Justin Michaud

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justinmichaud.com

github.com/justinmichaud

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, Powerbook 190cs and Commodore 64 so far)

EDUCATION

UNIVERSITY OF WATERLOO
3A 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

- 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 & IT Assistant   Jun 2014 – Aug 2016
Java, PHP | Sudbury, ON

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 pre-computed simulated paths, measuring distance along path to find most likely word; Next steps are to improve accuracy, usability and performance

RUST NES EMULATOR   Rust

- 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

GLIDEN64   C++, OpenGL

- Created demo adding stereo rendering and google cardboard support to GlideN64 Nintendo 64 graphics plugin (too unstable to merge)
- Applies eye translation after projection matrix is applied but before perspective divide; Avoids toe-in, but causes depth buffer issues

SERVO NATIVE RUST DEMO   Rust

- Massive hack to fit servo browser engine with native rust event handlers, with a very simple TODO list demo
- Idea is to be like electron, but with rust/servo instead of javascript/blink