Bao Chau

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Education

University of Texas at Arlington – *Bachelor of Software Engineering*   **Expected Jun 2025**

Relevant Courses: Data Structure and Algorithms, Operating System, Database System, OO Software Engineering, Software Testing

Skills

Languages: Python, Java, C++, Bash, JavaScript, HTML/CSS, SQL
Frameworks and Tools: React, Node, Express, Flask, MongoDB, Git, Firebase, Docker, Android Studio
Design and Development: REST APIs, Microservices, UML, Agile, Scrum
Interpersonal: Problem Resolution, Team Oriented, Self-Reliant, Quick Learner, Continuously learning

Projects

Student Advising System   **React, Node.js, MongoDB, Express.js, JWT, bcrypt**

- Designed and implemented a REST API with a controller pattern to manage scheduling, tracking and CRUD operations for students and advisors, **writing 600+ lines of code to handle various functionalities**.
- Secured authorization using JWT and bcrypt, protecting login data and tokens through HTTP-only cookies, significantly **enhancing system security by adding an additional layer of protection**.
- Managed React data flow to fetch and aggregate data from multiple components, enabling teammates to develop frontend components with fewer restriction, **improving developer productivity and reduce integration time by 25%.**

Virtual Chef   **Android Studio, Flask, Python, OpenAI API, Firebase**

- Led development of a Flask server that processed requests from Android Studio for managing user recipes and nutrition data, implementing caching for API calls that **reduced response time by 50% and increased system request capacity.**
- Optimized search functionality on Nutritionix API by implementing debounce technique to wait until user finished before making API requests, resulting in a **33% reduction in unnecessary requests and improving system responsiveness.**
- Worked in an Agile environment, attending daily Scrum meetings and planning sprints, consistently delivering features on schedule.

Parking Pal (HACK UTA 2023 Winner)   **C++, Node.js, Swift UI, Arduino, Python, Firebase**

- Developed the backend in Node.js to handle real-time sensor readings through writing API endpoints that send sensor data to Firebase, which allow for reliable data transmission and storage.
- Collaborated on Arduino sensor setup to streamline sensor readings and data transmission, resulting in efficient real-time monitoring with consistent **sub-100ms latency**

Work Experience

Tutor - Houston/Arlington   **Jun 2020 – Dec 2023**

- Guided students in finding their own learning style and method by simplify intricate topics, provided constructive feedback, and empower students with the skills and confidence needed to excel academically
- Explained course material in a concise and easy to understand manner, focused on OOP, DSA, and Math

Assisting Accountant, Queen's Nails - Arlington   **Aug 2022 – Mar 2023**
Cashier/Waiter, WingsN'More - Houston   **Jan 2020 – June 2020**