

skills

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

Web Tools: Node.js, Flask, React, Redux, Angular, Electron, Webpack, Gulp, Sass, Less, D3.js, WebGL, Express

Other Tools: Postgres, React Native, Qt, Git, Blender 3D

projects

WebGL Low Poly Solar System bit.ly/2DasL8M

DEC 2017 - JAN 2018

- Used an **object oriented** approach to implement a **WebGL** Solar System by creating geometries and textures in **ThreeJS** to render 3D planets
- Optimized rendering** of orbits by merging planetary vertices to reduce the total **draw calls per frame**

Pokedex Web App + API bit.ly/2yhWQ1h

APR 2017 - PRESENT

- 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 2** configurations

Geometric Audio Wave Form Visualizer 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 using **Node.js**
- 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, part-time (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 (Prototyping) | Thalmic Labs

MAY 2017 - AUG 2017

- Architected a **React** CRUD app that manages software updates, **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 (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 GRADUATION: APRIL 2018