Ruiquan (Richard) Su

506-886-8834 | r38su@uwaterloo.ca | LinkedIn | Website & Portfolio

EDUCATION

University of Waterloo

Waterloo, ON

Computer Engineering, Hon. Coop, President's Scholarship with Distinction, GPA: 4.0/4.0

Sept. 2024 - Present

EXPERIENCE

Control Software Developer

January 2025 - April 2025

SIOUX Technologies (Asia), Jiangsu Industrial Technology Research Institute (JITRI)

Suzhou, China

- Cut on-site deployment time from 98 hours to 20 hours by designing and developing concurrent streamlined installation and upgrade processes, reducing manual overhead via GitLab CICD pipelines and scripting.
- Refactored existing services into **organized packages** and developed **Blazor-based API controllers** to automate installations, enabling **direct customer access**.
- Organized and led **company-wide Git training sessions** to enhance version control proficiency across teams.

Software Developer Intern

September 2025 - December 2025

Lynkr Inc.

Toronto, ON

- Spearheaded, along with one another developer, the development of the core company product, Lynkr Workbench, from scratch to beta, which earned over 100,000 CAD in revenue for the company.
- Used FastAPI and Next.js to develop a containerized solution in Docker that contains two AI agent streams that handle the creation & execution of AI agents
- Used **secure routing** in the gateway to allow users to directly and indirectly **customize** their agents.
- Worked with Google Secret Manager to securely handle user secrets.

PROJECT SELECTION

KnowledgeHunt | Python, PyPDF, SciKit-learn, Tkinter, spaCy

January 2025 - May 2025

- Developed a **Python-based NLP algorithm** that **selects relevant PDF pages** based on keywords inputted by users, specifically **by vectorizing the PDFs and keywords**, then computing their **cosine similarity**.
- Designed a UI with **Tkinter** that allows users to **select the question bank** to source the PDFs from, and the **topics** to focus on, thus creating an **automatic question bank build tool** for any educational system.
- Created a default question bank for the **International Baccalaureate system** and donated the resulting curated software to **Vision Academy Ltd.**, a tutoring organization with **over 10,000 students**.

QuickSilver | Python, Socket, IPAddress, re, pybluez, Tkinter, PyInstaller

April 2025 - May 2025

- Built a broadcaster-receiver pair that broadcasts information to every receiving machine in the LAN
- Developed a file sending and receiving system via a TCP or RFCOMM connection that can validate and send files to any computer on the LAN or with Bluetooth, and a validation mechanism when receiving files.
- Maintained a CLI implementation of the application, while also designing a user-friendly UI using Tkinter, integrating all CLI functions into it, and packaged the program into a standalone EXE.
- Automated the build process on release using CICD pipelines via GitHub Actions.

WatIsLife | Python, JavaScript, React, Flask, GSM

December 2024 - January 2025

- Developed a **web API** that **records** the user's speech and uses **Google Speech Module** to count how many times a certain phrase was said and **stores** the count in a **database**.
- Built a simple **React front-end** that displays a **leaderboard** for all users.
- Used **Discord API** to build a Discord bot with commands that maintain the same functionalities.

TECHNICAL SKILLS

Languages: Python, C/C++, C#, SQL (Postgres, MySQL), JavaScript, HTML/CSS, Powershell, YAML, Batch Communication: English, Mandarin, French

Developer Tools: Git, Docker, VS Code, Visual Studio (msbuild), Jupyter, Anaconda, Node.js, React, NSIS, NuGet **Libraries**: pandas, NumPy, Matplotlib, Cartopy, Tkinter, PyKrige, Flask, Tensorflow, sklearn, Socket, spacy, PyPDF