Andrew L. Yurisich
Senior Software Developer

PERSONAL DETAILS

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Github	https://github.com/captain-kark
(personal)	https://github.com/Droogans

WORK EXPERIENCE

Norwegian Block Exchange, A.S.   `2019 - 2021`

Senior Software Developer

Migrate a localhost-only, docker-compose prototype over to Google Cloud Platform while finishing the flagship MVP. Authored, hardened, tested, and consumed base and application level Docker images for handling HTTP request-based applications, as well as **consumer/producer-based applications**. Companion images for testing and development, including **container-attachable debuggers**, code base typechecking and linting, unit, functional, and integration testing boilerplate, **schema registry compatibility checks**, submodule cloning in CI/CD pipelines, and simple github integration wrappers. Signal generator for validating exchange order submission, orderbook placement, and matching engine correctness, verified with **strict decimal precision**. Refactored common base application logic to better **manage Kafka and Cassandra client lifecycle state in a kubernetes environment** by implementing graceful shutdown, some error recovery, and broker delivery callbacks. Added **mutual TLS connections between Cassandra cluster nodes, as well as database client applications** using certificate-based ACLs. Refactored a single-namespace kubernetes cluster to use **small, application-specific kubernetes namespaces, with dedicated node pools**. Provided node taints, pod tolerations, and limit ranges to **resolve cluster-wide scheduling issues at zero cost**. Leveraged quality of service levels in stateful sets **running uptime-sensitive applications** like geth, bitcoind, and Cassandra. Created and used terraform modules to **compartmentalize access to long-lived IAM accounts** via short-lived service account access tokens, accessible only from github pull requests. Integrated with Firebase-managed email and password reset verification flows in a **React single page app by using Redux-Saga**. Spearheaded and executed a successful pilot effort to deliver a vault based solution using **immutable infrastructure** for the exchange's secure hot wallet system, with mutual TLS, and **incremental backups using serverless technology**. Root token-less vault access controls gated by a pod's kubernetes JWT with the auth kubenetes plugin. Built **a standalone cluster-wide pki service**, bundled with a **sidecar to manage trusting, issuing, renewing, and syncing of system TLS certificates** on behalf of the main application container. Admin pki interface to **enforce a uniform structure** when creating, extending, revoking, or deprecating a chain of trust. **Extensive training and documentation** where possible, focus on pair programming to **facilitate knowledge sharing** between remote offices and team members. Consistently set an example for **high-quality version control habits**, good commit message hygiene, modular branching strategies, 'at a glance' issue management.

Rackspace Hosting, Inc.   `2013 - 2019`

Rackspace Hosting, Inc.

Software Developer in Test I, II, and III (Remote Position)

Assigned exclusively to high priority projects from inception to MVP and beyond, typically without direct supervision or support. Developed a component-based approach to automated testing for an Angular component library by using Protractor, scaled to several projects as an NPM package. Introduced mock data testing to run comprehensive UI tests in just a few minutes. Created a robust, open source, cost-free solution to web-based visual regression testing. Implemented reusable infrastructure as code by creating Helm charts for Jenkins-based CI/CD pipelines in Openshift, including developer training and documentation.

Angie's List
2012-2013

Automation Engineer

Page object driven Selenium browser automation in Ruby, and Python. Featured end to end scenarios to validate A/B/C/D UX testing. Compared mobile search results against desktop experience. Wrote extended functionality in the Behave testing library to simplify end to end tests. Organized Jenkins testing jobs to target individual environments from command line parameters. Assisted in software developer interviews.

Robert Half Technology
2012

Consultant to BidPal, Inc.

Wrote Python scripts to automate a 30 minute manual build process. Deployed new releases to both a Windows server and an Apache Tomcat instance on Linux, shifting deployments away from weekly to daily events using Powershell and Python. Automated database setup and updates before test runs using MySQLdb. Trained in common manual testing techniques.

SKILLS

Languages	Python, Typescript, bash/sh, RDBMS, NoSQL, Ruby, Golang
Tools	Emacs, git, tmux, Make, k8s, vault, terraform, nginx, openssl
Systems	Debian/Ubuntu, CentOS/RHEL, BSD/MacOS, Alpine/Arch
Platforms	GCP, Github, docker-compose, Confluent, Jenkins, OpenShift
Process	Remote Teams, Devops, Serverless/Microservices, CI/CD

EDUCATION

AAS. Database Design
2009-2011

Ivy Tech Community College