

SKILLS**At Scale:**

- Puppet, Ansible, Chef
- Grafana/TIG, Nagios
- MPI, Ganglia, Kubernetes
- AWS EC2, EKS, ECS, S3

API Integration:

- OAuth, OpenID, Shibboleth
- Discord, Facebook Live

Data Scraping and Analysis:

- Apache Nutch, BeautifulSoup, WWW::Mechanize
- Automated cohort generation, Kafka, Spark
- ElasticSearch, Ceph, HDFS
- Google Analytics, Network flow analysis

Web Stacks:

- Python/Flask, Plack/PSGI, Go, Ruby/Rails
- React/Redux, TypeScript, Express, Next.js
- Postgres, MariaDB, Oracle
- Apache Cassandra, Hasura
- Nginx, Apache, Caddy

SELECTED EXPERIENCE**Systems Team Lead**

2021-current

Anthropic

- Manages team supporting Anthropic's large-scale training and inference infrastructure

Co-Founder/DevOps Engineer

2021-current

Hofvarpnir Studios

- Non-profit organization providing support for AI safety researchers at institutions such as MILA and UT Austin
- Designed, provisioned, and managed a dedicated GPU cluster for training research ML models
- Provide DevOps support in deploying and managing experiments using Kubernetes, Deepspeed, and Wandb

Lead Systems Architect

2020-2021

Prelim

- Built CI/CD pipeline with hosted workers in AWS and GitHub Actions for zero-downtime deployment
- Prototyped form transpiler to allow business rules to compile into safe, performant code without engineering
- Designed and built a graphical system for quickly connecting arbitrary APIs to existing forms
- Refactored authentication and authorization systems to support single sign on and role based access control

System Architect

2019-2021

Prometheon Systems

- Designed, built, and deployed a realtime collaboration system across heterogenous client devices in multi-cloud and on-premise environments
- Migrated legacy web backend servers to a horizontally elastic Kubernetes-based architecture
- Maintained consistency and availability of large PostgreSQL+Hasura GraphQL databases

Data Engineer

2019-2020

Carbick

- Increase cross-team communication and speed installations by bridging internal systems to Slack
- Implement Bayesian networks for proactive health indicators

Linux Administrator

2018-2019

National Center for Biotechnology Information, Medical Science & Computing

- Provision, maintain and decommission 2000+ CentOS servers using Puppet
- Create distributed inventory management and alert tooling

Linux Systems Administrator, Web & API Developer

2015-2018

Division of Information Technology, University of Maryland, Baltimore County

- Created enterprise service bus and automation platform
- Built API integrations for multiple campus partners across diverse API types
- Migrated configuration management from CFEngine to Puppet and server monitoring from Nagios to Zabbix

Webmaster

2008-2013

University of Maryland, Biotechnology Institute

- Expanded HaloWeb <halo.umbc.edu> from one genome to twenty plus genomes
- Created data visualization tools for cross-dataset correlative query building

SELECTED PROJECTS**Fletcher***fletcher.fun**Discord bot for cross-community organizing with ML driven moderation of 1M+ users***EDUCATION****Bachelor of Science in Information Systems**

2014-2018

University of Maryland, Baltimore County