Zhu Yufan
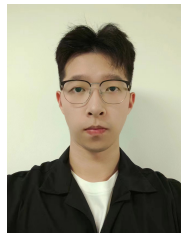
✉ e0773591@u.nus.edu   🔗 yufan-zhu-36024a225   ⭘ Yufannnn

Education

Aug 2021 – May 2025	**National University of Singapore** B.Sc in Computer Science with 2nd Major in Statistics, Focus Area: Artificial Intelligence GPA: 4.5/ 5.0
Feb 2019 – Dec 2020	**Eunoia Junior College** A Level result: AAAA/A

Scholarship and Awards

2023	Honor List of Student Tutors for Excellence in Teaching
2021-2025	NUS Science and Technology Merit Scholarship Recipient
2016-2020	MOE School-based Scholarship (SM1 Scholarship) Recipient

Research Publications

2024	**A Personalized Learning Tool for Physics Undergraduate Students Built On a Large Language Model for Symbolic Regression** Yufan Zhu, Zi-Yu Khoo, Jonathan Sze Choong Low, Stephane Bressan. *In Proceedings of the 2024 IEEE Conference on Artificial Intelligence.*

Employment History

May 2024 - August 2024	**Machine Learning Research Engineer Intern**, A*STAR Conducted QA, model training, and compatibility checks for ML on homomorphically encrypted data. Skills: software testing, API testing, ML, data security.
May 2023 - August 2023	**AI Engineer Intern**, KiWi Augmented Retail Technology Led a team of three to develop a pipeline for automatic poster generation using Stable Diffusion and LLM. Skills: backend API development, microservice design, object recognition, and product management.

Relevant Experience

May 2024 - Aug 2024	**Research Assistant**, National University of Singapore Participated in a paper on Artificial Intelligence Generated Content in Marketing with PhD student Bruce Yang, supervised by Professors Li Xiaofan and Qiao Dandan, under CP2107 Independent Introduction to CS Research (Odyssey).
July 2024 - Present	**Research Assistant**, Nanyang Technological University & A*STAR Participated in developing a Quantum Enhanced Machine Learning research project supervised by Professor Gu Mile of NTU and Dr. Jayne Thompson of A*STAR.
May 2023 - Present	**Student Researcher**, National University of Singapore Undergraduate Research: Worked on Symbolic Regression with LLMs under Professor Stephane Bressan and Dr. Khoo Zi-Yu, achieving an A+ grade. Final Year Project (Ongoing): Developing an FHE Model for Evaluating LLMs on MAMBA Architecture, supervised by Professor Xiao Xiaokui and Dr. Jin Chao from A*Star.
Aug 2022 - Present	**Teaching Assistant**, National University of Singapore Conducted weekly tutorials and labs, graded assignments, and held consultations for CS1101S (Programming Methodology), CS2100 (Computer Organization), and CS2106 (Introduction to Operating Systems).
Nov 2022 - Present	**Student Tutor**, Raffles Institution Boarding School Organize events and provide academic and living support to boarders. Assist in upgrading the boarding school management system.

Project Experience

Ongoing **Design Your Own Module**
Collaborating with Gtriip, a startup tech company, to develop an AI chatbot for hotel management using RAGflow, under the supervision of Dr. Prabhu at NUS.

2023 **Bayesian Stroke Prediction (CS3263 - Foundation of AI)**
Led a team of three to develop a Bayesian modeling approach for stroke prediction, which won the **Best Project Award** in CS3263 under Professor Leong Tze Yun.

Morning Duty Tool and **Night Duty Tool**, Raffles Institution Boarding School
Led a team of three to develop web and desktop tools to streamline task management for student tutors at Raffles Institution Boarding School, including daily roll calls, morning check, and prep check.

TutroPro (CS2103T - Software Engineering)
Led a team of four to create a desktop software solution for private tutors, simplifying administrative tasks and enhancing workflow efficiency.

2022 **Personal Blog Website**
Developed a personal blog website using Cloudflare, Hugo, and AWS services such as S3 and CloudFront, showcasing my personal experiences and interests.

Volunteer Experience

Aug 2019 **Programming Mentor for Underprivileged Kids**
Taught a basic programming language, Scratch, to primary students from low-income families, enhancing their digital literacy.

Skills

Languages	English (proficient), Mandarin Chinese (proficient)
Programming Languages	Python, Java, C++, C, R, JavaScript, HTML, CSS, Bash, LaTeX, Markdown
Databases	MySQL, PostgreSQL, MongoDB, SQLite
Web Development	HTML, CSS, JavaScript, React, Node.js, Django, Flask
Machine Learning and Data Science	NumPy, Pandas, PyTorch, TensorFlow, Scikit-Learn, OpenCV, Stata
DevOps and Tools	Git, Docker, JIRA, Linux, AWS Services (EC2, S3 etc.), Google Cloud Platform
Other Skills	Academic research, teaching, technical writing, project management