

# Chris Campbell

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Experienced software engineer with 14+ years of overall experience and 8+ years of expertise in cloud infrastructure. Skilled in leading teams through transformations and adopting cloud native technologies to optimize software development. Committed to improving the developer experience and streamlining the building process for seamless, frictionless delivery.

## Skills

**Languages:** Golang, Javascript / Typescript, Bash, Python, Ruby, C#, Java, React / React Native, AngularJS 1.x, HTML, CSS / SCSS

**Platforms:** Kubernetes, Docker, Terraform, Ubuntu, Systemd, Google COS

**Services:** MongoDB, MySQL, RabbitMQ, Grafana, Prometheus, Redis, Memcached, Linkerd2, Nginx, Envoy

**AWS (7 years of experience):** EKS, S3, IAM, RDS, ElastiCache, EC2, Route53, CloudFront, Secrets Manager, SQS/SNS, and more...

**Google Cloud (5 years of experience):** GKE, Cloud Run, Cloud Storage, Compute Engine, Cloud CDN, Cloud DNS, Memorystore, Cloud SQL, and more...

## History

### Shopify, Staff Software Engineer (July 2021 - May 2023)

Lead on the Cloud Environments team. Responsible for the cloud infrastructure that runs Shopify's cloud development environments.

- Implemented infrastructure on GKE and GCP to support cloud development environments for Shopify's cloud platform, supporting thousands of developers and hundreds of projects, resulting in increased productivity and efficiency.
- Led the successful migration from Ubuntu to COS nodes for GKE for the cloud environments platform, resulting in improved performance and reliability.
- Developed and implemented an application and SSH proxy for enhanced lifecycle features for user instances, resulting in a 30% cost savings on infrastructure.
- Developed a solution for Kubernetes resource defragmentation, resulting in a 10% cost savings.
- Kickstarted the implementation of cloud environments on VMs as an alternative for users who couldn't run their workloads on Kubernetes, resulting in increased flexibility and accessibility.
- Led the project and implementation of an in-house replacement for Ngrok to provide a secure tunnel to developer environments, resulting in improved security and control. The open-source implementation can be found at [github.com/campbel/tiny-tunnel](https://github.com/campbel/tiny-tunnel).
- Created an AI support bot using OpenAI to provide self-service support to developers, resulting in increased efficiency and improved user satisfaction.

### HP Inc, Master Cloud Architect (July 2019 - June 2021)

Lead architect for the HP Print infrastructure cloud platform.

- Led the definition of a cloud development strategy for the entire HP Print software organization, resulting in improved efficiency and alignment across teams.
- Drove development of a container-based cloud platform that sped up innovation, time to market, and mean time to recovery. Platform scope included CI/CD, Kubernetes runtime environment, SaaS integrations with AWS, MongoDB, and other providers, security, monitoring, and alerting, resulting in improved development and delivery capabilities for the organization.

- Reduced operational costs for projects by 30% by utilizing shared runtime infrastructure and reducing DevOps efforts, resulting in significant cost savings for the organization.
- Maintained developer autonomy by supporting integrations with their current tools and processes, resulting in increased developer satisfaction and productivity.
- Led adoption of key development concepts such as continuous delivery, shift left testing/security, separation of deploy/release, and more, resulting in improved development practices and increased efficiency.
- Oversaw the development of EKS automated deployments and management, CI/CD strategy on GitHub Actions, front-end portal for developer self-service built on Blazor (C#), integrated monitoring with Prometheus, and more, resulting in improved efficiency and reduced errors across the organization.

#### **HP Inc, Staff Software Engineer (July 2015 - July 2019)**

- Served as a full-stack feature developer for HP's device remote management platform, supporting more than 10 million devices through HP's managed print services business, resulting in improved reliability and availability for customers.
- Led the successful migration of a bespoke frontend web application to AngularJS 1.X, resulting in improved performance and developer productivity, as well as better maintainability of the codebase.
- Collaborated with HP's design team to implement a new user interface that improved usability and reduced support calls, improved customer satisfaction and reduced support costs for the organization.
- Implemented HP's front-end design components that could be reused by other teams, resulting in significant time and cost savings, as well as improved consistency and quality of the user interface across the organization.

#### **HP Inc, Software / Senior Software Engineer (August 2010 - June 2015)**

- Spearheaded the development of new features for HP's device remote management platform, which supported over 10 million devices through HP's managed print services business.
- Successfully led the migration of a bespoke frontend web application to AngularJS 1.x, improving performance and productivity for developers.
- Collaborated with HP's design team to implement a new web UI with html / css / angularjs, resulting in a more user-friendly experience and reduced support calls.
- Developed front-end web components that were reusable by other teams at HP, saving significant development time and effort.

### **Publications**

- [Spin Infrastructure Adventures: Containers, Systemd, and CGroups](#) (July 2022)
- [How Unnecessary Complexity Gave the Service Mesh a Bad Name](#) (September 2021)

### **Talks**

- [ServiceMeshCon 2021 Keynote](#) (2021) Introductory Remarks and Conference Kickoff
- CNCF Community Meeting Boise - Linkerd2 Intro (2019) An introduction to Linkerd2 the original CNCF ServiceMesh
- DevOps Days Boise 2018 - Tips for Running Docker in Production (2018) Everything I've learned running containers in production for the past two years.
- DevOps Days Boise 2017 - Building Docker with Docker in Docker (2017) How to utilize Docker as the runtime for your containerized CI/CD pipeline.

## Community

- [Linkerd Ambassador](#) (2021 - Present) The Linkerd Ambassador badge is a distinction awarded to those community members who are experts in their field and who demonstrate expertise, passion, engagement, and a commitment to sharing their Linkerd experience with the broader community. Linkerd Ambassadors are hand-picked by the Linkerd maintainers.
- CNCF ServiceMeshCon Program Committee Co-Chair (2021 - 2023) A select committee of experts in the field of ServiceMesh that defines the themes and perform selection of talks for the ServiceMeshCon conference.

## Education

- Oregon State University - B.S. Computer Science