

Alea Rao

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Interests: Computer Science, UX/UI Design, Product Management, Cognitive Science, Coding, Engineering Psychology

EDUCATION

Tufts University

Medford, MA

Bachelor of Science in Engineering: Computer Science

Minors: Mathematics, Engineering Management

Expected May 2028

- GPA: 3.8
- Relevant Coursework: Engineering for the Customer, Linear Algebra, Intro. to CS, Discrete Math

United World College South East Asia Dover

Singapore

International Baccalaureate Diploma (2022-2024)

Aug 2010 - May 2024

- Final Score: 39/45 (Passed)
- Relevant Coursework: Higher Level Computer Science (7), Higher Level Mathematics Analysis & Approaches (7)

IGCSE Program (2020-2022)

- Relevant Coursework: Additional Mathematics (A*), Computer Science (A*)

WORK EXPERIENCE

Project Lead, IDEA Lab Tufts University, Design Evolution

Medford MA, September 2024 - Present

- Aims to leverage the product design abilities of the human brain to develop a novel evolution design system
- Developed an ML-powered image generation platform by conducting user research, competitive analysis, and Figma prototyping, as well as using tools like OpenAI, TensorFlow, and OpenCV for design system integration.

Intern, Elev8.vc

Singapore, Dec 2022 – Jan 2023

- Worked for a B2B-focused VC fund that invests in early-stage deep technology founders.
- Conducted market research to help identify investment trends and opportunities within the market of mobility
- Researched the Mobility landscape in Singapore and explored the technology behind autonomous vehicles

Assisting at HighQ Tuition Center in Singapore

Singapore, Mar 2022 – Oct 2023

- Lead comprehensive “Introduction to Coding” camps for 30+ students during term breaks
- Produced detailed online resources to support students in learning Mathematics and Natural Science

ACTIVITIES

Girls in Tech/SheHACKS Head of Logistics

Singapore, Aug 2021 – May 2024

- Organize “SheHacks” - a yearly hackathon supporting girls in technology, 100+ participants yearly.
- Liaised with external partners and sponsors like Microsoft for funding and sourcing mentors to support the teams.
- Promote more girls in technology fields and learn new programming skills by preparing a product and pitching it

Leader of Maths Ambassadors Team, Head of Revision Materials and Publicity

Singapore, Aug 2021 – May 2024

- Create revision materials for students for the IB Diploma and IGCSE program, supporting 300+ students learning
- Implemented a detailed schedule and regular Social Media posts to increase awareness for the program around school

Affinity Co-chair

Singapore, Aug 2021 – May 2024

- Coded a website to organize a comprehensive bank of learning resources and delegated tasks to sub-committees.
- Reached over 70% of the student body with detailed notes, explanatory videos of IB and IGCSE Concepts

ADDITIONAL

Technical Skills: Java (Experience in OOP), Python; Experience in HTML/CSS/JS, C++, React, Figma, MySQL

Other Skills: Microsoft Office (Excel, Word, PowerPoint), Time Management, Creative Problem Solving, Canva

Languages: Fluent in English; Conversational Experience in Mandarin

Projects: Built Jewelry Database System using Java and SQL for a client, Built an AI chatbot for IB students using Python, TensorFlow, and ML techniques, Built a Python time management tool to help students prioritize/organize schoolwork, Built a React App for a hackathon to branch out to other Tufts students with similar interests.