

# Nik Ogura

## Principal Engineer

*Infrastructure - Security - Software - Platform - Tools*

## San Diego County, USA

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

## Professional History

### Amazon Web Services

2022 - Present *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 to ease use of, and drive customers to Amazon Web Application Firewall.

Technologies: Golang, Kubernetes, Linux, AWS, Bare Metal, Networks

### Orion Labs - San Francisco, CA

2020 - 2022 *Principal Staff Engineer*

- Designed and implemented a versatile Platform Infrastructure for SaaS, Cloud-Prem, 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

**Scribd - San Francisco, CA - Sec/DevOps Engineering Lead - 2018 - Present**

- Developed a scalable SIEM/WAF system to monitor and secure Scribd's global CDN, ensuring the protection of customer data.
- Implemented an easy-to-use YAML interface on Hashicorp Vault called Managed Secrets for streamlined management of sensitive information.
- Designed Kubernetes deployments that linked to Fastly caches, enabling efficient tracking of cache expiration of precompiled javascript code at scale.
- Instituted 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

**Stitch Fix Inc. - San Francisco, CA - Data Platform Engineer - 2017**

- Created the IAM systems 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.
- Built a self- building, self-updating, extensible userspace binary tooling system that creates and distributes signed binaries for doing work on laptops with no external dependencies.

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

**Apple iOS Systems - Cupertino, CA - Senior DevOps Engineer - 2015 ~ 2017**

- 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.
- Designed a system whereby the entire deployment footprint of a group of applications can be described and manipulated in code.
- Transitioned the organization from Subversion to Git.

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

**Data Recognition Corporation - Maple Grove, MN - Principal DevOps Engineer - 2014 ~ 2015**

- Designed an auto-scaling Continuous Delivery environment 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 - Sr. Software Engineer - 2014**

- DevOps Consultant for Development, Testing, Building 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: Java, Puppet, Ruby, Antlr

#### **U.S. Bank - Minneapolis, MN - Application Systems Administrator Sr. 2007 ~ 2014**

- Specialty Application Development- Projects too sensitive or specialized for a general development team, or things that were deemed 'impossible'.
- Designed, built and implemented encryption key management system used by multiple users in multiple countries.
- Designed, build, and maintained encryption and tokenization system for PAN data in Merchant Acquiring systems.
- Security Consultant for an Application Architecture team.
- Designed and Maintained full SDLC for High Availability PCI Compliant Apache Servers and LAMP Applications in multiple network tiers.
- Third level support of Web Applications, RHEL and SLES Servers, Oracle Databases, and IP Networks.
- Worked with Application Architecture teams and Development teams to preemptively address emerging threats while maintaining PCI DSS compliance across mixed technologies and multiple operating systems.
- Designed Monitoring and Alerting modules for High Availability Apache Servers (Custom Apache Modules).
- Full Stack Web Development on a variety of platforms.
- Presented internal courses/talks to business and technology teams on web communication and its dangers.

- Trained Development and QA personnel in methods and tools for Unit/Integration testing.
- Designed IPsec and IPTables security profiles for protection of PAN data in PCI Enclaves.
- Designed and implemented processes for Code Signing, Continuous Integration, and Application Building.
- Consultant for Penetration Testing, Exploit Confirmation, and Proof of Remediation.
- 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

#### **Plain Black - Madison, WI - Developer - 2006~ 2007**

- Provided online troubleshooting for supported customers.
- Core development on the WebGUI CMS

Technologies: Perl, Linux, Apache HTTPD

#### **Universal Talkware - Minneapolis, MN - NOC Administer - 2000**

- I handled internal tools development, built the NOC, and even supported the physical plant.

Technologies: Perl, Linux, Apache HTTPD, Bare Metal

#### **Hessian & McKasy - Minneapolis, MN - IT Administrator - 1999 ~ 2000**

- Started out as the help desk.
- Ended up as the head of IT for a 40 seat law firm.

#### **United Martial Arts - Plymouth MN - CEO and Head Instructor - 1998 ~ 2007**

- Responsible for day to day operations of the martial arts studio, including management, financial planning, and personnel.
- Taught classes in Exercise, Wellness, Leadership, and the Martial Arts in the studio as well as for corporations and in the community.
- Designed, built and maintained a custom studio management desktop application 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.

## Profiles

*Home Page* <https://nikogura.com>

*Code Repos* <https://github.com/nikogura>

*LinkedIn* <https://www.linkedin.com/in/nikogura/>

## Open Source Projects

- dbt “Dynamic Binary Toolkit” A framework for authoring and using self-updating signed binaries. Listed in awesome-go
- gomason A tool for doing clean-room CI testing locally. Listed in awesome-go
- Managed Secrets A YAML interface on Hashicorp Vault. Makes running Vault simple!
- go-postgres-testdb A library for managing ephemeral test databases.
- python-ldap-test A testing tool Python implementing an ephemeral in-memory LDAP server
- CGI::Lazy A Perl Web Development Framework.
- Selenium4j A Java Library for translating HTML format Selenium tests into JUnit4 at runtime.