Joshua Nee

Mountain View, CA | joshuanee@cmu.edu | linkedin.com/in/joshua-nee | joshuanee.vercel.app | (914) 912-3173

EDUCATION

Carnegie Mellon University   Aug 2025 – Dec 2026
Master of Science (M.S.) in Software Engineering
- QPA: 4.0 / 4.0

National University of Singapore   Aug 2021 – Jan 2025
Bachelor of Engineering (B.Eng.) in Computer Engineering
- GPA: 3.9 / 4.0, Top 5% of Academic Year 2023/2024 Sem 2 & Academic Year 2024/2025 Sem 1 (Deans' List)
- Teaching Assistant: Data Structures & Algorithms, Software Engineering & OOP, Machine Learning

PROFESSIONAL EXPERIENCE

Shopee   Jan 2025 – Jul 2025
Backend Software Engineer   *Singapore*
- Developed e-commerce and payment systems with Kafka/MySQL, processing **10K+ daily transactions**
- Spearheaded migration of legacy Golang microservices, **cutting tech debt by 20%** through modular refactor
- Restored notification microservice deployability **for 100+ users within 2 weeks** by redesigning release workflows
- Engineered nationwide features with blacklist/whitelist logic and redirect fixes, supporting 100K+ user requests
- Commenced role after early graduation; concluded tenure upon Master's program admission

ST Engineering   May 2024 – Aug 2024
Software Engineering Intern   *Singapore*
- Designed 3D interactions and live geo-tracking in Swift by reverse-engineering undocumented VisionOS behaviors
- Architected reusable mixed reality components, reducing future integration time by 30%
- Prototyped Apple Vision Pro applications **within 3 months** of US launch, preceding Singapore release by 2 months

InTune Auto   Dec 2022 – Dec 2023
Full-Stack Software Engineer   *New York, NY*
- **Reduced data retrieval latency by 80%** by redesigning pagination and query architecture
- Innovated custom scheduling platform to improve enterprise booking efficiency with advanced availability logic
- Gathered and defined client requirements to ship features weekly, maintaining 99% customer retention
- Collaborated in a 4-engineer startup team using React, Java, and PostgreSQL following Scrumban methodology
- Drove strategic acquisition by Highland Creek Partners through full-stack engineering enabling **2x user growth**

PROJECTS & HACKATHONS

A New Agent Hackathon | *LLM Agents*   Oct 2025 – Oct 2025
- Won Vapi Track (200+ builders) for a tool-using LLM scheduling agent with multimodal (text + voice) dialogue
- Integrated ClinicalTrials.gov-grounded dialogues with Google Calendar and Supabase Edge for intelligent timetabling

Computer Engineering Capstone Project | *Machine Learning*   Aug 2024 – Nov 2024
- Built real-time gesture recognition system using multi-layer perceptron in TensorFlow, achieving >**95% accuracy**
- Devised feature extraction pipeline using statistical and spectral metrics optimized with SHAP analysis
- Enhanced model robustness via time-series data augmentation and hyperband-based hyperparameter tuning

ETHGlobal Bangkok & ETHGlobal Singapore Hackathons | *Blockchain*   Sep 2024 & Nov 2024
- **Runner-up** at ETHGlobal BKK Social Good track (2,750+ developers) with a Next.js frontend featuring World ID
  authentication and blockchain integration via ethers.js and Protokit
- Won **3rd place** (out of 309 projects) at ETHGlobal SG Worldcoin track for building a React frontend with Web3Auth
  for blockchain access, integrating Privado ID for cryptographic credentials, and Sign Protocol for data authenticity

TECHNICAL SKILLS

Languages & Frameworks: Python, Go, Java, TypeScript, C++, React, Next.js, Express.js, gRPC/REST, Protobuf
Databases & Communications: PostgreSQL, MySQL, MongoDB, Firebase, Redis, WebSocket, MQTT, Apache Kafka
Cloud & DevOps: AWS (EC2, S3, Lambda), Docker, Kubernetes, NGINX, Grafana, Prometheus
AI/LLM: TensorFlow, PyTorch, LangChain, MCP, Agents, RAG (vector stores, embeddings)
Developer Tools & Productivity: Git, CI/CD Pipeline, Copilot, Codex