

Khang Tran

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Education

Princeton University

Physics A.B. with Minors in Engineering Physics, and Robotics

Sept 2024 – May 2028

Princeton, NJ

- **Grade:** 3.9/4.0
- **Relevant Coursework:** Quantum Physics (PHY 207 & PHY 208), Algorithms & Data Structures (COS 226)
- **Extracurricular:** Princeton Students in Quantum, Rocketry (Liquid Rocketry), Robotics (Robocup Team)
- **Awards:** IBM Qiskit Hackathon Champion (Hardware Category); Princeton COSCON 5th (Undegrad), 7th (Overall)
- **Events:** SpaceVision 2024, MIT IQuHACK 2025, YQuantum 2025

National University of Singapore

Dual Enrollment in Computer Science and Computer Engineering

Aug 2022 – May 2023

Singapore

- **Grade:** A
- **Relevant Coursework:** Computer Organization, Introduction to Operating Systems

Technical Skills

Software: KiCAD, Fusion 360, Onshape, Blender, Adobe Premiere Pro

Languages: HTML, (S)CSS, JAVASCRIPT, TYPESCRIPT, PYTHON, C/C++, JAVA, KOTLIN, SQL, MATLAB/OCTAVE, MATHEMATICA, L^AT_EX, Vietnamese, English

Frameworks/Libraries: SVELTE, FLASK, JAVAFX, NODE.JS, TENSORFLOW, NLTK, SPACY, SCIPY, SYMPY, ETC...

Engineering: Machine Learning (Natural Language Processing and Image Recognition), Operating System Design, Concurrent Programming, Low-level/Bare-metal Programming, Circuit Analysis, Signal Processing, Microcontrollers

Experience

Summer Research Intern

High Meadows Environmental Institute

Princeton, NJ

Jun 8 - Aug 3

- Studying the effects of varying forcing strengths on the Artic Amplification phenomenon under the guidance of Ivan Mitevski in Gabriel Vecchi's lab.

Physics Olympiad Problem Setter

Singapore Physics League Organizing Team (2024 & 2025)

Singapore

Sep 2023 – present

- Contribute in the setting and reviewing of problems in Singapore Physics League 2024 & 2025, a national Physics Olympiad in Singapore.

Space Systems Engineer Intern

Aliena

Singapore

Oct 2023 – Mar 2024

- Designed and built hardware and software for testing the Electronic Control Unit on Aliena's current Hall thruster.
- Developed end-to-end software pipeline for remote automation of lab equipment for ignition test of Aliena's 5A cathodes.

Projects

Shielding-Free Signal Noise Suppression in Portable Low-Field MRI

Singapore University of Technology and Design (SUTD)

Apr 2022 - Aug 2023


- Developed a shielding-free signal noise suppression system for SUTD's portable magnetic resonance imager under the mentorship of Professor Huang Shaoying and her team.
- **Poster presentation at International Conference for Magnetic Resonance Microscopy 2023**

Infinite Regress: Citation Graphing, Clustering and Multi-Document Summarization of Academic Articles

[report](#) 

- Built front-end and back-end for scraping papers, generating citation graphs, clustering, and multi-document summarization using transformers and techniques in natural language processing.
- Tools Used: Python, Vue

Ok, Bloomer!

 ok-bloomer

- A service built using Svelte (TypeScript & SCSS) and MySQL connecting plant buyer and seller
- Tools Used: Svelte, SvelteKit, MySQL