

Angelina Wong

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EDUCATION



HARVARD

Pursuing B.S. in Electrical
Engineering & Computer Science
Sep 2023 - 2027 | Cambridge, MA
Cumulative GPA: 3.78/4.0



NUS HIGH SCHOOL

Honors in Math & Chemistry,
Majors in Physics & Biology
Nov 2022 | Singapore
GPA: 4.9/5.0
• Valedictorian Class of 2022
• A* Young Researcher Award

COURSEWORK

GRADUATE

- Microfabrication Laboratory
- Advanced Introduction to Robotics

UNDERGRADUATE

- Systems Programming and Machine Organization
- Machine Learning
- Circuits, Devices and Transduction
- Vector Calculus & Linear Algebra
- Probability with Engineering Applications
- Data Structures and Algorithms

AWARDS

Top 60: Singapore (SG) Intl Math
Olympiad Training Team 2019
Top 5 Team: SG Space Challenge 2019
Champion Team: Autonomous
Car Competition 2018
1st Theory of Flight: SG Amazing
Flying Machine Competition 2018

SKILLS

PROGRAMMING

C/C++
Python
R (intermediate)

TOOLS/APIs

Arduino
Inkscape (Vector Design)
Fusion360 (intermediate)
PCB Design (intermediate)

RESEARCH EXPERIENCE



HARVARD EDGE COMPUTING LAB | Research Assistant (Robotics)

Sep 2024 - Present | Cambridge, MA

- Enhancing sampling-based motion planning algorithms by including dynamics calculations for smoother, collision-free movement of robotic manipulators



NATIONAL UNIVERSITY OF SINGAPORE | Intern (Data Processing)

May 2021 - December 2021 | Singapore

- Developed data-integrity detection algorithms (ML model trained on Python, implemented on C++) on a microcontroller that filtered 95% of corrupted ECG data
- Extended battery life of ECG wearable devices by removing redundancies in transmitted data to ensure long-term monitoring of cardiac conditions



DSO NATIONAL LABORATORIES | Intern (Data Analytics)

April 2020 - December 2020 | Singapore

- Designed two statistical Bayesian hierarchical models (using R) to investigate the effectiveness of COVID-19 interventions in 14 European countries
- Identified most effective intervention policies to improve pandemic management

TECHNICAL EXPERIENCE



HARVARD SATELLITE TEAM | Bus Electrical Team

August 2024 - Present | Cambridge, MA

- Building & optimizing altitude determination, control, & communications of CubeSat
- Working with other teams (payload, ground station, mechanical) to power electronic components of Phase 4 satellite (launching to ISS in 2025 under NASA CSLI)



HARVARD UNDERGRADUATE FORMULA TEAM

October 2023 - Present | Cambridge, MA

- Co-leading electrical subteam to integrate all electronics on inaugural Formula SAE car, and designing battery mount of car to compete in FSAE 2025



DCONSTRUCT ROBOTICS | Assistant Engineer (Robot Systems)

January 2023 - April 2023 | Singapore

- Created 2D depth maps to simplify robot navigation using custom C++ program that processed pointcloud data of local parks and buildings obtained from a lidar sensor
- Improved and integrated open street map interface, applying it to track the live path of an autonomous or remotely-controlled legged and wheeled robots (Spot, MR600)

INTERNATIONAL CONFERENCES

Date	Conference (Awards/Publications)	Project
Nov. 2022	Japan Super Science Fair	ECG Wearable
Sep. 2021	(2 nd place) ASEAN Student Science Project Competition	COVID-19
Jun. 2021	(1 st place) Korea Science Academy (KSA) Science Fair	COVID-19
Sep. 2021	(Publication) International Research Conference on	COVID-19
Sep. 2020	Science, Engineering & Technology	Graphene

TECHNICAL VOLUNTEERING



ENGINEERING GOOD STUDENT CHAPTER | Founder, President

January 2021 - December 2022 | Singapore

- Refurbished and redistributed old laptops to low-income families in Southeast Asia
- Designed and constructed assistive gadgets for people with motor disabilities
- Conducted 3D modelling and programming workshops for young girls in Singapore
- Mentored and provided opportunities for students in Singapore to embark on humanitarian engineering projects