

Michael Dresser

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EXPERIENCE

GOOGLE | SOFTWARE ENGINEERING INTERN

2020 | Remote

- Contributed to the Kubernetes project by designing and implementing an improved cluster deployer for GCE.
- The Kubernetes project runs 90,000 end-to-end tests a month on GCE. The new deployer simplified a convoluted end-to-end test workflow, improving the experience of test writers and testing infrastructure maintainers.
- Contributed patches to repositories across the Kubernetes project.

CU BOULDER COMPUTER SCIENCE | GRADUATE STUDENT

STAFF

2019 | Boulder, CO

- Held office hours and did grading for Linux Systems Administration.
- Course material included bash scripting, logical volumes, configuration using Puppet, access control, manual and DHCP configuration of network interfaces, DNS server configuration, and firewall configuration using iptables.

TWILIO | SOFTWARE ENGINEERING INTERN

2019 | Denver, CO

- Designed and laid out a development plan for a microservice to enable testing. Moved that service into Kubernetes. It was quickly in use by 3 teams and allowed one of them to automate flows they hadn't been able to for a year.
- Migrated legacy VM-based service into Kubernetes, saving up to an hour of developer time for every release.
- Created Go service and automatic pipeline to recover failed operations by recirculating Kafka messages.

LOGRHYTHM | SOFTWARE ENGINEERING INTERN

2018 | Boulder, CO

- Developed addition to Go microservice to write over 50,000 logs/minute to GCP Pub/Sub.
- Developed Go microservice that queries Elasticsearch to prevent PII cross-contamination.

OVERWATCHID | SOFTWARE DEVELOPMENT INTERN

2017 | Denver, CO

- Designed and implemented Java (Spring) service for integration with multiple ITSM products' APIs.

OTHER EXPERIENCE

CU CYBERSECURITY CLUB | EVENTS MANAGER

2018-Present | Boulder, CO

- Planned and led weekly meetings for the club.
- Reworked meeting norms to be more interactive.
- Designed lesson plans to quickly get new members up to speed, regardless of prior experience.
- Competed in RMCCDC 2020, including creating Linux operations playbooks and daily plans for the team.

EDUCATION

UNIVERSITY OF COLORADO BOULDER

B.S. AND M.S. IN COMPUTER SCIENCE

Expected Dec 2020

GPA: 4.0 / 4.0

SKILLS

LANGUAGES

Go • Python • Clojure • Scala • Java •
C++ • C • JavaScript • Bash • SQL

TECHNOLOGIES

Linux • Kubernetes • Docker • Git •
Microservices • GCP • AWS • REST •
Spark • Spark • Kafka

COURSEWORK

GRADUATE

Algorithms
Programming Languages
Machine Learning
Linear Programming
Data Mining
Datacenter Scale Computing

UNDERGRADUATE

Operating Systems
Big Data Architecture
Linux Systems Administration

PROJECTS

TEEMO TOOL

Clojure, TypeScript, Python
IRC bot, API server, and website that
gather and display information about the
betting minigame on the Salty Teemo
Twitch stream. Includes a crawler for the
Riot Games API and Jupyter notebooks
to analyze the gathered data.

SCHEMEINTERP

Go
Implementation of a Scheme interpreter.

NETENG DDOS

Facebook CU NetEng Hackathon 2017,
Security Winner
Python
Packet flooding DDOS script, including
port scanning, using Scapy and threading.