# Justin Michaud

Portfolio: <a href="http://justinmichaud.com">http://justinmichaud.com</a> Github: <a href="http://github.com/jtjj222/">http://justinmichaud.com</a> Github: <a href="http://github.com/jtjj222/">http://github.com/jtjj222/</a>

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### Qualifications

- Communication with coworkers/clients to define project requirements
- Experience building Java, Android, Web Applications
- Experience with version control, contributing to Open Source projects
- Proficient with: Android, Python, PHP, SQL, Linux

### **Employment History**

Sudbury Action Centre for Youth

Software Development Contractor

August 2016 – September 2016

- Built and deployed web application to track clients and donations using Python and Django
- Application eliminated an entire shift, collected statistics to seek funding and find areas to improve
- Communicated to collect requirements from non-technical users and ensured value was created

YMCA of Sudbury

Software Developer & I.T. Assistant

June 2014 to September 2016

- Developed open-source remote support tool using Java, Netty and UDP hole-punching to tunnel TCP connections without port forwarding; Used less data, was easier to use than existing solutions
- Built public job board using PHP and MySQL; used by hundreds of clients, ~20 job councillors
  - Introduced the use of Twig templates to separate display and business logic and eliminate XSS and CSRF vulnerabilities, prepared queries to eliminate SQL injection vulnerabilities
- Introduced git and basic documentation practices to development workflow
- Wrote Python scripts to manage public resource Linux computers, with guest sessions, automatic logout, and remote management; reduced maintenance costs, increased security, and enforced usage policies
- Created web application that tracked camper purchases; saved ~20 hours per week in repetitive and error-prone calculations, produced actionable statistics

## Interests / Projects

Everything from playing oboe in the Waterloo Orchestra to messing around with lasers at Hack the North to playing games on my Commodore 64

- Contributed Gesture Typing feature to the AnySoftKeyboard project to create the first Open Source swipe keyboard for Android
  - Generates simulated paths for possible words and compares them to the user input
- Created a shooter game for Google Cardboard with Java and OpenGL that uses BoofCV running on a laptop to track the position of player's head, allowing them to shoot enemies and dodge obstacles
- Work in progress: Arduino project to create cheap VR motion tracking, using mirrors to scan linelasers across the room and IR to synchronize the emitter/receiver
- An Open Source Android transit application using the Sudbury Open Data API, available on F-Droid More projects and source code available at <a href="http://justinmichaud.com">http://justinmichaud.com</a>

#### Education

September 2016 to Present – Candidate for Bachelor of Computer Science at the University of Waterloo