

Justin Michaud

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TECHNOLOGIES

- C++
- Java
- Scala
- Rust
- OpenGL

INTERESTS

- Free & Open Source Software
- Browsers
- Graphics
- Emulation
- Rust

HOBBIES

- Oboe with UW Orchestra
- Collecting old computers (Mac classic, Commodore 64)

EDUCATION

UNIVERSITY OF WATERLOO 2B COMPUTER SCIENCE

Sept 2016 - June 2021
Waterloo, ON

EXPERIENCE

APPLE, WEBKIT LAYOUT & RENDERING INTERN

Sep 2018 – Dec 2018

C++ | Cupertino, CA

- In Progress

PAGERDUTY, SOFTWARE ENGINEERING INTERN

Jan 2018 – April 2018

Kafka, Scala, Akka | San Francisco, CA

- Reduced database load by developing replacement for service that published records to Kafka from MySQL
- Built Scala/Akka Streams service to allow filtering and fanout of kafka records to multiple clusters
- Went on-call for team's mission-critical services

PAGERDUTY, SOFTWARE ENGINEERING INTERN

May 2017 – Aug 2017

Ruby, MySQL, EmberJS | Toronto, ON

- Optimized MySQL queries by adding indexes and denormalized columns, allowing incidents dashboard to support millions of incidents without any maintenance downtime
- Implemented incident priority editing and mobile support using ruby, EmberJS and iOS/Android SDKs

YMCA, SOFTWARE DEVELOPMENT ASSISTANT

Jun 2014 – Aug 2016

Java, PHP | Sudbury, ON

- Built low-bandwidth remote support tool using UDP hole-punching to tunnel TCP connections without port forwarding

PROJECTS

More at justinmichaud.com

ANYSOFTKEYBOARD CONTRIBUTOR

Java, C++, Android, JNI

- Contributed gesture typing feature to create first open source swipe keyboard for Android
- Compares input path to simulated paths, measuring distance along path to find most likely word; Next steps are to improve accuracy, usability and performance

RUST NES EMULATOR

Rust, 6502 ASM

- Created NES emulator with partial audio and cartridge mapper support to learn rust
- Included game modifications not possible on original hardware by hooking into memory reads/writes and import/export support for Super Mario Bros. levels

RUST/SERVO GUI DEMO

Rust

- Fork of servo browser engine demonstrating a simple react-like rust html macro and native rust event handlers
- Like electron, but using native rust + servo instead of javascript + webkit.