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, Database Management Systems, Systems Fundamentals, Data Structures & Algorithms, Foundations of AI, Discrete Structures & Probability, Linear Algebra

Technical Skills

Languages & Frameworks: Python, Java, C/C++, Go, JavaScript/TypeScript, HTML/CSS, React, React Native, Kotlin, Next.js, Node.js, TensorFlow, Keras
Databases & Cloud: PostgreSQL, Prisma, MongoDB, Firebase/Firestore, AWS (EC2, RDS, S3, SageMaker)
Developer Tools: Git, Docker, npm, VS Code, IntelliJ, Bitbucket, Jira, Agile/Scrum, Expo, Android Studio

Experience

Research Assistant | *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%**

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**, boosting author page views by **25%**

Software Engineer Intern | *Medtronic* June 2024 – Aug. 2024
- Researched **Generative AI** technology to automate and improve quality of surgical software test protocols
- Reduced **5-8 hrs/wk** on manual test protocol creation (**12-15% improvement**) for engineers across **8+ teams**
- Began building prototype with **LangChain** & **Meta Llama 3** to create **RAG** flow to implement in **NLP** model

Projects

Clubs@Brown | *Co-Founder, Full-Stack Technical Lead* March 2025 – Present
React Native, Cloud Firestore, Firebase Auth, Expo Notifs
- Led **4-person team** in developing an internal **iOS** and **Android** app for university club event coordination with a directory for **450+ orgs** & **1200+ club members**
- Automated admin workflows via **Firebase** Auth, Security Rules, and Functions, and **Firestore** sync
- Synced **50+** campus events, meetings, & application deadlines via **GCal** integration, increasing engagement **40%**
- Implemented **TDD** practices to ensure robust and maintainable code for Clubs@Brown app features

Multi-Sensor Sleep/Wake Classification | *Brown University School of Engineering* May 2025 – Present
Python, C++, TensorFlow, Scikit-learn
- 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{\mathbf{8}}$5–90%** of performance under partial sensor loss

Leadership Experience

Glialink | *Co-Founder, Product & Project Manager* June 2025 – Present
- Led **7-person team** to launch MVP of AI-powered, social research funding platform 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
- Developed monorepo **CI/CD pipeline** with **React** and **Prisma**, and **5+** integrated frontend/backend features

Fairfield University, NEDSI Conference (2023) | *Publication First Author* June 2022 – March 2023
- Conducted a case study on fast fashion complementary product **sustainability** and **supply chain**
- Analyzed social trends, **data**, circular economy, created environmental impact model using **IPAT equation**
- Proposed full-scope supply chain solutions **reducing 32% in global fast fashion emissions**