

# Joshua Calder

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## Technical Skills

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- *Adept:* Python (Django, Flask), JavaScript (React, React Native, Next.js), Java
- *Proficient:* Swift, PHP, Scala, C/C++
- *Other technologies:* AWS, Docker, Git, Google Cloud Platform, Serverless Framework, GraphQL/REST, PostgreSQL, MongoDB

## Experience

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### Lifehouse Hotels

Montreal, QC

Software Engineer

Nov 2020 — Present

- Implemented real-time messaging features integrated with AWS, Salesforce, and Python (Django and Serverless) to allow communication between hotels and guests
- Updated and delivered a completely redesigned native IOS application (Swift) based on new branding and design requirements
- Updated APIs for hotel services (REST to GraphQL) to match new requirements while maintaining backwards compatibility

### Shutterstock

Montreal, QC

Software Engineer

Nov 2019 — Nov 2020

- Worked on Shutterstock's Music Internal Tools as a full-stack dev to develop key features for internal audio processing tools
- Significantly simplified the front-end table architecture by redesigning and refactoring using React hooks, functional components, and Redux
- Improved code testing coverage in both backend and frontend environments

### Aptean

Kelowna, B.C.

Software Engineer Intern

June 2017 — Dec 2017

- Main contributor for a major update release of education management software
- Designed, developed and tested a custom spam-prevention email authentication system using PHP and MySQL
- Accepted a 4-month extension to work with the recreation management software team to implement new facility management booking features

### PG Music

Victoria, B.C.

Developer

Sept 2015 — May 2016

- Debugged incorrect MIDI data representations of instrumental audio recordings
- Ensured musical notation was accurately displayed inside musical accompaniment software Band-In-A-Box

## Education

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**Bachelor of Science, Computer Science (Software Engineering Option)** *Sept 2015 — Apr 2019*  
*University of Victoria — Victoria, B.C.*

- Relevant Coursework: Software Development Methods & Operating Systems, Software Scalability & Database Systems, Computer Communications & Networks
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## Personal Projects

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**Fretgym.com** — Django, Flask, PostgreSQL, JavaScript *May 2018 — Present*

- Developed and deployed a web app that generates custom guitar practice routines based on a user's practice preferences
- Featured on ProductHunt.com, currently has hundreds of registered users
- Streamlined production deployment to automate various build tasks and production pushes
- Manually set up Linux server on cloud hosting to serve Fretgym

**jimi** — Django, MongoDB, ReactJS *Feb 2019*

- Collaborated in a small team to create a location-based collaborative music playlist generator for UBC's NWHacks 2019
- Integrated the Spotify API to authenticate user's accounts and query their recent listening activity

**Lyra** — Python, NLTK (Natural Language Toolkit) *Jan 2019 — April 2019*

- Developed a natural language lyric generator using constrained Markov chains under the direct supervision of a University of Victoria professor
- Wrote a script that queries the genius.com lyric API to collect large amounts of training data

**WikiWikiWikipedia** — JavaScript, CSS, HTML *March 2018*

- Worked in a small team to develop an open-source Chrome extension that plays relevant audio while browsing Wikipedia. Created for the HackUVic programming competition
- Integrated YouTube API to query audio based on scraped Wikipedia HTML data