# 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 Director of Infrastructure

 Building a cloud-agnostic, world-wide platform for wealth management across DeFi and traditional centralized financial exchanges.

#### 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.
- 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.