Ziyuan (Bruce) Guo

ziyuan.guo@vanderbilt.edu | linkedin.com/in/ziyuan-guo-bruce | bruce-personal-website.vercel.app/

Summary

Graduated from Vanderbilt University with a degree of Bachelor of Science in Computer Science with a 3.873/4.0 GPA in December 2023.

Has extensive experience in web development and software development and is currently looking for a SWE position in the Canada area. I do not require work sponsorship in Canada in the future.

Education

Vanderbilt University Class of 2024

Bachelor of Science in Computer Science

Skills

Languages: JavaScript, Java, Python, C#, TypeScript, Node.js, C++

Frameworks/Tools: React, Spring, ASP. NET, Django, React-Native, Azure, Git, MySQL, Firebase, AWS, Express, MongoDB

Experience

Undergraduate Researcher, HIDe Lab at Vanderbilt University

May 2023 – December 2023

GPA: 3.873/4.0

- Researched with Prof. Dana Zhang to develop an interoperable and efficient identity system using distributed ledger technologies
- Designed and implemented a mobile decentralized application using React-Native that allows user to store and share their information using Hyperledger technology
- Implemented the routing and pages set up for the application and implemented all the functionality of the user interface for patient users
- Research Hyperledger blockchain technology and participated in the implementation of the chaincode in Hyperledger Fabric network
- Authored a paper titled: "HealthBridge: A Decentralized and Interoperable Healthcare App for Rare Disease Communities" (Accepted by IEEE BIBM 2023) as the first author

Mobile Application Development Intern at Give Black

February 2023 - May 2023

- Update the UI of the mobile application for iOS system using XCode
- Managed the SQL database of user information through Bluehost
- Worked with Co-founder Alexus Hall to design new features for the application to improve user connectivity

Projects

Job Hunting Web, Web Application

February 2024 – Current

- A web application applying React is and Chakra UI for frontend development, and Java Spring Boot for backend development
- Applied MySQL for data storage, Vercel for frontend deployment, and Railway for backend deployment
- Display my job application record since February 2024, currently deployed with the URL: https://jobhuntingrecord.vercel.app/

Duckling, Web Application

December 2023 - Current

- A web application applying Next.js for front-end development, and C# with ASP .NET for back-end development. Applied Material-UI for front-end design.
- Applied Firebase for data storage, Google Cloud Storage for image storage, and Firebase for user authentication
- Currently deployed on Vercel with URL: https://duckling-bruceg14s-projects.vercel.app/

Vanderbilt Course Planner, Web Application

September 2023 – December 2023

- A web application that enables students at Vanderbilt University to plan their courses to satisfy graduation requirement
- Applied Next.js, TypeScript for front-end development, and Python and Firestore cloud functions for back-end development

Wok Finder, Mobile Application

June 2023 – September 2023

- Designed and implemented a mobile application using React-Native.js that highlights local Asian restaurants
- Developed the back-end API using Node.js and database using MongoDB and implemented the Account page using an API call
 to connect to the backend database
- Wrote the Map page applying Google Map API that displays a map for visualization of nearby Asian restaurants