

Alyssa, Png Kai Wen
Email Address: alyssapng@u.nus.edu
[LinkedIn/Github/Online Portfolio](#)



Personal Statement

As a third-year Computer Science student deeply passionate about technology, my journey has been shaped by hands-on experiences that have equipped me with a robust set of skills and a drive for innovation. My recent internship at Kinexcs, an AI-driven digital healthcare startup, was pivotal in enhancing my abilities as a full-stack developer. I honed my expertise in Android development, UI/UX design, product engineering and quality assurance, adapting swiftly to meet evolving project priorities in a fast-paced environment. This experience not only bolstered my technical proficiency but also reignited my entrepreneurial spirit, motivating me to seek challenges beyond conventional boundaries.

Participating in hackathons further sharpened my problem-solving and teamwork skills. Whether integrating new technologies to optimize systems or leveraging data analysis for process enhancement, I thrive in collaborative, solution-oriented environments. Projects like Orbital and my Final Year Project underscore my proactive approach to learning and innovation, where I actively seek knowledge exchange among my team and embrace diverse perspectives to drive impactful results.

Prior to this, I worked as a research assistant at A*STAR Institute of Chemical and Engineering Sciences which instilled in me a strong foundation of analytical expertise and independent research skills. My involvement in contributing to a published research article demonstrated my ability to adapt and deliver results in new and complex areas.

Beyond technical skills, my involvement in Eusoff Hall committees and teaching at The Young Makers cultivated my leadership, communication, and decision-making prowess. These experiences instilled in me the ability to inspire and delegate effectively, crucial for fostering a collaborative work environment.

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.

I am driven by a desire to make a meaningful impact through technology. I am eager to contribute my skills and passion for innovation to a team committed to shaping the future. I seek an environment that not only challenges me technically but also encourages continuous learning and professional growth.

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>	Singapore
--------------------	--	-----------

- Taught two groups of 5 and 3 students each, aged 7-9 years old.
- Developed a curriculum including:
 1. Introduction to Python: 15 lessons, 737 slides
 2. 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.

Jan 2024 – June 2024

Kinexcs

Junior FullStack Developer

Singapore

- Conduct quality assurance for two core AI-driven model products.
- Developed new features and fixed bugs on existing native Android applications using Kotlin
- Assisted in product management by formulating technical requirements, prioritizing tasks, and planning roadmaps
- Designed the UI/UX of an upcoming project using Figma to be pushed commercially in app stores
- Facilitated scrum meetings which include SPRINT review, retrospective and planning utilizing the Atlassian community

Jan 2020 - Mar 2020

Lady M Singapore

Part-Time Staff:

Singapore

- 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.

Scholastic Achievements/Extracurricular Activities

June 2023 – Present

National University Singapore Football Varsity:

Singapore

- Represented NUS for 2023 SUNIG and IVP Games
 - Placed 2nd for SUNIG

Jan 2024 – June 2024

NUS Overseas College (NOC) Singapore:

Singapore

- Exposure to Singapore's Start-up Scene
- Connect with inspiring entrepreneurs and engage with established business owners.
- Gain expertise in developing a business case study

Feb 2024 – Feb 2024

Micron NUS-ISE Business Analytics Case Competition 2024

Singapore

- Improving efficiency and cost-effectiveness in wafer processing through data analysis-driven problem-solving

Aug 2023 - Sep 2023

Hack for Cities 2023 Hackathon

Singapore

- Attained a top 16 placement.
- Proposed to use Quantum Computing to improve smart parking through efficient tracking of vacancies and predictive analysis.

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

Skill Sets & Proficiency

Office Productivity	Microsoft Word, PowerPoint Microsoft Excel	Proficient Proficient
Project Management	Miro Board Jira Board Confluence	Intermediate Proficient Proficient
Data Analysis	Origin Lab Radiant	Proficient Intermediate
Engineering	Breadboarding Soldering skills Embedded Systems	Proficient Proficient Basic
UI/UX	Figma	Intermediate
Android	Kotlin	Intermediate
Web	HTML, CSS React Native	Basic Intermediate
Database	Firebase AWS Cloud Services SQL	Proficient Intermediate Basic
Programming	Java C C# Python	Proficient Intermediate Basic Intermediate
Scripting	JavaScript	Intermediate
Robotics	Raspberry PI Arduino Micro-bit	Intermediate Intermediate Intermediate

Language Proficiency

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

Degree: Bachelor of Computing (Honours) in Computer Science
Cumulative Average Point: 3.79 / 5.00

Year	Level	Course Description	Grades
Aug – Nov 2010	Year 1/Semester 1	Programming Methodology	S
		Discrete Structures	S
		Quantitative Reasoning with Data	A-
		Digital Ethics and Data Privacy	B+
		Calculus for Computing	S
Jan – May 2011	Year 1/Semester 2	Data Structures and Algorithms	B-
		Programming Methodology II	B
		English for Academic Purpose	B+
		Digital Platforms for Business	B+
		Linear Algebra I	B+
Aug – Nov 2011	Year 2/Semester 1	Independent Software Development Project (Orbital)	CS
		Software Engineering	B+
		Computer Organization	B
		Effective Communication for Computing Professionals	B+
		IT, Management and Organization	B+
		Probability and Statistics	B-
Jan – May 2012	Year 2/Semester 2	Discovering Resilience and Purpose	In-progress
		Entrepreneurship Practicum (Short)/ Innovation & Enterprise Internship Practicum	In-progress
		Start-up Case Study & Analysis /Innovation & Enterprise Case Study & Analysis	In-progress
		Start-up Internship Programme/ Innovation & Enterprise Internship	In-progress

NUS Grading Scale:

A+ & A (5.0); A- (4.5); B+ (4.0); B (3.5); B- (3.0); C+ (2.5); C (2.0); D+ (1.5); D (1.0); F (0)

S = Satisfactory; U = Unsatisfactory

CS = Completed Satisfactorily; CU = Completed Unsatisfactorily

EXE = Exempted; IC = Incomplete; IP = In Progress; W = Withdrawn