

**SKILLS**

Linux, Go, Docker, Python, Bash, Prometheus, Thanos, Docker, Ansible

**WORK**

- Senior devops engineer – NVIDIA 12/2021 – Present  
Linux build infrastructure for the RAPIDS ecosystem; rapids.ai
- Staff site reliability engineer – Pandora/SiriusXM 12/2017 – 11/2021
- Architect & maintainer of a petabyte-scale self-service Prometheus + Thanos metrics platform
    - Supported horizontal scaling for large Consul catalogs, and large query optimizations
    - Added resilience with meta-monitoring, auto-healing, and circuit-breaking
    - Created federated metrics cluster for long-term retention and cross-datacenter querying
    - Developed first-class integrations with containerized microservice platform
  - Rebuilt PostgreSQL-based DCIM system to add login gating/auditing with LDAP and JWT
    - Replaced legacy Python 2 code with PostgREST, Go, and Python 3
    - Designed new server architecture for redundancy, lower latency, and cross-region resilience
    - Added provisioning and management of RHV/oVirt virtual machines alongside baremetal
    - Incorporated realtime block device inventory tracking with Prometheus
  - Wrote a real-time cross-region parallel streaming media file replicator in Go, dropping replication time from hours to seconds and replicating 1+ billion files from a stateless container deployment. Critical in making new music releases available to users seconds after launch
  - Created a Go CI/CD and general artifact distribution system using Docker, Nomad, and Ceph, with first-class support for mirroring and rebuilding external Go projects for upgrades and hotfixes
- Site reliability engineer – Adgear/Samsung Ads 09/2016 – 11/2017
- Defined AWS deployment procedures with Terraform and Packer; developed tools for operating Vertica in AWS; wrote [github.com/steamhaus/goat](https://github.com/steamhaus/goat) to manage EBS/EC2 attachments
  - Lead SRE on first production Rust deployment; created first Rust CI/CD pipeline; wrote a popular command-line protobuf parser [github.com/sevagh/pq](https://github.com/sevagh/pq)
- Devops engineer – SAP Hybris 11/2015 – 09/2016  
Python developer – Gameloft 08/2015 – 11/2015  
Software developer – Savoir-faire Linux 04/2014 – 07/2015  
Junior computer engineer (intern) – Savoir-faire Linux 04/2013 – 04/2014

**SCHOOL**

- M.A., Music technology; GPA 4.0/4.0 – McGill University 2022 (expected)
- Thesis: “Music demixing with the sliCQ transform,” [github.com/sevagh/xumx-sliCQ](https://github.com/sevagh/xumx-sliCQ)
  - Publication: “Music demixing with the sliCQ transform,” MDX21 workshop, ISMIR 2021; pdf
- B.Eng., Electrical Engineering; GPA 3.48/4.0 – McGill University 2014