Daniel Zhang

📞 647-673-5556　✉ dwqz365@gmail.com　in linkedin.com/in/dz365　⚬ github.com/dz365

Experience

Full Stack Developer (Work Learning Experience)　　　　November 2023
Service Delivery Data Hub Project　　　　Toronto, ON
- Developed extensive E2E tests to validate the functionality of web pages involved in dataset uploads and management
- Identified potential testing challenges and proposed strategies to address risks and improve the overall testing process
- *Cypress, JavaScript*

Software Developer Intern　　　　Jan. 2022 – Aug. 2022
Caseware International　　　　Toronto, ON
- Deployed a routing microservice to automate and replace a manually maintained reverse proxy
- Developed a real-time dashboard to alert on microservice anomalies and improve service disruptions response times
- Optimized a multi-threaded file upload process, reducing API calls by 20% and upload times by >100ms
- *AWS DynamoDB, AWS Elasticache, Java, New Relic, Spring Boot, Spring Cloud Gateway*

Full Stack Developer Intern　　　　May 2021 – Aug. 2021
Skatescribe Corporation　　　　Markham, ON
- Developed a real-time communication system that provides updates on operational status and machine availability, improving operational transparency
- Integrated safety features into the desktop app, reducing manual machine intervention and refining user control
- Created an automated tool life tracker with real-time updates and alerts, eliminating manual management
- *Angular, Flask, NumPy, Pandas, PostgreSQL, Python, Socket.IO*

Projects

Ecosquad
- Developed a web application that enables citizen scientists to document and share environmental observations
- Implemented an interactive map feature, allowing users to easily add, search, and filter posts
- Optimized search with Meilisearch, cutting query times by 70% and boosting accuracy for a better user experience
- Deployed the app with Docker on Digital Ocean, ensuring scalability and reliability
- *Auth0, Digital Ocean, Docker, ExpressJS, MapLibre GL, Meilisearch, PostgreSQL, React, TailwindCSS, TypeScript*

Pintos
- Improved kernel efficiency by eliminating busy waiting and enhancing system performance
- Enhanced thread management and processor use with advanced priority scheduling and donation
- Created a multilevel feedback queue scheduler to optimize thread management and reduce response times
- *C*

Education

University of Toronto　　　　Sept. 2019 – June 2024
Honours Bachelor of Science in Computer Science　　　　CGPA: 3.47 / 4.0

Technical Skills

Languages: Java, Python, C/C++, SQL (PostgreSQL), NoSQL (MongoDB), JavaScript, Typescript, HTML/CSS
Frameworks & Libraries: React, Node.js, ExpressJS, Flask
Tools and Technologies: Git, Docker, Linux/Unix, JIRA, Postman