

Jeremy L. Morris

SUMMARY:

Senior Software Engineer with a focus on cross-platform infrastructure, CI/CD tooling, and internal developer experience. Strong background in systems-level Go and Rust, with OSS leadership in Istio and Kubernetes. Comfortable building high-reliability tools across Linux, containerized workloads, and cloud-native platforms. Interested in applying clean, low-level engineering principles to real-world productivity challenges.

CORE TECHNOLOGIES:

Languages: Go (primary), Rust, Python, Bash, Ruby

Cloud & Containers: Kubernetes, Docker, Envoy, Istio

CI/CD & Automation: Azure DevOps, Concourse, GitHub Actions, custom pipelines

Security & Ops: CVE triage, container isolation, Linux Kernel and firewall rule debugging

OPEN-SOURCE EXPERIENCE (MorrisLaw):

Currently Istio Maintainer, Azure/dalec contributor

Previously Kubernetes Contributor and co-maintainer

Created crashloop-analyzer.vercel.app

WORK EXPERIENCE:

Senior Software Engineer (OSS Istio, Azure Container Upstream Publishing)

Microsoft - 5/2023 to present

- Designed and maintained secure, cross-platform container pipelines supporting both Linux and Windows-based workloads, integrating with Azure services and internal developer tools.
- Designed and led secure CVE image pipelines with full automation, isolation, and auditability across Microsoft's container infrastructure. Mentored engineers and enforced strong review and test standards to meet company-wide security goals.
- Istio Maintainer where I've led feature improvements for the Ambient Beta release. I designed and implemented changes to allow for more granular traffic control through istioctl (I talk a bit about it in this Istio community demo; <https://shorturl.at/4NQqr>).
- Led implementation, design and managed issues for adding PolicyTargetReference in upstream Istio to support work for Istio layers and dataplane conformance in Ambient.
- Established internal RFC process to foster design feedback and cross-team collaboration.
- Worked closely with upstream maintainers to land multi-PR features in Istio and Kubernetes.
- Implemented logic in Istio to allow users to name and apply waypoints for different traffic types to help support the completion of Waypoint Svc-Addressed Capture.

Senior Software Engineer (DOKS)

DigitalOcean - 4/2020 to 5/2023

- Drove Kubernetes OSS participation and sponsored contributor membership, leading to 20+ upstream contributions and co-maintainership of a subproject.

- Increased security for worker firewalls within DOKS (DigitalOcean Managed K8s) clusters. Added a controller to handle firewall access for port ranges responsible for NodePort access to be restricted by default.
- Led project to associate DigitalOcean resources with DOKS clusters and implement cascading deletes, reducing related support tickets to zero.
- Led hourly billing implementations for various features such as Node Pools and HA billing as part of GA-ing our High Availability feature for our DOKS product. Defined pattern for handling Billing lifecycle events for our product.
- Created a Kubernetes CVE triage process that addressed 26 vulnerabilities over two years.
- Shadow for Kubernetes release 1.20
(https://github.com/kubernetes/sig-release/blob/master/releases/release-1.20/release_team.md)

Software Engineer (Billing)

DigitalOcean - 4/2018 to 03/2020

- Implemented a caching system, for customer invoice CSVs, to prevent timeouts in the browser. Reduced customer tickets related to this issue to 0.
- Built a REST/gRPC service to manage billing addresses and enforce accurate tax calculations, reducing miscalculations and blocking malicious actors.
- Created an end-to-end testing suite for our invoice generation logic. This was needed for controls related purposes and to further validate the accuracy of our Billing system's logic.
- Defined SLOs and created SLIs for all Billing services to ensure high reliability and uptime for our most crucial Billing systems.

Software Engineer (Search & Data Science)

Publicis Groupe - 3/2017 to 4/2018

- Led team of junior data engineers showing them software engineering best practices.
- Created an automated way to run web scraping jobs using Docker and K8s on Azure, freeing up their computers from processing this data and also allowing for multiple jobs to be run.
- Made my first OSS contribution to kubernetes/kubernetes during this time.

Software Engineer (Signals Intelligence)

Raytheon - 2/2016 to 3/2017

- Helped transition our services to a cloud native architecture leveraging Docker and Kubernetes.

EDUCATION:

Bachelor of Science in Computer Science, January 2016 St. Thomas Aquinas College, Sparkill, NY