# Nik Ogura

### Principal Engineer

*Platform - Tools - Infrastructure - Security*

*I make things - things that work- and by ‘work’ I mean work superlatively.*

### 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 drive to ease use of and drive customers to Amazon Web Application Firewall.

Technologies: Golang, Kubernetes, Linux

## Orion Labs - San Francisco, CA

2020 - 2022 *Principal Staff Engineer*

* 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

#### 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

#### 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 depenencies.

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

#### 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

#### 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

#### 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 fullfillment system used by mulitple 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

#### 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

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

* I started out as the help desk, and 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* <http://nikogura.com>

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

*LinkedIn* [https://www.linkedin.com/in/nikogura/](https://www.linkedin.com/in/nikogura)

# Open Source Projects:

* [dbt](https://github.com/nikogura/dbt) “Dynamic Binary Toolkit” A framework for authoring and using self-updating signed binaries. 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](https://github.com/avelino/awesome-go)
* [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.