

EDUCATION

University of Cambridge

Cambridge, UK
Oct. 2024 – Jun. 2028

Master of Engineering, Top 4% of cohort

Course includes: Information engineering, mathematics, linear systems and electronics.

NUS High School of Maths and Science

Singapore
Jan. 2016 - Dec. 2021

NUSH diploma, 4.9/5.0 GPA

Majored in Computer Science (A*), Physics (A*), Math (A*), Chemistry (A*)

Principal's List recipient (Top 5% of cohort)

PROJECTS

Understanding LLM generalization through fine-tuning (SPAR)

Cambridge, UK
Feb. 2026 – May 2026

- Conducted alignment research on LLM fine-tuning generalization under mentor supervision, taking ownership of literature review, experimental decisions, and result analysis
- Designed and ran experiments using SDF; visualized and interpreted results, contributing to written research outputs

Cambridge University AI Safety Hub (CAISH) Alignment Desk and Fellowship

Cambridge, UK
Oct. 2024 – Dec 2025

- Scoped, researched and produced 2 written posts about AI safety evaluations as part of the CAISH Alignment Desk
- Took part in the CAISH alignment fellowship, a 6-week intensive reading group and workshop series discussing state-of-the-art AI safety research.

Alignment Research Bootcamp Oxford (ARBOx)

Oxford, UK
Jan 2025

- Two-week technical safety bootcamp covering transformers, reinforcement learning and mechanistic interpretability.

EXPERIENCE

Fabrica.AI

Singapore
Jul. 2025 – Sept. 2025

Software Engineering Intern

- Worked in a team developing automated robots for construction.
- Improved the mapping system by integrating a new LiDAR, reducing redundancy from two sensors to one while increasing range and reliability.
- Developed and deployed in Dockerized ROS 2 environments, managing version control and parameters across development, testing, and live production.

Defense Science and Technology Agency

Singapore
Apr. 2024 – Sept. 2024

Engineering Intern

- Developed drone countermeasures as part of a team.
- Proposed and implemented an alternative video transmission method, improving frame rate by 30% and reducing bandwidth usage by 75%.
- Transitioned the network architecture from a 1.2 kg router to a 0.14 kg transmitter and produced detailed documentation.

DSO National Laboratories

Singapore
Jan. 2024 - Mar 2024

Research Intern

- Investigated methods to generate unit vector embeddings from small datasets.
- Applied tools like Lagrange multipliers and nearest-correlation matrices for numerical solutions.
- Built a Python codebase using NumPy with unit tests and documentation, ensuring reproducibility and clarity.

Defense Science and Technology Agency

Singapore
Oct. 2018 – Nov. 2018

Research Intern

- Developed and optimized a computer vision model to detect and classify vehicles in aerial imagery.
- Conducted data processing and literature reviews, and optimized image-processing pipelines for higher accuracy.
- Utilized Pandas, Numpy and TensorFlow for data cleaning and model training.

AWARDS

Asian Physics Olympiad 2021 (Silver)

May 2021

Placed 33rd globally and 2nd in Singapore

Singapore Physics Olympiad 2020 (Gold)

Nov. 2020

Placed top 28 nationally

Singapore Junior Physics Olympiad (Gold 2018 - 2019)

Jul. 2018 and 2019

*Top 32 nationally for 2 years consecutively
Highest mechanics score nationally in 2019.*

SKILLS

Programming Languages: Python, Java, C++

Development Tools: Linux, Git, Docker, Gradle, Conda