS, 2022)