Justin Michaud

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justinmichaud.com

github.com/justinmichaud

TECHNOLOGIES
- C++
- JavaScript
- OpenGL

INTERESTS
- Free Software
- Browsers
- Compilers
- Graphics
- Emulation

HOBBIES
- Coffee
- Oboe
- Retro Computers

EDUCATION

UNIVERSITY OF WATERLOO
4B Computer Science
Sept 2016 - April 2021
Waterloo, ON

EXPERIENCE

APPLE, JavaScriptCore Compiler Engineer –
C++ | Cupertino, CA
- Coming soon

APPLE, JavaScriptCore Intern   Jan – April 2020
C++ | Cupertino, CA

- Implemented inline caching optimizations for property deletion, giving 1% speedometer progression (go to blog post)

    May – Aug 2019
- Implemented strength reductions and instruction selection patterns to improve code generation, giving 1% speedometer progression.
- Implemented WebAssembly Reference Types proposal, allowing opaque JSValues to be used as values within WASM code.

APPLE, WebKit Layout & Rendering Intern   Sep 2018 – Dec 2018
- Developed prototype of CSS Painting API.

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 to allow incidents dashboard to support millions of records without any maintenance downtime

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

PROJECTS   More at justinmichaud.com

RUST NES EMULATOR   Rust
- Created NES emulator to learn rust (try it yourself)
- Included game modifications not possible on original hardware by hooking into memory reads/writes