GARV SHAH

EDUCATION

Caulfield Grammar School - Wheelers Hill (Full Academic Scholarship, 99.50 ATAR)

Jan 2019 - Nov 2024

- President and administrator of school maths club and programming society, CGSP. Created school Maths Captain role; built app w/ wkly problems, 120 users; taught 20 student classes & made comps; increased membership by 450%.
- Debating captain; led 98 students in state-wide program & made weekly workshops; coordinated 5 comps & increased participation by 350%; awarded school 'Best Speaker' 3x along with 'Swannie' for best speaker in region and grade.
- Involved in music/theatre (part of 9 ensembles, 9 productions) & tennis, table-tennis, soccer, badminton, rock-climbing; helped raise ~\$12k over 5 years for charity concert; co-created musical w/ 111 participants.
- Triple Colours Re-Awarded & Gold Certificate of Excellence (highest award level) for Academics, Music (+Service), Debating (+Service), Publications, Cheer Squad, Public Speaking (+Service) & Community Service.

The University of Melbourne

Jan 2023 - Current

- Completed University of Melbourne Extension Program Maths with H1 (First Class Honours) in high-school.
- Currently undertaking the Bachelor of Science (Computing & Software Systems) with a Concurrent Diploma in Maths.

Professional Experience

Junior Engineers & Innovate Technology Robotics Academy Teacher

Dec 2022 - Oct 2023 // Mar 2022 - Jun 2022

• Worked w/ young students to build robotics/programming skills e.g. with VEX IQ as past national championship winner.

CSIRO Student Internship

• Shadowed researchers across 5 fields (Software, Titanium Alloy 3D Printing, Electron Microscopy, Protein Synthesis & Bio Tech) e.g. Dr Helmut Thissen/Dr John Page; interpreted Aus Telescope National Facility data using algorithmic analysis.

VicSRC Executive Committee Member, National Student Voice Council Member VicSRC | Oct 2023 - Nov 2024

• Worked with national/state ministers on policy reform; organised state 'Congress' w/ 100+ ppl and achieved ~\$23k profit; helped create 10-year state priorities for Victorian Department of Education.

Self Employed Freelance Programmer

NP Logistics, Shaw FP, Verdis Government, etc. | May 2021 - Present

• Earned \$11k+ from client work; 7 apps on stores w/ 20k+ installs. Operating systems for 6 small businesses.

Axiom Education Co-founder, Partner

December 2024 - Present

• Co-founder of education start-up based in Melbourne, garnered over 400 hours of teaching and tutoring experience.

Projects

2cousins (Initiative under my non-profit Aporia, ABN: 87127315891) Founder/CEO

Flutter, Firebase

Led 18 intl volunteers to teach 200+ students from underprivileged backgrounds weekly; raised ~\$6k for rural dev and got 2 students into uni; nominated for 3 social impact awards including 7NEWS Young Achiever Saward Dawson Award (\$1000 value).

The NOVA System Founder/CEO

Flutter, REST APIs, Firebase, Node.is

Created system to mimic live cryptocurrency transactions; workshops for 300+ students on financial education; negotiated \$25k VC investment for implementation into intl IB curriculum before closure due to provider pricing changes.

CaulfieldSync

Next.js, REST APIs, iCal

Developed API for student interoperability over school backend (created calendar integration & 4 peer apps, 100+ users); reported and mitigated 6 vulnerabilities with CGS IT team. Founded 1st comp club for pro bono projects on community issues.

NP Logistics Independent Contractor

Flutter, Firebase, Node.js

Enterprise order/employee management solution; 15+ orders weekly w/ live tracking to transition to digital platform.

Research

Applications of Traveling Salesperson Problem

Held-Karp, Simulated Annealing | Jun 2022 - Aug 2023

Conducted informal research as passion project, comparing exact vs heuristic implementations w/ time complexity analyses.

Awards

Apple WWDC 2021 Scholarship Award App Development

Apple Inc. | Jun 2021

One of 300 global students awarded in the Swift Student Challenge, sponsored to attend the Worldwide Developer Conference.

IMMC Award of Meritorious Achievement Statistical & Algorithmic Analysis

ACER | May 2022

Placed 2nd in Australia for modelling most efficient way to board planes, proceeding to the intl finals out of 58 global finalists.

Non-Trivial Fellow Research

Non-Trivial | Jul 2024

Chosen from 3500+ global applicants as 1 of 200 for CS research on applications of computability theory in CAPTCHAs.

Kwong Lee Dow Young Scholar Leadership & Academic Excellence

Melbourne University | Nov 2022

Chosen from 1500+ applicants for general excellence. Independently started a student community "Green" w/ 150+ members.

SKILLS & INTERESTS

Programming Languages:

Flutter/Dart, Swift, JavaScript, Python, HTML, CSS, TypeScript

Software and Tools:

Adobe Premiere Pro, Adobe After Effects, GitHub, Docker, Latex, Node.js, Firebase

Languages:

Fluent in English, Hindi and Gujarati

Music lover, drummer for my band "Paradox" with published music. Hobbies include video editing Other Interests:

and 3D modelling, created tv show for my school. Also love traveling, tutoring and reading books!