

Josh Ghiloni

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SELECTED WORK EXPERIENCE

VP of Engineering / Chief Programmer

Havrion, LLC
August 2024 – November 2025

Summary

Havrion is a company in the digital signage space with a simple value proposition: You've already spent a ton of money on your displays; you shouldn't need to spend more on hardware to make it do what you want it to do. I served as its first VP of Engineering, while also contributing significantly to the product and infrastructure code.

Highlights

- Migrated code and CI/CD pipelines from Azure DevOps to GitHub to take advantage of GitHub and GitHub Actions' more advanced tooling
- Designed new Kubernetes-based architecture to reduce cost over Azure Functions-based strategy that was built for a scale that didn't exist and wouldn't for a number of years
- Brought TDD and Lean Product Management principles to my team of young engineers and Product Managers, with varying levels of success
- Worked to decouple from Samsung's Tizen Ecosystem and refactor into a platform agnostic solution

Required Skills

Leadership, Mentorship, Backlog Management, Azure, GitHub, Kubernetes, Typescript, Python, Go, React, Angular, Grafana, Mimir, Loki

Principal Software Engineer

Realtor.com
March 2022 – January 2024

Summary

Realtor.com is an online real estate platform that provides comprehensive property listings. I worked as a Principal Software Engineer enhancing product quality and developer enablement.

Highlights

- On loan to another team, I developed a super-low-latency (sub 10-ms) DynamoDB-based system for redirecting approximately 30,000 URL patterns from a recent acquisition's legacy platform to their new system using RDC infrastructure
- Implemented New Relic-based synthetic monitoring of approximately 25 critical systems, which allowed us to accurately report their rolling 28-day uptime weekly to be shared with senior management; it was often the only system that indicated an outage to a team. This data was then fed into an Apache Airflow workflow that ended up with the data in Snowflake for long-term analytics
- Developed a plugin-oriented Go-based CLI called **terraform-exporter** that allowed product teams to own their monitors' definitions by exporting the monitors as **terraform** IaC
- Automated generation of quarterly SLO reports intended for SVP+ level executives that previously took a senior direct, principal engineer, and principal project manager approximately 100 person-hours to create
- Converted existing ECS-based Playwright infrastructure used by deprecated Jenkins CI/CD pipelines to use Argo Workflows, to be used by CircleCI CI pipelines and ArgoCD Deployments

Required Skills

Mentorship, Observability, Go, Typescript, NestJS, Python, AWS, DynamoDB, CircleCI, ECS, EKS, RDS, Snowflake, Airflow, CloudFormation, Terraform, k6, InfluxDB, Grafana

Staff Solutions Architect

**Pivotal Software / VMware
July 2017 – February 2022**

Summary

Along with my world-class team of client-facing Solutions Architects as part of VMware Tanzu Labs (formerly Pivotal Labs), I helped my clients transform the way they build and run software platforms. My job entailed shepherding a team of client platform engineers, product managers, and designers through their journey in deploying and effectively using the VMware Tanzu suite and delivering value to their customers, which are usually in-house development teams. I focused on building Site Reliability Engineering competencies, as well fostering automation-first, security-first architectures.

Highlights

- Taught customers TDD, XP, and Lean Product Management in the context of managing an in-house PaaS
- Developed Concourse CI pipelines with customers to automate patch and upgrade management of products associated with PCF and later Tanzu
- Taught customers to build and maintain a curated backlog in concert with my Product Management counterpart
- Built a product with a small subteam that allowed customers who were using versions of our product that were too old to upgrade to stand up a new instance at the latest version and migrate the state of their existing instance to the new instance, including state and all workloads
- Led delivery of a pilot managed service offering; as the customer's in-house SRE team, we nearly automated ourselves out of work with automated upgrades and proactive SLO alerting

Required Skills

Customer Communication, “Commanding the Room”, Concourse CI, Pivotal Cloud Foundry / Tanzu Application Service, Go, React, Java, BASH, Kubernetes, AWS, GCP, Azure, vSphere, BOSH, Terraform, AWS CloudFormation

Principal Consultant

**ECSTeam, Inc., now part of CGI
November 2012 - July 2017**

Summary

As a boutique IT consultancy in Denver, CO, I received praise from both customers and coworkers for the solutions I delivered and my manner dealing with all levels of technical acumen I encountered

Highlights

- Was half of the infrastructure architecture team for Connect for Health Colorado, Colorado's ACA exchange. Due to design choices we made from a user experience and infrastructure perspective, C4HCO holds the esteemed honor of being the only exchange without an outage on October 1, 2013, the day the exchanges went live
- Developed a custom SFTP solution that allowed us to accept EDI files from roughly 35 different insurance providers in a zero-trust manner. When files arrived, we validated them, and did minimal normalization before passing them to Oracle's Healthcare Adapter for further processing
- At a client in the space industry, deployed UAA—Cloud Foundry's OAuth2 authorization server—for service to service communication, along with a simple SDK for creating secured

API endpoints, that was both similar to its counterparts while still being idiomatic Java, Python, and Ruby

- Was a founding member of ECSTeam’s Cloud Native Practice, focusing on partnering with Pivotal to provide post-sales delivery for the Pivotal team on a subcontracted basis

Required Skills

Java, Spring Boot, Python, Ruby, BASH, Concourse CI, Jenkins, Apache ANT, BOSH, Pivotal Cloud Foundry, Open Source Cloud Foundry, OpenStack, AWS, GCP

Further Employment History Available Upon Request

SKILLS

- **Languages:** Go, Java, Javascript, Typescript, BASH, C#, C, C++, Python, Ruby
- **IaaS:** AWS, GCP, Azure, vSphere, Proxmox VE
- **PaaS:** EKS, AKS, GKE, on-premise K8s, Cloud Foundry
- **IaC:** Terraform, AWS CloudFormation, BOSH, Pulumi
- **Frameworks:** Spring Boot, ReactJS, NestJS, Next.js, Angular
- **Containerization:** Docker, Kubernetes, Colima, Cloud Native Buildpacks
- **Databases:** PostgreSQL / PostGIS, MySQL, SQLite, MS SQL Server, Redis, DynamoDB, MongoDB
- **CI/CD:** Github Actions, Concourse CI, CircleCI, ArgoCD
- **Observability:** Prometheus, Loki, Grafana, Mimir, Jaeger, InfluxDB
- **“Etc”:** Leadership, Mentorship, Backlog Management, Public Speaking / Presenting, TDD, XP, Lean Product Management, Agile

Character and Skills References Available Upon Request