

Justin Michaud

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ABOUT

Know: Java, Scala, Rust, C++, MySQL, Kafka, Android

Have used: OpenGL, Python, Ruby, Percona XtraDB, Arduino, Javascript/ES6, EmberJS, ElasticSearch, Elixir

EXPERIENCE

PAGERDUTY, SOFTWARE ENGINEERING INTERN Kafka, Scala, Akka | Jan 2018 – April 2018 | San Francisco, CA

- Developed replacement for service that published records to Kafka from Mysql, eliminating database locking and load
- Contributed recovery features/bugfixes to open source Maxwell Mysql binlog-to-json publisher, built Scala/Akka Streams service to allow filtering and fanout of messages to multiple clusters
- Added OAuth support and other improvements to new Scala/Akka backend for frontend service

PAGERDUTY, SOFTWARE ENGINEERING INTERN Ruby, Mysql, EmberJS | May 2017 – Aug 2017 | Toronto, ON

- Optimized Mysql queries, added 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

Php, Java | Jun 2014 – Aug 2016 | Sudbury, ON

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

SELECTED 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

RUST NES EMULATOR

Rust, 6502 ASM

- Created NES emulator capable of playing Super Mario Bros., Donkey Kong
- Included game modifications not possible on original hardware, import/export support for Super Mario Bros. levels

VR SPACE SHOOTER

Java, OpenGL, BoofCV

- Google Cardboard shooter game using head tracking to allow player to shoot enemies and dodge obstacles
- Uses OpenGL for rendering, BoofCV on a laptop to track the position of player's head

RUST/SERVO GUI FRAMEWORK DEMO

Rust

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

EDUCATION

UNIVERSITY OF WATERLOO, 2B COMPUTER SCIENCE

Sept 2016 - Present | Waterloo, ON

INTERESTS

I love playing oboe with Orchestra@UWaterloo, playing games on my Commodore 64, and collecting old Macs