

JOSHUA NEE

+65 8585 4870 • joshuanee@u.nus.edu • <https://joshuan98.github.io/resume/>
<https://linkedin.com/in/joshua-nee> • <https://github.com/joshuan98>



EDUCATION

National University of Singapore, BEng (Computer Engineering)

Aug 2021 - Present

- Expected Date of Graduation: Dec 2024, Cumulative Average Point: 4.86 / 5.0
- Course Work: Programming Methodology (A+), Data Structures and Algorithms (A), Software Engineering & OOP (A-), Introduction to Artificial Intelligence (A+), Introduction to Machine Learning (A)
- NUS Overseas Colleges (NOC) New York, Top 5% of Academic Year 23/24 Cohort (Deans' List)

WORK EXPERIENCE

Aggregate Asset Management, Research Analyst (Singapore)

Aug 2024 – Present

- Conduct in-depth research and development of multiple trading strategies, analyzing market trends, back testing models, and optimizing strategies for risk management and profitability.

National University of Singapore, Teaching Assistant (Singapore)

Aug 2022 – Present

- Conducted tutorials for over 60 students across multiple modules, including [Data Structures and Algorithms](#), [Software Engineering & Object-Oriented Programming](#), and [Introduction to Machine Learning](#); responsibilities included designing course materials, creating and presenting tutorial content, and weekly consultation services.
- Mentored 24 student teams across 2 iterations of [self-directed software development projects](#), specializing in Unity game development, Telegram bot creation, and web application development, resulting in 17 teams achieving Apollo 11 (Advanced) level and 7 teams attaining Gemini (Intermediate) level.

ST Engineering, Software Engineer (Singapore)

May 2024 – Aug 2024

- Developed and maintained 11 XR applications in Swift and VisionOS for Apple Vision Pro, such as user authentication, interactive scenes, and remote monitoring.
- Unified various application capabilities into a cohesive solution, providing strategic insights and enhancing the company's readiness for leveraging Apple Vision Pro in future projects.

InTune Auto, Software Engineer (New York)

Dec 2022 – Dec 2023

- Engineered and deployed 9 major projects, including digital authorization, automated reminders, appointment scheduling, Twilio SMS/Gmail integration, EC2 image attachments, and OpenAI utilization.
- Revamped testing infrastructure, fixing over 50% of broken Cypress frontend tests and achieving over 90% coverage of backend endpoints with JUnit tests.
- Leveraged technologies like Heroku, Netlify, DataDog, AWS (ECR, ECS), and Docker, and coded in TypeScript, React, Jersey, jOOQ, and PostgreSQL.

Solutions16, Software Engineer (Singapore)

Sep 2022 – Jan 2023

- Devised an end-to-end monitoring system using MosquittoMQTT, DigitalOcean, LilyGO SIM7600, and ESP32, integrated with Blynk and MongoDB to collect over 200,000 data points.
- Implemented just-in-time alerts for WhatsApp and Telegram via Meta for Developers and BotFather, successfully averting 2 instances of severe property damage from pump room leaks.
- Automated email notifications using the Blynk IoT platform, eliminating manual 8-hour updates.

PROJECTS & HACKATHONS

Quantitative Finance – QuantEdge Summer Insights Program

Jun 2024 – Jul 2024

- Learned financial management, investment strategies, and asset allocation from senior management and analysts, and extended externship to complete a technical project in portfolio management.

Blockchain - ArcAid

Sep 2023 – Sep 2023

- Awarded Best Education Hack award at PennApps XXIV hosted by University of Pennsylvania, ranking among the top 8 teams out of 354 participants.
- Streamlined the student aid application process with Aleo's zk-SNARKs, implemented 2FA with USB and SHA256 encryption, using Next.js and managed database with Prisma ORM and PlanetScale.

Telegram Bot - Study Buddy

May 2022 – Dec 2022

- Led the development and deployment of a Telegram Bot for student study groups using Python and MongoDB on Heroku, reaching 80 Engineering students with 29 active users in a pilot program.