

Professional Experience

Startup 2023 - CURRENT	Sole engineer of financial startup building Python tooling and infrastructure on AWS (ec2, RDS).
Tower Research Capital 2023 - 2024	Liaison to FPGA development from DevTools Compute Development Platform. Sole developer of specialized dependency management system for FPGA design. Ownership of end to end CI/CD pipelines for hardware simulation on Kubernetes. Managed Kubernetes clusters across bare metal colocated datacenters. Developed Python applications for resource management, automated image creation and production deployment. Managed private GitLab, Gerrit and Gitolite instances for ~30+ trade teams. Ownership of highly available geo-distributed Artifactory instances with ~40 terrabytes of binary and package data. Implemented comprehensive monitoring and backup strategies for critical services.
Addepar 2016 - 2018	Highly available internal toolchain development for machine & environment provisioning, authentication & authorization within an auditable financial environment. Developed Python Flask applications for internal core workflows. Developed Python utilities to parse and process financial data injected for product. Managed compute resources on AWS. itihin an auditable financial platform representing \$500 billion assets under management.
Phoenix Age / Kabam 2013 - 2016	Technical lead of scalable backend infrastructure, and full stack feature development for top grossing, massively multiplayer mobile games of 15+ million users.
DuckDuckGo 2011 - 2013	Developed and managed open source repositories hosted on GitHub, responsible for responding to pull requests. Added features to and maintained the DuckPAN platform. Implemented business driven integrations with companies such as ESPN and Amazon. Wrote internal services and development tools, servicing ~4 million daily users.

Technical Skills

Languages	Python, Perl, Ruby, PHP, C, C++, Objective C, Javascript, Java, Shell, SQL, Haskell
Software Packages	NGiNX, Apache, MySQL, MariaDB, Postgres, Vertica, Couchbase, Redis, Memcached, Nagios, Sensu, Ganglia, Wavefront, Sumologic, BIND, ACME, Postfix, Dovecot, Chef, Gitolite, Gitlab, Gerrit, Salt, Docker, Conda, Kubernetes, Artifactory, Vault, Grafana, Prometheus

Personal Projects

disinclined.org	https://github.com/majuscule	https://disinclined.org/git	I manage this Debian VPS which hosts my code repositories, email accounts, and virtual domains including my personal website and technical blog.
powermate			I wrote this Haskell program to control ALSA, MPD and Pianobar with a Griffin Powermate, binding arbitrary shell scripts to physical gestures. It is available in the Arch User Repository.
nasm-demonstration			64 and 32 bit Netwide Assembly demonstration, in the form of a needlessly complicated hello world featuring a branch, macro and function.