Mohammed Sahl

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Skills

Languages:	C++, C, Python, Typescript, Javascript, Rust, Java, HTML, CSS
Tools:	Node, React/Redux, Sails/ExpressJS, Redis, PostgreSQL, Cypress, Espresso, Git, Docker, Jenkins

Relevant Projects

Util-bot - *Rust, PostgreSQL, diesel, serenity*   July 2020

- Developed an open source utility discord bot using Rust to serve bash-like commands helping server members analyse, organize and optimize their workflow
- Architected a DX friendly API making on-boarding easier for aspiring contributors to the project

js-word - *Typescript, PowerShell*   June 2020 - July 2020

- Collaborated in a group of 7 to implement a parser and writer for various word processing formats
- Implemented an **efficient algorithm** to parse file signature helping pass file-stream to appropriate file handlers
- Developed the **XML** file handler for unzipped .docx, .odt, .ods, .odp file-types
- Starred by **1.1k+** users, forked **190+** times and downloaded **129k+** times weekly

Auto Project Structure - *React, Typescript, TSX, styled-components*   June 2020

- Developed a repository structure tree generator with the Github API

Biquadris - *C++, Bash*   November 2019

- Collaborated in a group of 3 to implement a **graphical, 2 player version** of Tetris with **special abilities** and **difficulty levels**
- Adopted the **MVC** design pattern to develop user-interface allowing for simultaneous development of project
- Applied the **factory method** design pattern to implement block generation
- Utilized the **observer** design pattern to enable inter-class communication of state information

Work Experience

Major League Hacking   (Remote) Waterloo, ON
Software Engineering Fellow   May 2020 - August 2020

- Architected and deployed the backend server and established a testing framework used for v2 of the **Babel Repl** in 4 weeks
- Collaborated in developing **js-word** and contributed to the **sheetJS** projects by **SheetJS**
- Contributed to the **docsify.js** project by adding bug fixes, making UI alterations and administering test infrastructure changes
- Commited to **various open source projects** with a **team** of **Fellows** under the educational mentor-ship of a professional software engineer

WorkMarket - ADP Canada   Toronto, ON
Quality Engineer   May 2019 - August 2019

- Planed, developed and administered software test plans to detect and diagnose errors and bugs for the company's Android platform. Increased automated test case coverage from **62%** to **87%**
- Executed integration, regression and sanity testing to certify software stability prior to launch
- Identified and automated highly repetitive test cases increasing testing process speed by **25x**
- Developed thorough documentation to optimize the on-boarding process for new employees
- Collaborated in the development of the mock automated test suite.

Education

University of Waterloo - Candidate for Bachelors in Computer Science (3.77 GPA)   Waterloo, ON
Relevant Courses: Expected April 2023

- CS240: Data Structures and Data Management
- CS246: Object-Oriented Software Development