Bao Quoc Phan

+1 (832) 232-2281 | bao.q.phan.work@gmail.com | linkedin.com/in/bao2803/ | github.com/Bao2803 | IN, 47906

Education

Purdue University West Lafayette, IN
Bachelor of Science in Computer Science *Expected May 2025*

- Major GPA: 3.54/4.00
- Award & Honors: Semester Honors, Dean's List
- Extracurricular Activity: Engineering in the World of Data Learning Community, IEEE Computer Society

Technical Skills

Languages: Java, Golang, C/C++, JavaScript/Typescript, C#, HTML/CSS, NodeJS, Matlab, Python, Bash, SQL
Technologies: Ant Design, Azure, AWS, Docker, OpenGL, Jest, ReactJS, Material UI, supertest
Developer Tools: Git, GoLand, IntelliJ, Pycharm, Unity, Unreal Engine 5, Vim, Visual Studio 2022, VS Code

Experience

Undergraduate Research Fellow West Lafayette, IN
JRL Lab - Purdue University | C++, Unreal Engine 5.1 *May.2023 - Aug.2023*

- Developed a configurable level III driving simulation using Unreal Engine and C++ as a testbed for a cutting-edge NSF-granted automated driving research
- Created a low latency data streaming pipeline for analysis by utilizing UDP and Kafka

Full Stack Developer Intern Remote
OplaCRM | ReactJS, TypeScript, Go, GORM, PostgreSQL, Docker, Azure *Jan.2023 - Apr.2023*

- Developed a full-stack e-commerce platform used by more than 20 corporates and 40 partners with Golang and GORM on the PostgreSQL database
- Reduced software bugs by 20% by implementing comprehensive unit tests using supertest and Jest framework

Software Developer Intern West Lafayette, IN
Omnilos | Bootstrap, Javascript, ReactJS, SyncFusion *Sept.2022 - Dec.2022*

- Developed a MERN-stack web application for the real-time stock price and segmentation analysis of customer portfolio
- Improved application performance and user experience by reducing 30% application loading time using CDN

Projects

3D Shooter Game | *C++, Unreal Engine 5.0* Jan.2023 - Present

- Created AI bots to track and shoot players using Unreal Engine's AI Behavioral tree and Blackboard, intensifying gameplay challenges
- Established real-time multiplayer mode via Unreal Engine online subsystem and Steam, ensuring smooth gaming across locations
- Implemented interpolation and extrapolation techniques to reduce network latency by 30% during gameplay, enhancing user experience

Personal Finance App | *Azure, Golang, ReactJS, JavaScript, PostgreSQL* Dec.2023 - Present

- Created a responsive dashboard UI to display transactions and statistics using ReacJS and Material UI
- Developed a highly-scalable serverless backend using Golang, Azure Functions, and Azure Database for PostgreSQL
- Utilized Azure Application Gateway for load balancing and exposing API

Storage Planner | *AWS, Java, ReactJS, TypeScript, PostgreSQL* Oct.2023 - Present

- Developed a full-stack application handling over 3000 requests daily for 200 users using AWS Lambda with Java and PostgreSQL on AWS RDS
- Implemented highly scalable architecture with asynchronous processing using AWS SQS and notification service using AWS SNS
- Created a single page application using ReactJS with TypeScript

Campus Mobility Enhanced | *Arduino, C++* Oct.2021 - Nov.2021

- Conducted thorough data analysis on user preferences and usage patterns, leading to the identification of key areas of improvement for the Purdue Campus Mobility system
- Built and programmed a simulated traffic light using Arduino and C++, effectively controlling the prototype lever arm in real-time testing