

Justin Michaud

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EDUCATION

UNIVERSITY OF WATERLOO
2A COMPUTER SCIENCE
Sept 2016 - Present | Waterloo ON

BLOG POSTS

- Super Mario Bros. Level Generation Using Torch-RNN

LINKS

Portfolio:
More projects and full source code available at justinmichaud.com

LANGUAGES

Big Projects:
Java, Ruby, Rust
Small Projects:
Javascript, Python
Have Used:
PHP • C & C++ • Racket (LISP)
Frameworks/Technologies:
EmberJS • Arduino • Android •
OpenGL • Linux

INTERESTS

Music:
• 2nd Oboe for the Waterloo University Orchestra, W2016
Technical:
• Participant of Hack the North 2016, MHacks 8
• Retro computer fan; I enjoy programming in BASIC for my Commodore 64

EMPLOYMENT EXPERIENCE

PAGERDUTY | SOFTWARE ENGINEERING INTERN
May 2017 – Aug 2017 | Toronto, ON
• In progress

SUDBURY ACTION CENTRE FOR YOUTH | CONTRACTOR
July 2016 – Aug 2016 | Sudbury, ON
• Developed web application to track clients using Python and Django

YMCA | SOFTWARE DEVELOPER & 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
• Includes optional game modifications by hooking into memory operations
• Allows exporting training data and importing levels generated using Torch-RNN - See portfolio/blog
• Fully playable online using WASM and Emscripten - See portfolio

ANYSOFTKEYBOARD | OPEN SOURCE CONTRIBUTOR
Dec 2016 - Present
• Contributed experimental gesture typing feature to create the first open-source swipe keyboard for Android (currently feature-flagged)
• Compares input to predicted word paths by finding path corners and measuring their distance

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