Lucas F. Chaufournier

lucaschaufournier@gmail.com

https://lucasch.dev (301) 820-2080

Technical Skills

Programming Languages: Golang, Python, Javascript, C, Bash, Bokeh

Cloud Technologies: AWS, GCP, Azure, Docker Products, Linux Containers, KVM

Architectures: Microservice, Edge Clouds, Centralized Clouds, Pub/Sub

Work Experience

Graduate Research Assistant in Distributed Systems University of Massachusetts Amherst, Amherst, MA Sep 2015 - Present

- Evaluated the performance of hardware and operating system virtualization platforms to show which workloads should use containers over VM's.
- Evaluated the use of multi-pathing network protocols for speeding up workloads in data centers and at the edge.
- Data Visualization of large networking datasets for debugging.

Consulting Backend Engineer

Jun 2018 - Jan 2019

Veea Inc., New York, NY

- Designed customer demo applications in golang and node.
- Led the design of Veea's developer ecosystem including a golang based CLI, resulting in an easy to use environment for developers working with the platform.
- Golang developer on the backend cloud management system of edge devices; responsible for DOS detection.
- Designed and implemented demos to showcase computer vision on edge devices.

Summer Research Intern

May 2017 - Aug 2017

IBM Thomas J. Watson Research Center, Yorktown Heights, New York

- Evaluated container performance at the edge of the network to show performance on low resource nodes.
- Evaluated the performance of machine learning container workloads when scaling many instances on a node to show optimal workload placement.
- Built a framework in golang for easily running and measuring container experiments at scale.

Jr. Info-Sec & Compliance Analyst, Linux System Administrator GWU School of Engineering Computing Facility, Washington, DC

Jun 2013 - May 2015

- Ensured compliance with George Washington University network security policies.
- Deployed and maintained High Performance Computing Grid Machines.
- Hardened linux computing infrastructure.

Education

University of Massachusetts Amherst M.S. Computer Science Specialized in Distributed Systems Amherst, MA, May 2018

The George Washington University B.S. Computer Science G.P.A. 3.9/4.0 (in major) Washington, DC, May 2015

University College London B.S. Computer Science Affiliate Student, London, UK, Fall 2013

Select Computer Science Courses

Secure Distributed Systems, Distributed OS, Visualization, Design of Open Source Software, Computer Security, Operating Systems, Systems Programming and Embedded Systems

Select Publications

Performance Evaluation of Multi-Path TCP For Data Center and Cloud Workloads International Conference on Performance Engineering, To Appear 2019.

Fast Transparent Virtual Machine Migration in Distributed Edge Clouds ACM/IEEE Symposium on Edge Computing, October 2017.

Containers and Virtual Machines at Scale: A Comparative Study ACM International Middleware Conference, December 2016.