Bao Chau
Software Engineer Intern

https://bchau.netlify.app   contactbaochau@gmail.com

Education

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

Relevant Courses: Data Structure and Algorithms, Fundamental of Software Engineer, Theory of Computation, Operating System, Fundamental of Database System, Object Oriented Software Engineering

Projects

Student Advising System   **Apr 2024**
- Designed an authorization system and establishing connections to the server using Axios in React, based on the frontend engineer's requirements. Login and authorization were secured by integrating JWT and bcrypt, with access and refresh tokens being signed and transmitted via HTTP-only cookies.
- Worked in a team of 7 to build an advising appointment scheduler for UTA students and advisors. Implemented the client-server architecture with creator/controller pattern to designed a REST API for the system, centered around scheduling, tracking, notifying and performing CRUD operation on appointments, corresponding to the user roles.
- Implemented a notification system, which is sent via mgs for any relevant changes made to students/advisors
- Created the UI for advisors based on the Full Calendar library, data is fetched from MongoDB and display on screen.
- Tech Stack: React, Node.js, MongoDB, https://github.com/bchau1010/CSE_3311_Advising_Appointment_System.git

Virtual Chef   **December 2023**
- Led the development of a Flask server based on the client-server architecture. Android Studio will make request to the server, then the appropriate controller will handle the request by forwarding it to either OpenAI API or Firebase. After the operation is finish, return the corresponding status and data back to Android Studio.
- Worked in a team of 5 to develop an app to offers a way for users to discover new recipes from items that they currently have. The app also allow user to view nutrition value of each item and manage them via CRUD operations
- Implemented auto-complete search functionality by integrating Nutritionix API into the UI via Axios, which allow the app to fetch and display the requested items.
- Tech Stack: Android Studio, Flask, Python, OpenAI API, Firebase, https://github.com/bchau1010/VirtualChef.git

Parking Pal (HACK UTA 2023 Winner)   **October 2023**
- Worked in a team of 5 to develop an app to offers a way to make finding parking spot faster and easier for everyone. The project used sensors and cloud database tracking to find available space and lot number.
- Established communication between hardware and software through a CRUD server, built using Node.js
- Worked in pair to configured Arduino IoT sensors using C++ to initiate interaction between Firebase and the server.
- Tech Stack: C++, Node.js, Swift UI, Arduino, Python, Firebase, https://devpost.com/software/parkingpal-owmukr

Work Experience

Tutor - Houston/Arlington   **June 2020 – Aug 2023**
- Proficient in tailoring teaching methods to meet individual student needs, helping learners achieve their goals.
- Explained course material in a concise and easy to understand manner, focused on OOP, DSA, and Mathematics.
- 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

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

Skills

Programming Languages: Python, Java, C++, Shell, JavaScript, HTML, CSS, SQL
Frameworks and Tools: React, Node.js, Express.js, Flask, MongoDB, Tailwind CSS, Git, Firebase, JWT
Design Skills: Capable of producing a Design Class Diagram for a system based on its requirements, complete with the mediation steps, including Domain Modeling, Use Cases, Actor-System Interaction and Object Interaction Modeling.
Interpersonal Skills: Problem Resolution, Communication, Research Skills, Team Oriented, Self-Reliant, Quick Learner