Nik Ogura

Infrastructure - Security - Software - Platform - Tools

San Diego County, USA

Viam inveniam, aut faciam. *(I will find a way, or I will make one)*

Professional History

Terrace - Remote, USA

2023 - Present *Chief Information Officer*

- Hired as Director of Cloud Infrastructure and Security.
- Migrated DeFi/ CeFi Crypto Trading proof-of-concept from GCP/GKE to AWS/EKS and finally to AWS/Talos Linux (Immutable Kubernetes).
- Architected a cloud-agnostic, secure, planet-scalable application platform across multiple cloud providers and on-prem installations.
- Secured company IP during critical moment of turnover.
- Took over as Head of Engineering.
- Recruited and hired an expanded engineering team.
- Led a globally distributed engineering team to re-architect Terrace's core product from the ground up into a performant platform for DeFi, CeFi and Cryptocurrency trading with latencies measured in the milliseconds. The perfect balance of Fintech, Blockchain, and Security.
- Promoted to Chief Information Officer.

Amazon Web Services - Remote, USA

2022 - 2023 *Systems Development Engineer, Senior DevOps Consultant*

- Implemented automation processes to ensure the security and maintenance of Amazon Global Accelerator across various platforms.
- Served as internal Security Consultant to Amazon Global Accelerator.
- Contributed to the Financial Services and Banking sector's transition to modernization by providing practical DevOps guidance and driving cloud adoption.
- Created Kubernetes Operators for Amazon Web Application Firewall.

Technologies: Golang, Kubernetes, Linux, AWS, Bare Metal, Networks, Hashicorp Vault, GitLab

Orion Labs - Remote, USA

2020 - 2022 *Head of Infrastructure / SRE / DevOps, Principal Engineer*

- Lead Infrastructure/DevOps/SRE Team - responsible for all SRE / DevOps work, and Orion's Cloud and On Prem systems.
- Designed and implemented a versatile Platform Infrastructure for SaaS, CloudPrem, OnPrem, and Airgapped Kubernetes based installations for Orion and it's customers.
- Transformed 24/7 IT Operations with improvements to visibility, monitoring, alerting, and response systems resulting in reliable and delightful solutions.
- Developed a cutting-edge Framework for Voice Bots using the Orion Platform.
- Elevated technology standards at Orion by spearheading the development of Golang code guidelines and migrating existing microservices to meet new standards.
- Led internal training initiatives on technology for all employees at Orion.

Technologies: AWS, Kubernetes, Bash, Linux, Golang, Terraform, Prometheus, Grafana, AlertManager, ElasticSearch, Kibana, Logstash, OpenSSL, Hashicorp Vault, Bare Metal, IPTables, Networks, Postgres, Redis, Fluent-Bit, Elastic Beats, CircleCI, Github

Scribd - Remote, USA

2018 - 2020 Principal DevSecOps Engineer, Sr. DevOps/SRE

- Founded, hired, and led the Scribd Security Team.
- Developed a scalable SIEM system to monitor and secure Scribd's global CDN, ensuring the protection of customer data.
- Led implementation of WAF (Web Application Firewall) to protect Scribd's services and network.
- Created an easy-to-use YAML interface on Hashicorp Vault called "Managed Secrets" for streamlined management of sensitive information- now published as an Open Source project.
- Designed Kubernetes clusters and Kubernetes native tooling that linked application workloads to Fastly caches, enabling efficient tracking of cache expiration of precompiled javascript code at scale.
- Created an advanced IAM System and PKI to protect internal networks and Kubernetes clusters against unauthorized access.

Technologies: Kubernetes, ElasticSearch, Logstash, Kibana, Linux, Golang, Chef, Ruby, OpenLDAP, OpenSSL, Hashicorp Vault, Bare Metal, IPTables, Networks, MySQL, Fluentd, Grafana, Jenkins, GitLab

Stitch Fix Inc. - San Francisco, CA

2017 - Sr. DevOps/SRE, Data Platform Engineer

- Created the IAM System whereby the Algorithms & Analytics department connects to every resource, instance and container in the stack.
- Enabled AWS IAM Role based development that works transparently on a laptop as if the computer were actually an EC2 node. Whether you're local or in the cloud your code works exactly the same.
- Created a system for interactive containers in the cloud that enabled Data Scientists to run their code near their data transparently as if it was local.
- Created self-updating userspace tool framework that creates and distributes signed tools for doing work on laptops, servers, and containers.

Technologies: AWS, Golang, Python, OpenLDAP, Docker, Linux, OpenSSL, Hashicorp Vault, IPTables, Networks, PF

Apple iOS Systems / Apple Pay - Sunnyvale, CA

2015 - 2017 Systems Architect, Lead DevOps Engineer, Senior DevOps Engineer

- Led Apple Pay DevOps team.
- Transformed Systems Design and Administration by bringing Security, Audit, and Engineering to a modern, best-practice based pattern of administration and audit.
- Designed and built a dynamic test driven CI/CD pipeline for Apple Pay, Apple Sim, and every Apple device in the world.
- Architected the command and control architecture for Apple Pay for the China launch.
- Implemented a private OpenStack cloud for testing and verification of applications from bare metal hardware.
- Designed a system whereby the entire deployment footprint of a group of applications can be described and manipulated in code.
- Created a system by which full end-to-end integration testing of the Apple Pay stack can be performed on any laptop.
- Transitioned Apple Pay from Subversion to Git.

Technologies: Java, Docker, Chef, Puppet, Ansible, Bash, Ruby, Subversion, Git, Linux, Bare Metal, IPTables, Networks, Redis, Artifactory, Jenkins

Data Recognition Corporation - Remote, USA

2014 - 2015 Principal DevOps Consultant

- Designed an auto-scaling Continuous Delivery System for educational testing.
- Shepherded multiple applications from proprietary systems to fully Open Source platforms.

- Designed and taught internal training curriculum for the technology, disciplines, and cultural concepts that come under the heading of DevOps.

Technologies: Puppet, Linux, Java, Ruby, VmWare

Wells Fargo - Minneapolis, MN

2014 DevOps Consultant, Sr. Software Engineer

- Led Development, Testing, and Delivery of Applications and Middleware.
- Module Developer for Continuous Integration/ Continuous Delivery of multiple applications across multiple technologies and multiple operating systems.
- Designed and built SCA tools to parse the Puppet DSL for GRC.

Technologies: Linux, Java, Puppet, Ruby, Antlr, Jenkins

U.S. Bank - Remote, USA

2007 - 2014 Security Architect, Application Architect, Sr. Systems Engineer / SRE

- Security Architect for Corporate Payment Systems.
- Created and Maintained Web Application Firewalls (WAF) for all of U.S. Bank.
- Software Engineer for special / sensitive projects around Security and Payment Systems.
- Consultant for Threat Modeling, Penetration Testing, Security Remediation.
- Consultant / Trainer for Automated Testing.
- SRE for Payment Systems.
- Designed and Maintained PCI Compliant Payment Systems.
- Maintained PCI DSS compliance for Payment Systems
- Created Observability / Monitoring / Alerting systems for Payment Systems.
- Created Encryption Key management and delivery service used by multiple users in multiple countries.
- Created Encryption and Tokenization system for PAN (Primary Account Number) data in Merchant Acquiring systems.
- Full Stack Engineer on a variety of platforms.
- Designed IPSec and IPTables security profiles for protection of PAN data in PCI Enclaves.
- Designed and implemented processes for Code Signing, Continuous Integration, and Artifact Storage.
- Consultant/SME for SSL, SSH, Encryption, Public Key Infrastructure.
- Consultant/SME for Software Packaging, Build, Deployment.

Technologies: Perl, Linux, Apache HTTPD, Python, Java, Spring, OpenSSL, Luna HSMs, Bare Metal, VmWare, MySQL, Oracle

Plain Black - Remote, USA

2006 - 2007 Software Engineer

- Software Engineer - WebGUI Content Management System.
- Customer Service.

Technologies: Perl, Linux, Apache HTTPD

Universal Talkware - Minneapolis, MN

2000 Lead Systems Engineer - Network Operations Center

- Built Network Operations Center
- Internal tools

- On Prem / Bare Metal Servers/ Datacenter

Technologies: Perl, Linux, Apache HTTPD, Bare Metal

Hessian & McKasy - Minneapolis, MN

1999 - 2000 Director of IT / Systems / Security

- Ran IT for a 40 seat law firm. Desktops, Servers, Network, Backups, Compliance, Security - entire electronic / technological base of the company.

Technologies: Windows, Windows NT, Novell Netware, MS Access, VBA, Bare Metal

United Martial Arts - Plymouth MN

1998 - 2007 Director, Head Instructor

- Responsible for day to day operations of the martial arts studio, including Management, Finance, Systems, and HR.
- Created custom management applications that handled enrollment, financials, lesson plans, scheduling, video and print library management, and curriculum.
- Authored training curriculum for leadership programs as well as physical curriculum.

Technologies: Perl, Linux, Apache HTTPD, Bare Metal

Profiles

Web Site https://nikogura.com

Portfolio https://github.com/nikogura

LinkedIn https://www.linkedin.com/in/nikogura/

Certifications

- AWS Solutions Architect
- Hashicorp Vault Professional

Open Source Projects

Dynamic Binary Toolkit https://github.com/nikogura/dbt A delivery system for self-updating, signed tools. Listed in *Awesome-Go* https://github.com/avelino/awesome-go.

GoMason https://github.com/nikogura/gomason A tool for doing clean-room CI testing locally. Listed in *Awesome-Go*.

Managed Secrets https://github.com/nikogura/managed-secrets A YAML interface on Hashicorp Vault. Makes running Vault simple!

go-postgres-testdb https://github.com/stitchfix/go-postgres-testdb A library for managing ephemeral test databases.

python-ldap-test https://github.com/zoldar/python-ldap-test A testing tool Python implementing an ephemeral in-memory LDAP server.

CGI::Lazy http://search.cpan.org/~vayde/CGI-Lazy-1.10/lib/CGI/Lazy.pm A Perl Web Development Framework.

Selenium4j https://github.com/nextinterfaces/selenium4j A Java Library for translating HTML format Selenium tests into JUnit4 at runtime.

Managed Secrets https://github.com/nikogura/managed-secrets A YAML interface on Hashicorp Vault that allows teams to manage their secrets, without being to access them in production.