

# JOSHUA NEE

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Eligible for H1B1 work visa status, bypassing the lottery requirement due to Singaporean citizenship.



## WORK EXPERIENCE

**Shopee**, *Software Engineer* (Singapore)

Jan 2025 – Present

- Backend Engineer, Marketplace Buyer, Buyer Order Payment

**Aggregate Asset Management**, *Software Engineer* (Singapore)

Aug 2024 – Nov 2024

- 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 – Nov 2024

- 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.

## EDUCATION

**Carnegie Mellon University**, *MSc (Software Engineering)*

Aug 2025 – Present

- Expected Graduation: January 2027
- Course Work: Foundations of Computer Systems, Functional Programming in Practice, Foundations of Software Engineering

**National University of Singapore**, *BEng (Computer Engineering)*

Aug 2021 – Jan 2025

- Honours (Highest Distinction), GPA: 4.86 / 5.0
- Course Work: CEG Capstone Project (A+), Introduction to Artificial Intelligence (A+), Introduction to Machine Learning (A), Data Structures and Algorithms (A), Software Engineering & OOP (A-), Programming Methodology (A+)
- Top 5% of Academic Year 2023/2024 Semester 2 & Academic Year 2024/2025 Semester 1 (Deans' List), NUS Overseas Colleges (NOC) New York

## PROJECTS & HACKATHONS

**Blockchain** – [ETHGlobal Bangkok](#) & [ETHGlobal Singapore](#)

Sep 2024 – Nov 2024

- Won 3rd place among 309 projects in Worldcoin's Best Use of World ID track at ETHGlobal Singapore by developing ZkScholar, a decentralized app for private financial aid applications using zk-SNARKs, collaborating in a team of three.
- Secured runner-up in the Real-World Impact: Best Social Good Application track on Polygon at ETHGlobal Bangkok, competing against 2,750+ developers, with DocuEarn, a privacy-focused dApp enabling passive income from health data using zero-knowledge proofs.