Pham Hai Minh

e1375556@u.nus.edu ❖ (+65) 9845-6996 ❖ 10 Kent Ridge Drive, Singapore 119242 ❖ GitHub / Portfolio / LinkedIn

EDUCATION

National University of Singapore **May 2028**
Bachelor of Computing, Computer Science with minor in Quantitative Finance *Singapore*
- **GPA (Current): 4.83 / 5**

EDUCATION

National University of Singapore **May 2028**
Bachelor of Computing, Computer Science with minor in Quantitative Finance *Singapore*
- **GPA (Current): 4.83 / 5**

WORK EXPERIENCE

National University of Singapore, TeleHealthCore **Sep 2024 - Present**
Junior Software Engineer *Remote*
- Led development of a full-stack healthcare platform experimental features using **React**, **Express.js** and integrating Claude AI API, reducing API response time by **40%** through optimized React architecture.
- Designed responsive **UI/UX** using **Tailwind CSS** and established **RESTful API** architecture.
- Established automated QA testing framework using **Playwright** with **90%** coverage across critical features.

WorldQuant BRAIN **Nov 2024 – Jan 2025**
Research Consultant *Remote*
- Created and optimized **100+** quantitative financial models (Alphas) using WorldQuant's BRAIN platform to predict market movements effectively.
- Conducted extensive data analysis, leveraging a database of over **120,000 fields** across diverse financial instruments and regions.

INDIVIDUAL PROJECTS

Academic Web Forum **Dec 2024 - Jan 2025**
Full-stack Application | Front-end | Back-end | Live Demo
- Architected and launched a full-stack academic forum able to serve **1000+** monthly users with **React**, **TypeScript**, **Go**, and **PostgreSQL**, enabling real-time discussions across 3 specialized categories.
- Developed secure user authentication system with **JWT tokens** and **bcrypt** while managing user data through Supabase integration.
- Optimized frontend performance achieving **96+** Lighthouse performance score through responsive **Tailwind CSS** design and **Framer Motion** animations, while maintaining **99%** uptime via **Vercel** deployment.

CERTIFICATIONS, SKILLS & INTERESTS

JPMorgan Chase & Co. Quantitative Research Virtual Experience Program **Jan 2025**
Forage Program | Certificate
- Completed a simulation focused on **quantitative research methods**.
- Analyzed a book of loans to estimate a customer's probability of default.
- Used **dynamic programming** to convert FICO scores into categorical data to predict defaults