

STEPHEN BRENNAN

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EXPERIENCE

Yelp, San Francisco, CA

Software Engineer, Spam Team, October 2016 – Present

- Led project to improve XGBoost model impacting millions of reviews.
- Built real-time streaming system for filtering and forwarding hundreds of messages per second to a third party via Amazon SQS.
- Migrated Hadoop map-reduce jobs to Apache Spark, reducing cost and runtime.

Intern, Spam Team, May 2016 – August 2016

- Improved user security by detecting & blocking messages containing dangerous URLs.
- Migrated credit card transaction blocking system to a service oriented architecture.

LECO, St. Joseph, MI

Intern, Separation Science, May 2013 – August 2013

- Implemented GPU-accelerated graph traversal feature in C++.
- Wrote build scripts in Python and developed Windows Installers.

EDUCATION

Case Western Reserve University, Cleveland, OH

Master of Science, Computing and Information Science, August 2017

Bachelor of Science, Computer Science, May 2017

SKILLS

- Experienced with C, Python, SQL, Go, Java, and C++.
- Experienced with Spark, Git, Docker, Linux Kernel Development, and Multipath TCP.

PROJECTS

Linux Kernel

- Several patches with coding style fixes merged upstream.
- Working on patch series to enable support for HWRNG on Raspberry Pi 4.

Personal Operating System

- Minimal operating system targeting 32-bit ARMv7.
- Supports virtual memory, cooperative multitasking, system calls, PL011 serial output.

Master's Thesis

- Implemented Multipath TCP path manager within Linux kernel.
- Experience developing and debugging complex systems spanning kernel and userspace.

PUBLICATIONS

Improving Communication Through Overlay Detours: Pipe Dream or Actionable Insight? *Stephen Brennan & Michael Rabinovich, IEEE International Conference on Distributed Computing Systems, July 2018*