Myan Nguyen

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EDUCATION

Brown University | Sc.B Applied Mathematics - Computer Science

GPA: 3.8/4.0 | Sept. 2023 – May 2027

Relevant Coursework: Software Engineering, Compilers & Program Analysis, Database Management Systems, Logic for Systems, Computer Systems, Data Structures & Algorithms, Foundations of AI & ML,

Discrete Structures & Probability, Linear Algebra, Statistical Inference

EXPERIENCE

AI Researcher | Brown School of Engineering

May 2025 – Present

- Designed pipeline modifying LTA2V architecture for military wearables processing 10K+ one-minute epochs from 10+ PSG-validated patients, fusing 4-limb×3-axis actigraphy, lifting accuracy from 80% to 95%
- Benchmarked 4 architectures (Logistic Reg, Random Forest, 1D-CNN, LSTM+Attention) under LOSO CV, with an LSTM+Self-Attention model achieving around 90% F1 and 0.94 AUC
- Built 40+ unit tests, then **ablation** and **robustness** tests within an adapted LTA2V pipeline, with preliminary results showing attention-based fusion retains $\tilde{8}5-90\%$ of performance under partial sensor loss

AI Researcher | Brown University Database Group & Rhode Island Hospital

Jan. 2025 – Present

- Extended VectraFlow's, an AI-augmented data flow system, SQL engine with LLM-powered operations to support semantic queries over unstructured clinical notes and vitals, reducing query development time by 40%
- Designed streaming "semantic window" experiments, detecting patient state changes in real time achieving low-latency processing of 1,000+ events/sec, improving early warning sensitivity by 25%

Software Engineer Intern | Medtronic

June 2024 – Aug. 2024

- Developed and trained a machine learning pipeline using **Python**, **TensorFlow**, and **Keras** to automate surgical test protocol generation, reducing manual creation time by 5–8 hours/week across 8+ engineering teams
- Designed & implemented a RAG pipeline using LangChain and Meta Llama 3 to enable context-aware NLP test protocol generation, improving model accuracy reducing review time by 20%

Frontend Developer | Brown Daily Herald

Jan. 2025 – Present

- Optimized media-rendering pipeline in **React Native** for **1,000**+ users of the Brown Daily Herald **mobile** app
- Implemented a dark mode toggle across all app pages and redesigned author article pages responsively

Projects

Clubs@Brown | Co-Founder, Full-Stack Technical Lead

March 2025 – Present

- Led **4-person team** in developing an internal **iOS** and **Android** app using **React Native** for student organization and event management serving **450+ orgs** & **1200+ club members**
- Built real-time campus event synchronization with Google Calendar API, syncing 50+ events and deadlines
- Automated admin workflows via Firebase Auth, Security Rules, and Functions
- Developed a scalable NoSQL schema in Firestore to support dynamic club & user data
- Integrated Expo Notifications for automated event reminders, boosting app retention & daily active users 25%
- Applied test-driven development (TDD) with **Jest** and **React Testing Library** to ensure robust UI and backend

Glialink | Co-Founder, Product & Project Manager

June 2025 – Present

- Led **7-person team** to launch MVP of AI-powered social research funding platform, using React connecting defunded labs with public supporters, with custom recommendation **algorithms** and role-based access control
- Delivered production-ready demo with 8+ core user flows, onboarding 7+ research labs for pilot program
- Implemented role-based access control (RBAC) and JWT-secured APIs to support multi-level permissions for labs, donors, and admins
- Designed and optimized database schema in **PostgreSQL**, **Neo4j**, and **Prisma ORM** to handle **500+** concurrent user records and scale efficiently
- Built and deployed monorepo CI/CD pipeline with GitHub Actions + Docker, reducing build and deployment times by 50% and enabling rapid iteration

TECHNICAL SKILLS

Languages & Frameworks: Python, Java, C/C++, Go, OCaml, JavaScript/TypeScript, HTML/CSS, React, React Native, Kotlin, Next.js, Node.js, TensorFlow, Keras, PyTorch

Databases & Cloud: PostgreSQL, Prisma, MongoDB, Firebase/Firestore, AWS (EC2, RDS, S3, SageMaker)

Tools: Git, Docker, npm, VS Code, IntelliJ, Figma, Bitbucket, Jira, Agile/Scrum, Expo, Android Studio, Lean Six Sigma