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SUMMARY

Graduate of Texas A & M University, with over two decades of experience in software engineering, seeking full-time software engineering position. Strong background with many variants of UNIX, problem solving, software development, and troubleshooting. Experience with web services and APIs, microservices, networked applications, database driven applications, multi-process applications, web development, and tool development.

SKILLS

Operating Systems: Linux (Centos, Redhat, Debian, Ubuntu)
Programming: Go, web-based APIs, web services, micro services, Perl, Python
Databases: MySQL, PostgreSQL, Riak, ElasticSearch
SCM: Git (GitHub and GitLab)
Observability: Grafana, Graphite, Prometheus, Icinga, Icinga 2, Collectd
Other: Docker, GoCD, Jenkins, AWS, Agile (sprints, planning, etc...)

EXPERIENCE

ConnectWise
March 2021 – September 2021
Senior Software Developer

Working with a small team on the ConnectWise client and two services that the client talks to. The client runs on many different types of hosts (Windows, Mac, Linux), and records events such as the installation of software or a change in the amount of available memory. This information is sent to upstream services and presented to users. Another service manages profiles for clients that allows users to install / uninstall software, and other management tasks, across a large number of clients, remotely.

The primary mechanism of communication between all the services is Kafka with some direct messaging via HTTP. Data storage is provided by Cassandra. The

storage of the client is done in Amazon S3. Access to the client is done via a set of AWS Gateway endpoints. All services run in AWS. The client and all services are written in Go.

Silicon Shuttlecock

Senior Software Developer

October 2019 - April 2020 (company folded)

Worked on services, written in Go, that were meant to be used for the tracking and management of silicon wafers during the assembly of semiconductors. The services provided an API to query and manipulate the metadata for individual wafers as well as groups of wafers known as 'lots'. The backend datastore was SQLite.

Unfortunately the software did not sell and the company folded in April 2020.

Xome

Senior Software Developer

October 2018 - July 2019

Joined a small team of developers at Xome. Worked on breaking apart a small monolithic application into smaller services. Each service had a Postgres backend to store (mostly) JSON data using the JSONB column type in Postgres. Each service exposed a REST interface and all intra-service communication was done via REST. All code ran within Docker containers on locally managed hardware. All new services were written in Go.

Maintained an accounting service of primary interest to the accounting group within Xome. Worked closely with the accountants when adding new features, and made all technical decisions for the team. Was able to convert multiple by-hand projects into automated projects to the great relief of the accountants.

Was a member of a team that worked on rapid deployment of each of our new services. We used Jenkins as our CD platform and the end result was deployment to multiple hosts running docker containers. We reached our goal of under 10 seconds per deployment allowing very quick iteration for all developers.

OpenX

Senior Software Developer

February 2010 - September 2018

Was the founding member and team lead of the Automation Engineering and

Observability team at OpenX. This team was directly responsible for a number of things including a system that tracked all of the hardware in each datacenter and what role each piece of hardware was meant to fulfill, along with monitoring, alerting, graphing, imaging, and central tooling.

Wrote and maintained the system that helped OpenX organize and administer its data centers (several data centers worldwide with nearly twenty thousand servers). This system was used to track machines, network switches, IPs, PDUs, and many other items in each data center. Among its many functions this system wrote configuration files for various monitoring systems, controlled which users could access which hosts, and re-provisioned hosts.

At the core of the data center management system was a web-based, RESTful API that allowed for things such as creating virtual machines, allocating physical machines, rebooting hosts, and creating new images for our machines. This API was backed by a dozen different services each using its own backend (primarily Postgres). Long running, asynchronous jobs were delegated to a job queuing system.

Designed and performed initial development on a monitoring system that tied together Grafana, Graphite, Icinga 2, the data center management system, and an in house metric collection system. This monitoring system simplified and improved the way monitoring and alerting of metrics occurred at OpenX.

All of the services my team was responsible for were tested and deployed via our CI/CD system (GoCD at first, followed by Jenkins). We were the first team at OpenX to use continuous deployment and we helped other teams that wished to move toward CD (be it continuous delivery or continuous deployment).

Testing (unit, functional, operational) is very important. The codebase had well over 13,000 tests. Most of the code had well over 90% test coverage.

Oversee.net

Senior Software Developer

June 2008 - February 2010

Primary developer on next generation domain ad serving platform. This included a custom web server frontend and many backend services. The entire system was asynchronous. The backend services were all built from a common server framework. I wrote the web server frontend, the common server framework, and a number of the backend services.

Wrote a packaging and release system built on top of Jenkins. Using

Jenkins we could package up our code (using RPM) and release it to QA. After validation by QA the code could be released to production using the same mechanism.

OPEN SOURCE

Goldsmith (<https://github.com/WholsSethDaniel/goldsmith.nvim>)

This is a Neovim plugin I have developed. I use it every day when I am working on Go code. It takes advantage of many new features that Neovim provides as well as the tools provided by the Go distribution itself.

toggle-lsp-diagnostics (<https://github.com/WholsSethDaniel/toggle-lsp-diagnostics.nvim>)

Another Neovim plugin I have developed. This one is much simpler than Goldsmith and it does exactly one thing: toggle the display of diagnostics from external LSP servers.

EDUCATION

Texas A&M University
Bachelor of Computer Science, 1996