Zhu Yufan

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Education

Aug 2025 – May 2029	🔖	**National University of Singapore** Ph.D. in Computer Science, Research Focus: Privacy-Preserving Machine Learning.
Aug 2021 – May 2025	🔖	**National University of Singapore** B.Comp in Computer Science with 2nd Major in Statistics, Focus Areas: Artificial Intelligence & Database. GPA: 4.5/ 5.0
Feb 2019 – Dec 2020	🔖	**Eunoia Junior College** A Level result: AAAA/A

Scholarships

2025-2029	🔖	NUS Research Scholarship Recipient
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 Engineer Intern**, A*STAR Conducted model training, validation, and performance optimization for machine learning pipelines deployed on Google Cloud Platform.
Jan 2024 - May 2024	🔖	**Generative Artificial Intelligence Engineer Intern**, KiWi Augmented Retail Technology Led a team of three to develop a pipeline for automatic poster generation with SD and LLM.

Research Experiences

May 2023 - Present	🔖	**Undergraduate Researcher**, National University of Singapore & A*STAR UROP: Investigating Symbolic Regression with LLMs with few-shot learning FYP (Ongoing): Developing an FHE Model for Evaluating LLMs on MAMBA Architecture.
July 2024 - Jan 2025	🔖	**Research Assistant**, Nanyang Technological University & Centre for Quantum Technologies Participated in Quantum Enhanced ML research using variational quantum algorithms
May 2024 - Aug 2024	🔖	**Research Assistant**, National University of Singapore Odyssey: Participated in a paper on a theory-driven AIGC framework for visual marketing.

Relevant Experiences

Aug 2022 - Present	🔖	**Teaching Assistant**, National University of Singapore Conducted weekly tutorials or labs for CS1101S (Programming Methodology), CS2100 (Computer Organization), CS2106 (Introduction to Operating Systems), and CS4248 (Natural Language Processing). Won the **Honor List of Student Tutors for Excellence in Teaching**.
Nov 2022 - Present	🔖	**Residential Assistant**, Raffles Institution Boarding School Organize events and provide academic and living support to boarders. Assist in upgrading the boarding school management system.

Project Experiences

2024	🔖	**SplaXBERT Model for Question Answering** Led a team of four in fine-tuning an enhanced BERT-based model, with mixed precision training and context splitting to optimize performance on SQuAD V1.1 tasks.
2023	🔖	**Bayesian Stroke Prediction** Led a team of three to develop a Bayesian model for stroke prediction, Won the **Best Project Award**.
	🔖	**Morning Duty Tool** and **Night Duty Tool**, Raffles Institution Boarding School Led a team of three to develop web tools to streamline task management for tutors at RI Boarding School.

Project Experiences (continued)

TutorPro: Interactive Tool for Private Tutors
Led a team of four to create a desktop software solution for private tutors, simplifying administrative tasks and enhancing workflow efficiency.

2022   **AI Agent for "Breakthrough"**
Designed an AI agent for the "Breakthrough" board game, employing iterative deepening minimax search for strategic gameplay.

Professional Certificates

Feb 205   AWS Certified Machine Learning Engineer - Associate

Available Period

1st May 2025 to 31st July 2025 (full-time)