

skills

Development Languages: JavaScript (ES6), GLSL, SQL, C++, C#, C, Scheme, HTML/CSS

Web: Node.js, React, Redux, Angular, Electron, Sass, D3.js, Express, Webpack, Gulp

Graphics: WebGL, Shaders, ThreeJS, Blender3D

Other: Postgres, React Native, Unity, Qt, Git

projects

WebGL Sketchbook bit.ly/2BcthOE

JAN 2018 - PRESENT

- A collection of **shaders** exploring various **raw WebGL/GLSL** techniques including ray marching, signed distance functions and noise functions. Implemented using an **object oriented** approach
- Handled routing and mounting between sketches via **React + React Router**

Pokedex Web App + API bit.ly/2yhWQ1h

OCT 2017 - JAN 2018

- Architected a **Postgres** database to store Pokemon data scraped using **Node.js** for efficient read access
- Implemented front-end using **React + Redux** with a **Node.js (Express)** backend to handle database queries
- Optimized production build and development process using customized **Webpack 3** configurations

Processing Audiograph bit.ly/2fjxBTS

JUN 2017 - JULY 2017

- Structured a **React** playlist application using a **flux** based architecture
- Analyzed and rendered audio frequency data onto an HTML **canvas** using **processing**-like techniques

D3 Geographic Esports Visualization bit.ly/2xoWW9j

JAN 2017

- Scraped and aggregated esports earnings data with **Node.js** using a **functional** paradigm
- Rendered processed data into a 3D self-rotating globe choropleth (heatmap) using **D3.js**

experiences

Freelancer | misspia.me

SEPT 2017 - PRESENT

- Effectively worked with and provided consultation for clients to bring **mobile** and **web** applications to life
- Made architectural decisions to create **scalable** applications

Software Engineer Intern (Manufacturing Automation) | Thalmic Labs

SEPT 2017 - DEC 2017

- **Reduced manufacturing process time** by 33% by developing intuitive interfaces using **React** with **flux** to communicate with machinery software via **WebSockets**
- **Increased scalability** by migrating and re-architecting legacy web applications to modern frameworks

Software Engineer Intern (Prototyping) | Thalmic Labs

MAY 2017 - AUG 2017

- Architected a **React** CRUD app that manages software updates and releases, **reducing QA inaccuracy** by 90%
- Developed **Qt / QML** applications for user testing to validate product designs
- Implemented a desktop screen capture tool using **Electron** that streams image / video data to remote devices, improving Design team efficiency

Full Stack Developer Intern (Lab of Forward Thinking) | Manulife

SEPT 2016 - DEC 2016

- Effectively communicated with stakeholders and designers to launch department's internal website redesign
- Developed **Angular** charting directives using **D3.js** for cutting edge retirement investment tool

education

University of Waterloo, Bachelor of Accounting and Finance

CLASS OF 2018
EXPECTED GRADIATION: APRIL 2018