maroda@gmail.com

Matt Davis

<u>Fullerton</u>, CA ::: 714-366-8455 ::: <u>maroda@gmail.com</u> <u>https://www.linkedin.com/in/mattcookedavis/</u>

Multiple decades in the tech industry has led me to the discipline of Learning From Incidents. From the early days of building highly available data centers to the complex reliability of cloud systems, I have seen a wide array of distributed systems operations and Site Reliability Engineering. Now, I am the most interested in Incident Management through the lens of Resilience Engineering and SRE. I want to lift the human teams in our socio-technical landscape and help them learn to navigate complexity when production pressure is high.

Recent Experience

FORM

Mobile apps for inventory field work in multiple non-tech industry verticals, from image recognition for beverages to compliance forms for factories. 2/2023-08/2023 (Remote (Denver, CO) / Fullerton, CA)

Skills of note: Knowledge Mgt, Incidents, Program Mgt, Lucidchart, Pingdom, Sumo Logic, Jeli, Nobl9.

Talks: On-Call Reprised and Rejuvenated ::: Southern California Linux Expo 20x (2023), Human Observability of Incident Response ::: SRECon Americas (2023).

Articles: Making Music with Others ::: LFI Blog Series (2023).

Site Reliability Architect

- Hired to build a new Site Reliability Engineering (SRE) practice around a new team of six, owning three areas: Incident Management, Observability / Monitoring, and Reliability (Service Level Objectives).
- Established meetings for structure around SRE: "Reliability Matters" weekly office hours around SRE topics; "Incident Story Time" weekly operational Learning Review; and "SRE Monthly" for stakeholder discussion about the progress of the SRE Program.
- Performed detailed Vendor Risk Assessments with InfoSec for multiple companies, including a full scale evaluation and purchase of the Jeli Incident Management Platform.
- Implemented a new Incident Management program where none existed, using Jeli for Slack Bot and Analysis.
- Succeeded in taking three Product Engineering divisions (GoSpotCheck, FieldConnector, ShelfWise) from unmanaged chaotic multichannel confusion during incidents to a highly disciplined and streamlined approach where people know exactly where to go and what actions to perform.
- Authored a Response Guide to help Responders make quick decisions about incidents. Designed high-level flow-chart for the Incident process model.
- Investigated the state of technical operations in the three areas of responsibility with *Wardley Mapping*, identifying Incident Management as a critical area to raise in the value chain.
- Built a three-Quarter roadmap for implementing a brand new SRE program which remained on-track through several pivots until work halted a month early when funding was pulled.
- Created team outline, hiring plan, and job descriptions including presentations for C-level on this and other aspects of SRE, especially the changes implemented by the inaugural Incident Management program.
- Worked across all teams to ensure a smooth melding of existing customer-facing processes with the brand

new Engineering one.

- Authored wiki space, including HowTo pages. Created diagrams, learning aids, and infographics.
- Maintained Kanban for work across two different Jira projects to cover Observability and Reliability.
- Introduced Service Level Objectives using Nobl9 and Synthetic Testing using Pingdom.
- Worked with Jeli to onboard and educate multiple teams. Held internal training on the SRE Response Guide.
- Fulfilled Incident Commander where needed, plus Thematic and Causal Incident Analysis on most incidents. Ran blame-aware Learning Reviews for high-sev incidents, coached new Incident Commanders on-the-job.
- Identified and implemented positive areas of cost savings in logging on the Sumo Logic platform.
- Worked with Engineering leadership to get forward momentum on a stalled OpenTelemetry implementation.

Blameless

Incident Management Suite with tools to integrate events and retrospectives with reliability metrics and documentation. 11/2020-01/2023 (Distributed / Fullerton, CA)

Skills of note: Data Analysis, Applied Resilience Engineering, Incident Mgt, Learning From Incidents approaches, Operational Product Mgt, Terraform, GKE, Kubernetes, Salt Stack, Golang, GCP, Identity Services, Sumo Logic.

Talks: Groove with Ambiguity: the Robust, the Reliable, and the Resilient ::: DeveloperWeek (2021), Atlanta SRE Meetup (2021), LISA21 (2021). Human Observability of Incident Response ::: CMG ObservabilityCon (2022).

Articles: SRE and the Practice of Practice ::: Blameless (2022), SRE and the Art of Improvisation ::: The New Stack (2022).

SRE Advocate

- Created the role of SRE Advocate. Worked with SREs to outline responsibilities and write job description.
- Bridged the SRE and Marketing teams. Community outreach through blog posts, conference talks, educational sessions, podcast interviews, social media, and webinar recordings.
- Hosted the five-part webinar *From Theory to Practice* that brought industry leaders together to discuss the question "*What's difficult about* _____?" on topics like tech debt and problem detection.
- Founded *Practice of Practice Gamelan*, a weekly examining "Work-As-Done" through collaborative activities.
- Used *Wardley Mapping* to inform a vision and project plan for the Observability stack of services.
- Held weekly "Observability City" office hours to field requests, give announcements, and offer guidance.
- Owned the project to build a new Incident Command program and served as Incident Commander. Created cheat sheets and Severity Flow Charts. Authored documentation for all employees going On-Call.
- Imagined, designed, organized, and taught quarterly classes on Incident Response, the Post-Incident, Analysis, and being On-Call.

Staff Infrastructure Engineer

- Designed and implemented the company's first organized approach to Observability. Engineered and rebuilt all GKE clusters with the Sumo Logic CNCF solution (prometheus + fluentd + OTEL).
- Built a set of instrumental logging dashboards that gave the ability to visualize quickly by customer or service.
- Performed both Infra/SRE On-Call and Incident Command roles, plus Incident Analysis.
- Co-hosted our weekly operational Learning Review called "Incident Story Time".
- Led the team to use Kanban for keeping work visible, mentored on prioritization and estimation.
- Implemented RainbowQ: an operator-focused information management system in Golang and TOML for

gathering knowledge-base endpoints and nuggets of data for quick command-line access.

• Established patterns for deploying Linux hosts and secure user access in GCP using GitOps, Salt, and Terraform. Updated the entire Terraform code base across multiple versions to become v1 compatible.

Verica

Continuous Verification platform using chaos experimentation to discover security and availability weaknesses. 12/2018-7/2020 (Distributed / Fullerton, CA)

Skills of note: Terraform, Packer, Vagrant, Kafka, Kubernetes, Salt Stack, AWS, Enterprise IT, chaos engineering, resilience, sociotechnical systems, Lund Cognitive Systems Learning Lab (2019), Sumo Logic Certification (2018).

Published Blogs: Music in Resilience: The Practice of Practice

Talks: *Music in Resilience: The Practice of Practice*: Southern California Linux Expo (2020), Sparklecon (2020), REdeploy (2019), Disney JETA (2019), Music City Tech (2019), Texas Linux Fest (2019); QCon NYC Chaos Engineering Workshop (2019).

Sr Infrastructure Engineer

- Built and operated all IT and network infrastructure.
- Designed, implemented, and operated "on-prem" Confluent Kafka cluster in AWS using Terraform.
- Wrote and ran Go microservices for testing the Verica Kubernetes module.
- Configured observability pipelines for both Sumo Logic & Humio. Operated CircleCI pipelines.
- Managed 20+ Vendors: relationships, integrations, identity, cost tracking, and proof of concept testing.
- Practiced Learning Reviews and investigations on low-impact incidents.

OpenX

Programmatic advertising exchange connecting publishers to advertisers through auctions across multiple platforms. 2013-2018

(Pasadena, CA)

Skills of note: CentOS, Riak, Vertica, Hadoop, HBase, Erlang, Consul, Salt Stack, Mesos, Kubernetes, distributed storage systems, high volume traffic, server hardware, datacenter management, Certified Scrum Master (2016).

Published Blogs: Salted Riak, Making Logs Awesome with Sumo Logic

Talks: Sumo Logic CIO summits (2, 2017); *Stepping up to Scale*: RICON (2016), SREcon (2016), CalPoly SWiFT (2016); *Measuring and Monitoring Riak Across the Globe*: RICON (2015), SCaLE (2015); OpenX TechTalks (7, 2015–2016).

Manager, Data Systems / SRE / TechOps

8/2016 - 4/2018

- Lead a globally distributed team of Data SREs providing support for data, storage, and databases.
- Consulted on the Hardware Review Committee for data applications when considering hardware costs.
- Performed large-scale data systems Chaos Engineering tests, deployed canary releases and feature flags.

- Led teams through a transition from Scrum to Kanban, serving as ad hoc Technical Project Manager.
- Collaborated closely with other TechOps leadership on roadmap, hiring, vision, mission, and budget.

Lead SRE, Data Systems Engineering

1/2015 - 8/2016

- Subject Matter Expert on Riak: Architected, built, deployed, and maintained multiple cluster installations.
- Managed large Hadoop installations with 2000+ nodes between all clusters and 30PB+ in storage.
- Operated Kafka clusters for streaming workflows between components of the OpenX application stack.
- Worked closely with the Infrastructure team on hardware profiles and strategic planning for capacity.
- Taught sessions on approaches for operating and using eventually-consistent distributed systems.

SRE II-III

3/2013 - 1/2015

- Oversaw the reliability of OpenX applications including all data, delivery, and API infrastructure.
- Focused primarily on data systems with cross-functional work on the delivery front-end.
- Lead for migrating all RDBMS from MySQL to MariaDB; implemented Galera for a multi-tenant platform.
- Recipient of "The David Award" for showing resilience and innovation.
- Recipient of "The Chair Award" for excellence in Site Reliability Engineering.

Select Professional History

Backplane: Sr Infrastructure Engineer (2018). *Go, Terraform, PostgreSQL, AWS*.
Spin Media (Buzz): Sr Systems Administrator (6/2011 – 1/2013). *CentOS, MySQL, Corporate IT*.
CyberDefender: Sr Systems Engineer (2/2010 – 6/2011). *MySQL, Rackspace*.
Oversee.net: Systems Engineer (7/2009 – 2/2010). *MySQL, VMWare ESX, Xen*.
Rackable Systems (SGI): Sr Systems Engineer (10/2008 – 5/2009). *Server & datacenter hardware, sales*.
Xdrive/AOL: Principal System Administrator (10/2004 – 10/2008). *MySQL, NFS, Java, storage*.
About.com: Sr Site Architecture Engineer (1/2001 – 9/2001). *FreeBSD, Solaris, project manager*.
Global Crossing GlobalCenter: Assistant Director, Systems Engineering (6/2000 – 1/2001); Director, Professional Services - East (10/1999 – 6/2000); Sr Technical Account Manager (10/1998 – 10/1999).
Digex, Inc.: Sr Internet System Administrator, UNIX Technical Operations (5/1997 – 10/1998).
HuskyLabs: Website Producer / Graphic Designer / On-Site Systems (10/1995 – 7/1997).

University

University of Maryland School of Music, Opera Studio Master Program: Operatic Performance 1996 – 1998 Virginia Polytechnic Institute and State University Bachelor of Arts in Music, Cum Laude 1990 – 1995