Daniel Zhang

647-673-5556 | dwqz365@gmail.com | linkedin.com/in/dz365 | github.com/dz365

EDUCATION

University of Toronto   Toronto, ON
Honours Bachelor of Science in Computer Science   *Sept. 2019 – June 2024*
- Specialist in Computer Science - Software Engineering Stream
- CGPA: 3.47 / 4.0

EXPERIENCE

Full Stack Developer (Work Learning Experience)   November 2023
Service Delivery Data Hub Project   *Toronto, ON*
- Contributed to the development of an end-to-end testing platform with Cypress and JavaScript for a service delivery data management and analysis tool used by local agencies
- Enhanced testing efficacy by developing comprehensive test cases for critical pages and ensuring thorough validation of key functionalities for manipulating client data

Software Developer Intern   Jan. 2022 – Aug. 2022
Caseware International   *Toronto, ON*
- Developed a routing microservice using Java, Spring Boot, AWS DynamoDB, and Redis, enhancing system efficiency and scalability while achieving 93% code coverage through thorough unit testing with Mockito and JUnit5
- Created a monitoring dashboard with New Relic, allowing for real-time detection of service disruptions and ensuring seamless client experience by promptly notifying on-call team members of critical issues
- Reworked a multi threaded file upload process in C++ to optimize performance for larger clients, resulting in fewer API requests and reduced upload times

Full Stack Developer Intern   May 2021 – Aug. 2021
Skatescribe Corporation   *Markham, ON*
- Designed a new communication and safety system using Angular, Python Flask, and SocketIO, allowing operators to quickly detect errors and unwanted actions
- Engineered an automated tooling system, removing the need for manual tool life tracking and reducing human intervention by 70%

PROJECTS

Ecosquad | *React, TailwindCSS, ExpressJS, PostgreSQL, MapLibre GL, Meilisearch, Auth0*
- Developed a citizen scientist web app enabling users to share and explore natural discoveries, featuring an interactive map to enhance user experience
- Implemented a robust RESTful API to facilitate data exchange, enabling seamless communication between all components while supporting scalable future development

Capture the Flag Competition | *Python, JavaScript, C*   Score: 2170 / 2300
- Improved cryptography understanding by cracking symmetric and asymmetric encryption algorithms
- Executed network attacks such as spoofing, and denial of service to expose flaws, and exploited web application vulnerabilities through XSS attacks and SQL injections
- Demonstrated proficiency in low-level system exploitation through buffer overflow attacks

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