

James Andariese – james@strudelline.net – 415-741-4157

Software Developer / DevOps Engineer

Experienced in team and independent development, software and system design, monitoring, automation, technical training, sales engineering, and bid writing.

I have experience in the open source world beginning as a hobby in my teens and leading into a successful career serving as technical duct tape. I've worked with an abundance of technologies and thrive on gaining knowledge and applying it to new problems. My experience dates back to the 90s with commits ranging from the relatively mainstream FreeBSD to the exceptionally obscure AIM client for Emacs, TNT.

Skills Summary

Kubernetes	SRE	Python	FedRAMP	AMI
Tekton	Automation	BASH	Infrastructure	Packer
Flux	Operations	Terraform	Logging	Docker
GitHub Actions	Security	Vault	Okta	CloudWatch
DevOps	Microservices	GitLab	SSH	PostgreSQL
Linux	Metrics	OpenVPN	AWS S3	KVM
Go	Monitoring	Wireguard	Consul	Fabric
C	HA	IPsec	CI/CD	Ansible

Fireside – SRE Lead – 2023-2025

As the SRE Lead at Fireside, my responsibilities encompassed all of the company's infrastructure, monitoring, and automation. In addition to my primary responsibilities, I provided guidance and leadership to the frontend and backend engineering teams on topics where we identified a need for extra oversight, primarily in performance, efficiency, reliability, and code quality.

- Led our engineering-wide scalability project to increase efficiency, growing the platform capacity 5x while lowering monthly operating costs in GCP from 200k/mo to 30k/mo (667% reduction in gross infra spend, 3,300% normalized efficiency gain).
- Led several smaller cost reduction projects which allowed us to reduce other monthly operating costs by 20%.
- Revamped our Kubernetes stack to simplify it, lower management burden, and reduce attack surface.
- Created automation using OpenTofu, Flux, Tekton, and GitHub Actions in concert to deploy new, isolated environments across arbitrary patchsets in under 30 minutes. This allowed us to spin up patch-specific environments and test under load, without impacting stability or developer productivity in other environments.
- Supported backend engineering team by writing and reviewing Go code where needed, as well as through consulting, project planning, and project ownership.
- Provided engineering and professional mentorship.
- Acted as primary on call.

HackerOne – Senior Software Engineer – 2021–2023

As a Senior Software Engineer working on the Infrastructure team, my duties included both platform maintenance and strategic development utilizing services such as Kubernetes, Vault, Terraform, and GitLab. In addition to internal tooling, my team was also responsible for various customer-facing platforms such as our OpenVPN-based stable-IP tooling for hackers, and our Wireguard- and IPsec-based tunnel solutions for high trust environments and pen tests simulating internal bad-actors.

- Designed and led implementations of platform solutions for practical problems.
- Assisted in customer engagements to ensure offerings by sales were possible with current technology.
- When offerings were not possible with current technology, created designs with level of effort estimates to assist sales leadership in determining whether to pursue a customer.
- Participated in on-call rotation and served as a company-wide escalation point in North America, applying my experience and knowledge of systems to resolve issues quickly.
- Designed a new Kubernetes-based platform to enable our efforts in achieving FedRAMP High Trust without sacrificing company velocity.

Twitch – Senior Software Engineer – 2016–2021

As a Senior Software Engineer, I provided technical leadership to a group of systems developers in both daily operations and long-term development projects on the Core Systems/AWS Infrastructure team.

- Provided guidance and review for both projects and operations work
- Provided mentorship and software engineering training to skill up Systems Administrators into DevOps Engineers
- Designed and built a custom syslog stack with real-time search and scalable ingest up to S3's speed
- Designed and built an automated PrivateLink mechanism to allow authenticated and authorized access for employees to link the hundreds of microservice accounts to each other via a self-service web portal
- Designed and built a system for automated, real-time collection of metrics from our company-wide data lake for applications in monitoring and expert systems

Radius Intelligence – Senior DevOps Engineer – 2015–2016

As the developer of the DevOps team, I supported the company's 100+ developers through projects which improved individual productivity.

- Created a library (nsswitch plugin) and HA Okta synchronizer for per-user SSH login
- Created a rapid S3 enumerator to quickly encrypt all items in data lake
- Implemented a repeatable Consul cluster with A/B failover support using Terraform
- Provided consultation to teams on application of SOC2 policy rollout
- Backfilled automation of existing apps
- Created AMIs with Packer to establish a common base for applications using Docker, Consul, and other ubiquitous tools
- Created datadog integrations for CloudWatch, PostgreSQL, and Codahale Metrics
- Implemented Continuous Deployment using semi-immutable base servers, Docker, and Upstart

Location Labs – SRE Lead – 2012–2015

As the lead of the DevOps and SRE teams, I built a top-notch team capable of operating services used by millions at 4½ nines.

- Built and led DevOps and SRE teams
- Wrote automation for Ubuntu and Debian VM creation, application deployment, and database migration using Fabric and Ansible
- Wrote applications for operations support and one click remediation tools for NOC engineers
- Wrote a REST API for LVS load balancer
- Created automatic monitoring framework based on Consul, Nagios, and Docker allowing individual teams to monitor their own products without particular expertise
- Developed plugin for Net-SNMP for easily monitoring of custom software using Go and Python
- Collaborated with tier 1 wireless carriers on application and system design
- Collaborated with tools team on application development
- Created and maintained the deployment automation for the polyglot systems backing a tier 1 US cell provider's white label family protection services
- Created automated network routing tools for complex VPN-based connectivity

Ahtna Technologies – Systems Administrator, Developer – 2011–2012

As the developer for the systems team, my primary duty was to write and maintain software to support our customers. I also acted as a Systems Administrator for projects and on call.

- Built, maintained, and rebuilt websites with Plone and SharePoint in Python and C-Sharp
- Wrote software to simplify management and support of four geographically diverse AD/Exchange environments
- Designed and implemented project to replace Board meeting binders with iPads using SharePoint
- Developed custom software for conversion of legacy document management to SharePoint
- Created a database/app pipeline for network log monitoring across various enterprise systems
- Managed and consolidated multiple legacy virtual environments utilizing XenServer, ESXi, and Hyper-V
- Implemented Chef-based configuration management across organization
- Acted as lead and escalation point for technical teams

Design-PT – Systems Developer – 2009-2011

As the company's only Systems Developer, I was responsible for both maintaining contract software and hardware deployments, including software developed in-house. My time was split 50/50 between development and systems work with down time spent skilling up team members in development and systems administration as appropriate for the individual.

- Mentor Systems Administrators in cross-training for BASH, Python, and PowerShell
- Implement and maintain MSSQL, PostgreSQL, and MySQL databases
- Engineer hybrid customer physical deployments with mix of Linux, Windows, and Thin Clients
- Implement and maintain KVM, ESXi, and Hyper-V virtual environments
- Implement and maintain hybrid Exchange deployments with Postfix and Spamassassin
- Implement and maintain SAN using FreeNAS and iSCSI
- Implement and maintain Asterisk and Switchvox-based PBXs with Polycom phones for internal and client use
- Modernize customer databases by implementing new web-based tools using Clojure, Scala, and Lift to eliminate unreliable, shared Access databases
- Migrate transactions and products from legacy system into custom Magento schema
- Collaborate with Sales Engineering to fit customer needs into tight grant budgets

NANA/WorleyParsons – Developer – 2008-2009

As a Developer on the Systems team, I was responsible for implementing automation to streamline and accelerate output from the team. My duties also included gap-filling for any systems where team expertise was otherwise lacking.

- Designed OpenSUSE server deployment for various company projects
- Built a Python service with PostgreSQL to fully automate proprietary environment installation with a WinPE-based AutoIT and Tcl/Tk client capable of deploying Linux, Vista, and XP images
- Wrote a Java-based TFTP server to work around incompatibilities between the phone system and UWI's boot loader as well as enable system monitoring and tracking during boot
- Maintained Asterisk PBX, MSSQL databases, Exchange, Dell blade servers, and ESX hypervisors

Spenard Builders Supply – IT Developer – 2005-2008

As an IT Developer, I built automation tools for the IT department to increase the productivity of fellow team members.

- Migrate AIX systems to CentOS and solve interoperability issues by scripting
- Automate manual tasks using Python, PExpect, and Tcl/Tk saving time and labor
- Create usable GUI frontends to legacy COBOL system avoiding training costs for new users
- Wrote workflow system for IT requests in a Plone intranet
- Manage web sites and email systems for a number of nonprofit and personal clients
- Cast existing websites into Plone to allow for extensive future customization, workflow management, and end user edits