# Justin Michaud

justinmichaud.com justin@justinmichaud.com | 226-505-5463 | github.com/justinmichaud

### **FDUCATION**

# UNIVERSITY OF WATERLOO 2A COMPUTER SCIENCE

Sept 2016 - Present | Waterloo ON

# **LANGUAGES**

Medium Projects: Java, Ruby, Rust Small Projects: Javascript, Python Have Used: PHP • C • C++ • Rack

PHP • C • C++ • Racket Frameworks/Technologies: EmberJS • Arduino • Android • OpenGL • Linux

# **INTERESTS**

- Playing Oboe with the Waterloo University Orchestra
- Playing games on my Commodore 64

# **FMPI OYMENT EXPERIENCE**

#### PAGERDUTY | SOFTWARE ENGINEERING INTERN

May 2017 - Aug 2017 | Toronto, ON

- Full stack development using Ruby, MySQL, Zookeper, Ember and iOS/Android SDKs
- Optimized queries, indexes, denormalized columns and UX to support accounts with millions of incidents

#### YMCA | I.T. ASSISTANT

June 2014 - Sep 2016 | Sudbury, ON

- Developed open-source remote support tool using Java and UDP hole-punching to tunnel TCP connections without port forwarding
- Built public job board using PHP and MySQL; used by hundreds of clients, 20 job counselors

# **PROJECTS**

### NES EMULATOR | PERSONAL PROJECT

June 2017 - Aug 2017

- Created NES emulator in Rust, capable of playing games including Super Mario Bros and Donkey Kong
- Fully playable online using WASM and Emscripten See portfolio

# SUPER MARIO BROS. LEVEL GENERATION | BLOG POST Aug 2017

- Trained Torch-RNN on original levels; Modified emulator to load generated levels
- · Wrote detailed blog post documenting how to replicate results

#### ANYSOFTKEYBOARD | OPEN SOURCE CONTRIBUTOR

Dec 2016 - Present

• Contributed gesture typing feature to create first open-source swipe keyboard for Android (development builds only)

# MOTION TRACKING SPACE SHOOTER | MHACKS 8 PROJECT Oct 2016 | Detroit, MI

- Created a shooter game for Google Cardboard with Java and OpenGL
- Used BoofCV running on a laptop to track the position of player's head, allowing them to shoot enemies and dodge obstacles