Xiuqi (Bianca) Bai

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TECHNICAL SKILLS

Languages: Python, C, C++, SQL, PHP, Go, HTML, CSS, Typescript & JavaScript, GDScript
Frameworks and Libraries: Django, Vue.Js, React.Js, React Native, Node.js, Gin, Tensorflow, OpenCV
Developer Tools: AWS, MySQL, Git, GitHub, GitLab, Figma, Linux, Postman, Docker, Godot Game Engine, Leaflet, Blender, Vercel

EXPERIENCE

Lead Software Developper   May 2024 – Nov 2024
Garfay Startup

- Added custom modifications to the Humhub framework to create a social media platform.
- Implemented full functions for business users using **PHP** and **MySQL** to establish functioning back-end endpoints, and customized frontend using **Vue.js**.
- Managed team progress by actively communicating with members, organizing weekly meetings and creating project tracking spreadsheets.

Software Development Intern   Apr 2024 – Aug 2024
Xintongda SCIENCE & TECHNOLOGY Group Co.

- Set up **DNS service** for company intranet on Linux using **CoreDNS**.
- Created a Demo application that automatically registers runners with the GitLab REST api, using **Go Gin framework**.
- Developed frontend for the company's database management application using **Vue.js**.

PROJECTS

EyeSee | *Python, TensorFlow, OpenCV, Node.js, React Native*   Nov 2024 – Present

- Developed an IOS application that detects and reads texts on street view images using **React Native**, **Node.js**, and **Typescript**.
- Constructed and trained custom CRNN based OCR model using **TensorFlow** and **OpenCV**.

DoorSense | *AWS, Node.js, MariaDB, Typescript, React Native, Postman*   Oct 2024 – Nov 2024

- Worked in a team to build a smart home security system using Raspberry Pi 4B, ESP32 camera, magnetic door sensors, ML, and a mobile IOS application.
- Created a **MariaDB** instance on **AWS** server and defined the schemas and JSON data structures for efficient data management.
- Designed and implemented back-end **RESTFUL** API endpoints using **Node.js Express** framework, and connected to front-end using **Axios**.
- Applied unit and integration testing to all endpoints using **Postman** to ensure full functionality.

MapAbled | *Django, Leaflet, Python, Copilot, Vercel*   Oct 2024 – Nov 2024

- Developed and deployed full-stack Web application using **Python Django framework** and **Vercel** that displays the locations of disability-friendly facilities.
- Created the map feature with **Leaflet API**.
- Implemented a text reading feature for visually impaired people using **Python gTT library**, and **Copilot API**.

AWARDS

2024 Canadian Computing Challenge Senior Division Certificate of Distinction   Feb 2024
Placed top 25% among all contestants.

2023 Canadian Senior Mathematics Contest Honor Roll   Nov 2023
Placed top 2% among all contestants.

EDUCATION

University of Waterloo   Waterloo, ON
Bachelor of Software Engineering, Honours   *Sep 2024 – Dec 2029*
Maintained 4.0 GPA (97%) in 1A.