

Gavin Gosling

Oshawa, Ontario

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SKILLS

Languages: Java, Javascript, Python, C#

Query/Database Languages: SQLite, PostgreSQL, MySQL, MongoDB, JDBC

Front End: React, React Material UI, React Semantic UI, Styled-Components, Gmail, Google Maps, Google Charts, Two.js, OpenType.js, Pixi.js, JQuery, Bootstrap, Canvas, D3.js, Chart.js, FontAwesome, JEST, Moment.js, React Hooks, Google Analytics.

Backend: Node.js, Express, Socket.io, MS Azure.

Tools: Git, Gradle, TCP/UDP, WebSockets, REST, IntelliJ, Visual Studio Code, NPM, Jira,

EXPERIENCE

Software Developer

Ontario Tech University

May 2019 - April 2020

- Collaborated with a PhD to create a 3D virtual and interactable environment in Unity C# suited to maximize the learning potential for users wanting to learn percussion instruments.
- Utilized the Leap Motion and Oculus Rift to create a controller that is able to control percussion instruments using only hand movements and gestures.
- Applied Human-Computer Interaction principles to enhance the user experience by following usability, accessibility and design heuristics and using heuristic evaluation on previous designs.
- Employed the BNO055 Arduino for capturing the velocity, orientation, acceleration and position of the handpan and used these values to transform the handpan respectively in the game.

Teaching Assistant

Ontario Tech University

January 2019 - April 2020

- Directed Digital Media, a course on the development and theory of audio and graphics including topics sampling, storage and file structures, reproduction, and processing using libraries such as PortAudio, Magick++ and FFmpeg.
- Instructed Software Systems Development, a course on the concepts and implementation of coding standards, software testing and maintenance, software tools (Github/Gradle), multithreading, GUIs (JavaFX) and networking (Sockets).
- Provided sufficient feedback, academic support and mentorship to undergraduate students at Science Cafe which is a weekly help session for students in Science, Engineering and Information Technology for over 10,000 students.

EDUCATION

Bachelor of Science. Computer Science (Honours) - Data Science Specialization

Graduated April 2020

Ontario Tech University, Oshawa

CGPA: 3.3 | Dean's List: 2018 Fall, 2019 Winter | President's List: 2019 Fall, 2020 Winter

PROJECTS

RepositoryViewr (React, Javascript, Nodejs, Github API, React Material UI, Chart.js, DynamicRefs) Link on Website

- Gathered commit, repository and user data via REST requests using the Github REST library using ES6 Promises and input validation.
- Parsed REST data for each user and converted to JSON to be used for Charting and tabling. Interactivity using functional components and React hooks.

PassChecker (React, Javascript, Nodejs, Dictionary API) Link on Website

- Constructed a component-based React application which provided help to many users on how to improve their password.
- Juxtaposed expectations versus reality by showing password comparisons with respect to entropy, charsets and hash tables.

Animated Signatures (React, Javascript, Nodejs, Two.js) Link on Website

- Employed Two.js and React to create an interface that allows for SVG which can allow uploaded icons, shapes and fonts to be animated.
- Uses OpenType.js to parse and load locally and web linked fonts in .WOFF, .TTF and .OTF formats.