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SUMMARY

Working in tech for 12 years, 8 years of full stack web development and infrastructure/cloud.

COMPUTER SKILLS

Languages and Frameworks

- Languages: Go, Ruby, Node.js, ES6/JavaScript, Typescript, C#, SQL, BASH, HTML/CSS/SCSS
- Frameworks: Rails, Sinatra, ASP.NET, Dotnet Core, Angular 2+, VueJs, ExpressJs

Software

- Database: MS SQL Server, PostgreSQL, SQLite, Redis
- Platforms: Linux (Debian, Ubuntu, CentOS), Windows Server, AWS, GCP, Digital Ocean
- Miscellaneous: Jira, Apache, NGINX, IIS, RabbitMQ, New Relic

EXPERIENCE

Cloud Systems Engineer

10/2019-Now

BenchmarkONE (merger of Hatchbuck + Benchmark Email)

- Works closely with development team to plan, deploy, and maintain applications in a multitude of environments, including Windows and Linux servers/VMs at AWS and GCP.
- Involved in orchestrating a migration of colocation servers/VMs to the cloud.
- Re-engineers legacy applications to take advantage of cloud benefits, such as S3, SQS, and CloudFront.
- Responds to monitoring alerts and assists with application slowdowns and outages, in addition to transient infrastructure problems, such as low disk space or prolonged high CPU usage.
- Helps harden and secure new VMs and features, including managing IAM service accounts, consulting with feature teams about secure application architecture/appropriate separation of concerns, and minimizing attack vectors through means of VPCs/subnetting and appropriate use of firewalls, Fail2Ban, etc.
- Built and deployed both Port25 PowerMTA and HalonMTA respectively, while considering best
 practices for integration with an application and hardware requirements. Assigned IP blocks from
 ARIN to both GCP and AWS, then created network topography and configured site-to-site BGP
 VPN links to support the sending IPs.
- Wrote AWS Lambda functions to push custom metrics into New Relic, then built dashboards to show various queue depths, service heartbeats, and stats that were otherwise invisible.

Non-Profit Assistance Index (WIP)

2/2022

Project Hugo

- Personal project, currently under development, not yet online. Uses scripts and web scraping to automatically detect charitable donations to animal rescue organizations from public tax records, which are then manually curated, detailed, and listed in an index for use by local animal shelters that are seeking funding. Web scrapers ping each foundation's website to check for updates to submission deadlines or funding windows in an effort to keep the index updated without human intervention.
- Frontend is written Svelte and uses Bulma UI kit for component designs and SCSS for styling. Backend API is written in Go and uses SQLite3 for a database. A simple UI for manual curation was

- created with Ruby/Sinatra, and the web scrapers/tax file parsers are written in a mix of Go and Ruby.
- Infrastructure runs on AWS and is managed via Terraform. The frontend utilizes Netlify for CI/CD, CDN, and static asset hosting.

Freelance Website 11/2020

Heavy Riff Brewing Company (https://heavyriffbrewing.com)

- Full stack project with a UI/UX designer to create a website for Heavy Riff Brewing Company in Dogtown. Requirements were a real-time "currently on tap" feed using the untappd.com API, a contact form, and mobile responsiveness.
- Frontend is written VueJs and leverages Bulma UI kit for component designs, SCSS for styling, Axios as an HTTP client, and Dotenv for development purposes.
- Helped integrate a Shopify portal (created by a volunteer) into the web application and wrote a custom JS script to include an age verification modal inside Shopify.
- Backend consists of a Go API and a SQLite3 database.
- Utilizes Netlify CI/CD + CDN to host frontend and the backend runs on a Digital Ocean VPS (Ubuntu).

Web Developer 11/2017-10/2019

Hatchbuck

- Utilized agile processes (Kanban, SCRUM) and Jira to create new features and fix bugs in our flagship ASP.NET application.
- Wrote production code in C#/ASP.NET, JavaScript, jQuery, Angular, and SQL.

Senior Technical Analyst

7/2014-11/2017

Hatchbuck

- · Maintained mostly independent projects centering around higher-level customer support.
- Maintained several Linux-based VMs that hosted novel applications, including web connectors, ETL processes, and API integrations with various support tools (Freshdesk, Olark, Pendo, Intercom).
- Custom applications for clients, such as a Quickbase integration and a custom reporting engine.
- Designed and implemented an integration with Chartmogul for leadership to track SaaS metrics.
- Provided analysis regarding email deliverability, DNS troubleshooting, and bug documentation.

Help Desk Engineer 6/2013-7/2014

Miken Technologies

- Performed desktop support and server administration for clients.
- Troubleshot and repaired hardware at a workbench, as well as remote support.
- Managed Active Directory and troubleshot MS Exchange and email deliverability problems.

Senior Service Center Technician

11/2010-6/2013

Scottrade

- Provided technical assistance to clients and branch offices via phone and email.
- Trained new hires and developed documentation for Scottrade and Apple systems.
- Served as a point of contact for the developers' interactions with the technical support team.

HalonMTA Deployment

- Led the project, along with a counterpart from the development team, and became the point person in the company for Halon issues/questions/maintenance.
- Configured the cloud infrastructure (EC2, ElastiCache, OpenSearch, S3), set up the necessary subnets and security groups, and currently maintain the Halon service itself.
- Worked closely with the lead developer to spec and troubleshoot his ASP.NET 5 application (to feed the MTA from our existing queuing infrastructures) and deployed it on a Linux-based EC2 instance. To aid with his unfamiliarity with Linux, I wrote BASH scripts to deploy and restart the systemd services, pull logs for various workers for different time periods, and implement a custom logrotate schedule, not to mention screenshares and general training.

PowerMTA Cloud Migration

- Managed project with two contractors (entrenched Linux sysadmin from Benchmark Email merger, as well as a boots-on-ground networking contractor in LA that managed the colocation) to migrate Benchmark Email's PowerMTA servers from an LA datacenter to the cloud (GCP).
- I personally set up network infrastructure that allows AWS EC2 instances to feed PowerMTAs at GCP, which then sends email out and received feedback loop responses via ARIN IPs hosted on a Cisco Firepower located in the datacenter in LA. This was accomplished by configuring a High-Availability VPN between AWS and GCP, peering subnets on each end, and then working with my contact in LA to set up a BGP VPN between LA and GCP.

Hatchbuck Admin Portal

 Full stack solo project using C#/ASP.NET, Angular 6, and MS SQL Server that provides a way for technical support, sales, and account reps to access relevant information about client accounts, as well as securely logging into them. This is used company wide.

Hatchbuck Custom Reporting Engine

- A solo project using Ruby and SQL that utilizes WickedPDF/wkhtmltopdf to generate custom
 reports for both client and internal use. By writing a stored procedure or table-value function and
 adding a record to a table, a new CSV or PDF report could be generated from the dataset and
 automatically emailed to a list of recipients on a set schedule.
- Allowed us to cover up a weakness in the application (few/insufficient reports), create new
 revenue for the company by selling them, offered an upsell incentive for monthly promotions or a
 salesperson trying to close a deal, and is used internally to send out commission reports to sales
 people, revenue sharing reports for our partners, critical churn data to our customer success
 manager, and accounting numbers to members of leadership.

BenchmarkONE K-12 FTP Project

- Upon acquiring Marketvolt, we needed to implement their FTP integration for K-12 ERP systems before we could sunset their product and move customers onto our existing solutions.
- I wrote a service in C# for the development team to implement into the flagship application that accepts user credentials, asymmetrically encrypts the payload, and queues it in AWS SQS. I also stood up and hardened an EC2 instance as an SFTP server that hosts a BASH script to poll SQS, retrieve and decrypt the credentials, and create and set permissions for a new SFTP user using those credentials. A second BASH script searches all client FTP directories for files, then stores them in S3 for later processing by the flagship application.

Hatchbuck + Benchmark Chartmogul Integrations

A solo project written in Ruby and hosted on a Linux VM that polls our payment processor's API for transactions, stores them in our database, and manipulates the data to fit company accounting practices. Afterwards, the script extracts all relevant financial information, transforms that data into invoices, and then loads it into Chartmogul for leadership visibility into the company's SaaS metrics.

After the Hatchbuck/Benchmark merger, leadership asked me to recreate this for Benchmark, which uses a completely different accounting paradigm and database structure. This second iteration was written in C# so it could eventually be handed off to a contractor team for long-term maintenance (as my role has shifted from everyday development to cloud engineering).