

Alyssa, Png

Mobile: +65 87277005

Email: alyssapng@u.nus.edu

[LinkedIn](#)/[Github](#)/[Online Portfolio](#)



Personal Statement

I am a second-year Computer Science student passionate about technology and motivated by an eagerness to learn. During my A*STAR Institute of Chemical and Engineering Sciences internship, I diligently developed analytical skills, leading to co-authorship of a research article.

My sociable nature drives my passion for teamwork. In projects like Orbital and my Final Year Project, I proactively seek clarification and eagerly share my ideas. I view these interactions as opportunities to exchange knowledge and expose myself to diverse perspectives.

Being a program member of various Eusoff committees developed my ability to delegate tasks, inspire others through my actions and communicate effectively. These were vital in teaching at The Young Makers, where I developed decision-making and team management skills, boosting my confidence level.

Engaging in initiatives like Youth Expedition Project also deepened my compassion for others, aligning with my passion in helping people and contributing to the community. This inspired me to strive towards using my problem-solving skills and creativity to make a tangible impact to help others.

Embracing new experiences and challenging myself drives my continuous desire to grow. I am excited about contributing my knowledge and passion to innovate and join a team that shapes the future.

Education

Aug 2022 - Present	National University of Singapore Bachelor of Computer Science NUS Transcript	Singapore
Aug 2019 - May 2022	Ngee Ann Polytechnic Diploma in Biomedical Engineering Ngee Ann Transcript	Singapore

Work Experience

Nov 2021 - Present	The Young Makers (TYM) <i>Main Teacher</i> <ul style="list-style-type: none">• Taught two groups of 5 and 3 students each, aged 7-9 years old.• Developed a curriculum including:<ol style="list-style-type: none">1. Introduction to Python: 15 lessons, 737 slides2. Advanced Scratch: 10 lessons, 333 slides, aimed at enhancing student engagement and understanding.• Improved communication skills by guiding students in creating around 10 projects per student, utilizing visual aids and clear step-by-step instructions.• Strengthened troubleshooting abilities by assisting students in debugging and resolving project issues.	Singapore
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Mar 2021 – Aug 2021	<u>A*STAR Institute of Chemical and Engineering Sciences</u> <i>Assistant R&D Engineer Intern</i> <ul style="list-style-type: none"> Co-authored a research article, contributing to about 30% of the essential graphs and developing proficient analytical skills in the process. Improved research project efficiency by around 50% through conducting experiments independently and implementing an Excel calculation system. 	Singapore
Jan 2020 - Mar 2020	<u>Lady M Singapore</u> <i>Part-Time Staff:</i> <ul style="list-style-type: none"> Improved crowd management process to manage more than 50 people in queues at any point in time by working efficiently under pressure. Proactively took the initiative to learn and carry out multiple roles such as barista, cake cutter and waitress. 	Singapore

Achievements/Co-curricular Activities/Volunteering

June 2023 – Present	National University Singapore Football Varsity: <ul style="list-style-type: none"> Represented NUS for 2023 SUNIG Games 	Singapore
Aug 2023 - Sep 2023	Hack for Cities 2023 Hackathon <ul style="list-style-type: none"> Attained a top 16 placement. Proposed to use Quantum Computing to improve smart parking through efficient tracking of vacancies and predictive analysis. 	Singapore
May 2023 - Aug 2023	Orbital 2023: Productivity App <ul style="list-style-type: none"> Created user-friendly UI/UX with React Native and Expo Go, ensuring easy navigation for users. Implemented a React Native Countdown Timer to track study hours, storing data on Firebase, and presenting it as bar graphs to track yearly, monthly, and weekly progress. Established an authentication system using Firebase Authentication. 	Singapore
April 2023	Top Field Award Rookie of The Year in recognition of invaluable services rendered to Eusoff Hall for the academic year 2022/2023	Singapore
Aug 2022 - Aug 2023	Eusoff Hall <ul style="list-style-type: none"> Hall Promotion Board: <ul style="list-style-type: none"> Organized Eusoff Hall Engagement Camp Culture Management Committee <ul style="list-style-type: none"> Planned and Emceed for Culture Events Green Committee <ul style="list-style-type: none"> Conduct environmentally friendly activities Participated in the Inter-hall Games and placed 1st for Ultimate Frisbee and Football 	Singapore
May 2022	Smitech Asia Sliver Medal & Prize Second most outstanding graduate in the Diploma in Biomedical Engineering course	Singapore

Sep 2021 – Jan 2022	Final Year Project (FYP): Augmented Reality Telepresence Robot <ul style="list-style-type: none"> Leveraged Raspberry Pi, Vue.js, and Amazon Web Services (AWS) Facilitated real-time audio and video streaming from the robot's camera to a Vue.js website through AWS Kinesis Video Streams with WebRTC integration. Implemented user authentication using AWS IoT Core credentials, enabling individual user connections to distinct robots. Enabled robot movement control via AWS IoT Core MQTT topics through AWS API Gateway 	Singapore
Aug 2021 – Oct 2022	East Youth: <ul style="list-style-type: none"> Participated in Food Distribution Events consisting of collecting non-perishables from donors and distributing to over 50 lower-income households. Communicating with potential donors, educating them about our Food Distribution Event and answering any queries. 	Singapore
June 2020	A*star Science Award recognizes students who have shown interest and excellence in the Sciences and Mathematics.	Singapore
Apr 2019 – Apr 2022	Ngee Ann Polytechnic Ultimate Frisbee: <ul style="list-style-type: none"> 2nd place in the 2022 PO-LITE games 4th place in the 2019 PO-LITE games Plate champion in Ultyschool 2020 	Singapore
Aug 2019 - Sep 2019	Youth Expedition Program Vietnam (Hoi An) Sep 2019 <ul style="list-style-type: none"> Student Leader Service-learning overseas trip Volunteered at the Touch Home Care 	Vietnam

IT & Software Proficiency

Office Productivity	Microsoft Word, PowerPoint Microsoft Excel	Proficient Proficient
Data Analysis	Origin Lab Radiant	Proficient Intermediate
Engineering	Breadboarding Soldering skills Embedded Systems	Proficient Proficient Basic
Web	HTML, CSS React Native	Basic Intermediate
Database	Firebase AWS Cloud Services	Proficient Intermediate
Programming	Java C C# Python	Proficient Intermediate Basic Intermediate

Scripting	JavaScript	Intermediate
Robotics	Raspberry PI	Intermediate
	Arduino	Intermediate
	Micro-bit	Intermediate

Language Proficiency

Spoken	English – fluent; Simplified Chinese – competent
Written	English – competent; Simplified Chinese – fair