

CHENSHUO-JUSTIN ZHU

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Technical Skills

Programming Languages: C/C++, JavaScript/TypeScript, Java, REST API, JWT, Python, C#, Bash, SQL, HTML 5, CSS 3, PHP, Racket
Frameworks: React.js, Next.js, Tailwind CSS, Node.js, Spring Boot, Spring MVC, Spring Data, JUnit
Databases & ORMs: MySQL, PostgreSQL, Drizzle ORM
Developer Tools: VS code, Cursor, Spring Tool Suite 4, Postman, Git, Unity, Eclipse, IntelliJ
Platforms & Environments: Apache Tomcat, Linux, Vercel

Experiences

Beyz AI

Sep 2024 – present

Full Stack Developer (part-time)

- Contributed to key features for Beyz AI's GPT-based real-time interview copilot using **Next.js**.
- Achieved a **20%** reduction in token costs by optimizing compression of user background data through **prompt engineering**. Utilized **OpenAI's AI SDK** to enable efficient GPT integration.
- Implemented a dynamic prompt versioning mechanism with **TypeScript**, **Drizzle ORM**, and **PostgreSQL**, ensuring seamless updates, alignment across database and API configurations and delivering the latest prompts for an enhanced user experience.

Information Systems & Technology Department, University of Waterloo

Sep 2024 – Dec 2024

Presentation Technologies Support Technician

- Developed a web-based attendee management system with **PHP**, **JavaScript**, and **PostgreSQL**, integrating an interactive **SVG** seating plan that improved seat assignment efficiency by **75%**.
- Delivered technical support across **90%** of campus classrooms for maintaining and troubleshooting AV equipment, resolving **200+** issues monthly. Designed 3D-printed mic-testing tools to improve sound quality assessments in Board & Senate rooms in Needles Hall.

Huadian Energy Development Co. Ltd

Jan 2024 – May 2024

Full Stack Developer Intern

- Designed and developed the **Supplier Management module** within a Procurement and Billing Management System.
- Created a responsive web interface using **React.js** and **JavaScript/TypeScript**, ensuring cross-browser compatibility and enhancing user experience for **3000+** users.
- Built backend services with **Java/Spring Boot**, integrated with **PostgreSQL** for database management, and utilized **JSON** and **REST API** for efficient data interchange.

Projects

Portfolio Website | Website [↗](#), GitHub [↗](#)

Jun 2024 – Sep 2024

- Designed a responsive, single-page portfolio website using **React.js**, providing dynamic navigation and a downloadable resume feature. Deployed on **Vercel** to support continuous integration, enhancing professional visibility.
- Applied **Tailwind CSS** for a minimalist design and integrated **Framer Motion** to create engaging interactive animations, elevating the overall user experience.

Sorcery - Card Game

May 2024 – Aug 2024

- Created a collectible card game with a team of three using **C++**, implementing turn-based mechanics and optimizing game logic for smooth gameplay.
- Utilized the **Factory design pattern** and **Decorator design pattern** in C++ to efficiently create diverse card types and abilities, collaborating with teammates to develop cohesive player actions and game logic.

Interactive Museum Guide Website | Website [↗](#), GitHub [↗](#)

Sep 2022 – Jun 2023

- Constructed an interactive museum guide website using **HTML**, **CSS**, and **JavaScript**, enabling users to explore world-renowned museums with features like an creative world-map interface and a magnifying tool for artifact viewing, enhancing user engagement.

Island Adventure Game

Sep 2022 – Dec 2022

- Developed an immersive open-world island shooting game using **Unity Engine**.
- Designed a FPS mechanic in **C#** and crafted a detailed natural environment using **Universal Render Pipeline**.

Education

University of Waterloo

Sep. 2023 – Present

Candidate: Bachelor of Computer Science

Waterloo, ON

- Awarded President's Scholarship of Distinction