

Michael Goulet | Résumé

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Summary

CS Senior at Caltech seeks full time position in Software Engineering. Experience with large-scale infrastructure and full-stack development. Strong interests in scalability, compilers, functional programming, computer graphics, and distributed computing.

Highlights

- Presented "Throttling Traffic at Facebook Scale" at GlusterFS Summit 2017 in Prague, CZ.
- Contributed open-source TLS security patch to OBS, a popular live streaming application.
- Helped write and TA new programming language implementation course, CS 131 Spring 2018.
- Filed patent for thin-client virtualization scheme at HP during internship, Summer 2015.

Employment

Facebook

Production Engineer Intern, Video Infrastructure

Menlo Park, CA

Summer 2018

- Developed tooling to enable more fine-grained video analysis at Facebook.
- Deployed internal services and helped on-board next-gen technology.

Facebook

Production Engineer Intern, POSIX Storage

Menlo Park, CA

Summer 2017

- Contributed to GlusterFS, an open-source distributed filesystem deployed at Facebook.
- Tackled QoS issues and improved performance on petabyte-sized storage clusters.
- Upstreamed patches to mainline GlusterFS and collaborated with developers outside of FB.

Jet Propulsion Laboratory

Summer Undergraduate Research Fellow

Pasadena, CA

Summer 2016

- Greatly improved usability and reliability of the "CTOC" pub-sub message passing library.
- Authored "Implementing a Framework for Message Passing between Marine Multi-Agent Systems"

Hewlett-Packard Company

Linux Software Engineer Intern

Houston, TX

Summer 2015

- Collaborated in a small team contributing to HP's ThinPro Linux distribution for thin clients.
- Used virtualization to decouple ThinPro's hardware dependency and enable quicker hardware adoption.

Skills and Projects:

Highly experienced with: C/C++, Linux, Python, Haskell, Scala, Rust, git/hg

Web technologies: React, JavaScript, PHP/Hack

Noteworthy projects include:

- **Arrow:** Scala-based SQL optimizer on top of "NanoDB" project database.
- **Vesta:** CPU emulator written in Rust to learn more about CISC instruction sets.
- **Cheshire:** Toy programming language and compiler written in Rust.

Education

California Institute of Technology

Computer Science and English, GPA: 4.0

Pasadena, CA

2015–2019

- **Teaching Assistant** for Intro to Systems, Database Projects, and Operating Systems Implementation.
- Rigorous practical and theoretical math and CS exposure, includes (but not limited to) distributed systems, operating system implementation, database implementation, functional programming, and machine learning.