Jun Kai Zhang

+1 416-786-1259 | junkaizhang8@gmail.com | [LinkedIn](#) | [GitHub](#) | [Portfolio](#)

SKILLS

Languages: JavaScript, TypeScript, HTML, CSS, Python, Java, C++, C, Bash, SQL, Lua, GLSL
Frameworks: React, Next.js, Angular, Node.js, Express.js, Flask
Databases: PostgreSQL, MongoDB, SQLite, Firebase
Tools: Git, GitHub, Docker, VS Code, Android Studio

EDUCATION

Honours Bachelor of Science | University of Toronto Scarborough   **Toronto, O.N.**
Specialist in Computer Science   Sept 2022 - Aug 2025
CGPA: 3.59/4.00

PROJECTS

Automacro   Oct 2025 - Present
- Designed and implemented a **modular** macro automation framework in **Python** focused on workflow-based execution
- Authored comprehensive **API-level documentation** for all public classes and functions, clearly specifying behavior, limitations, and extension points to support safe third-party usage
- Applied **object-oriented design** and separation of concerns to structure workflows and tasks with explicit lifecycles and extension points, improving extensibility and maintainability
- Abstracted keyboard, mouse, and screen-based input behind reusable tasks and listener components, including pixel sampling and OCR to enable state-aware automation

CollabPen   Oct 2024 - Dec 2024
- Engineered a code collaboration **Next.js** web app utilising **Node.js**, **Express.js**, and **y-websocket** to enable real-time communication
- Resolved server hanging issues by utilising **Web Workers** and a **Redis** cache server to handle long tasks like invoking an LLM
- Designed a **RESTful API** with well-defined endpoints to clearly separate and organize application functionality
- Streamlined the production and development environments by leveraging **Docker** and automated deployment by using **GitHub Actions**

GoHere App   Jan 2024 - Apr 2024
- Wrote comprehensive **unit tests** and **integration tests** for the **API** using **Jest** which ensured the reliability of the backend API on various inputs
- **Resolved pull requests** by frequently communicating with team members, ensuring smooth code integration and maintaining a streamlined development process
- Engaged in **Scrum Poker** sessions at the beginning of each sprint to plan the development of user stories
- Crafted a **Shell/Bash** script with written documentations to streamline configuring default settings needed to launch the app

Stock Social Network   Jul 2024 - Aug 2024
- Built a stock social networking app with **React**, integrating **PostgreSQL** for capturing relational representations of data
- Applied **normalisation** techniques to ensure the database is in BCNF, minimising data redundancy and anomalies