

## skills

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**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, Qt, Git

## projects

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**WebGL Sketchbook** [bit.ly/2BcthOE](http://bit.ly/2BcthOE)

JAN 2018 - PRESENT

- A collection of **shaders** exploring various **raw WebGL/GLSL** techniques including raymarching, 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](http://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](http://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](http://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

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**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

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**University of Waterloo**, Bachelor of Accounting and Finance

CLASS OF 2018  
EXPECTED GRADUATION: APRIL 2018