# 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**
**Computer Science (BCS)**
Sept 2016 - April 2021
Waterloo, ON

## EXPERIENCE

**APPLE, JavaScriptCore Intern**    Jan – April 2020
**C++ | Cupertino, CA**
- Implemented inline caching optimizations for property deletion, giving 1% speedometer progression (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 – Dec 2018
- Developed prototype of CSS Painting API.

**PAGERDUTY, Software Engineering Intern**    Jan – 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

**Ruby, MySQL, EmberJS | Toronto, ON**    May – Aug 2017
- 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

**GLIDEN64**    C++, OpenGL
- Created demo adding stereo rendering and Google Cardboard VR support to GlideN64's high-level graphics emulator
- Can play Super Mario 64 in VR, albeit with many graphical artifacts