JOSHUA NEE

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

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.