Shazil Razzaq

416-670-0648 | srazzaq@uwaterloo.ca | linkedin.com/in/shazil-r | github.com/Shazil-R | http://shazilr.me

Education

University of Waterloo — Waterloo, ON
Computer Engineering (Honors) — *September 2019 – Present*

Courses: *Systems Programming and Concurrency, Distributed Systems, Real-Time Operating Systems, Computer Networks, Algorithms and Data Structures, Computer Security, Computer Architecture, Database Systems*

Skills

Languages: C, C++, C#, Golang, Python, Java, SQL, JavaScript, TypeScript, HTML, CSS, Verilog, RISC-V Assembly (Excellent debugging and OOP skills).

Technologies: React, Node.js, Angular, GoogleTest, Django, Flask, Git, MySQL, Docker, Unix/Linux, Bootstrap

AI-900 Certification: Experienced with Azure Machine Learning, Computer Vision, Natural Language Processing.

Strong problem solving, interpersonal, learning, analytical, adaptability, time management, and organizational skills demonstrated through various extra-curriculars, awards, and volunteering such as being a soccer coach.

Experience

Full-Stack Developer — January 2023 – April 2023
D2L — *Waterloo, ON, Canada*

- Worked on the next generation of assignment, discussion, and quiz experiences using Hypermedia APIs, Lit Web Components, React, JavaScript, Node.js, HTML, CSS, C#, .NET, AWS, and SQL.
- Implemented ability for multiple evaluators to grade a student and unified the evaluation experience for teachers.

Software Infrastructure Developer — January 2022 – April 2022
Ford — *Oakville, ON, Canada*

- Designed and implemented new features and 20 bug fixes for networking, security, IPC, and power management platforms using C++, Golang, GNU Debugger, DDD, and Valgrind.
- Created unit tests using the GoogleTest Suite framework (Google Testing and Mocking).
- Explored ways to deliver efficient code by utilizing knowledge of design patterns, data structures, code optimization techniques, and concurrency techniques including multi-threading and multi-processing.

Android Developer — May 2021 – August 2021
OpenText — *Waterloo, ON, Canada*

- Implemented 25 UI improvements and features and resolved 80 bugs in the OpenText Core Share app.
- Architected clean, clear, efficient, well-tested and maintainable Java and Kotlin code using Android studio.
- Developed features with the OpenText API to fetch data from servers and used inspector tools to debug API calls.

Data Analyst — September 2020 – December 2020
Loblaw — *Mississauga, ON, Canada*

- Designed Python scripts using the Pandas library to aggregate and analyze data; saving the team 3 hours a day.

Application Developer — February 2020 – May 2020
Enterprise eSolutions — *Mississauga, ON, Canada*

- Authored an email follow-up program with C++, curl, and JDE integration; reducing acquisition costs by 20%.

Projects

5-Stage Pipelined Processor | *RISC-V Assembly, Verilog, C* — September 2022 – December 2022

- Built a processor using the synthesizable subset of Verilog at the RTL which implements the RISC-V ISA.

Real-Time OS (RTOS) on an Arm Keil MCB1700 | *C* — May 2022 – August 2022

- Developed an RTX with inter-task communication, memory, task, and real-time task management.

PNG Concatenator | *C* — September 2021 – November 2021

- Developed a program which joins PNG Files found within a local directory or from servers using libcurl.
- Implemented multi-threading (using semaphores and mutexes for synchronization), multi-processing (for parallelism with shared memory for IPC), and dynamic memory allocation.