

andrewschwartz

senior software engineer

contact

561-614-5414

trin.lives@gmail.com

 github.com/trinchan

 [linkedin.com/trinchan](https://www.linkedin.com/in/trinchan)

fav. languages

♥ Golang

Python

fav. tech

Kubernetes

PostgreSQL

Prometheus

languages

English native

Japanese fluent

quick stats

Golang advocate

Kubernetes enthusiast

Cloud native

Scalable systems

B.S. Comp. Sci

CT → NY → JP ↔ FL

experience

Dec. 2017 -- Present

IBM Cloud Databases

Japan/USA (remote)

Platform Architect

Architect and lead platform engineer of the next-gen DBaaS offering on IBM Cloud, modernizing the Compose suite of databases on Kubernetes. Thought leader and advocate within the company for Kubernetes and the Controller pattern.

- Lead architect of declarative Controller based platform provisioning and maintaining 40k+ instances of 10+ types of databases with high availability on Kubernetes
- Represent IBM Cloud Databases as architect at compliance audits (SOC, PCI, FS Cloud, etc), ensuring systems are well understood and compliant
- Developed framework for automatic anomaly detection and recovery within a Kubernetes cluster, reducing time to recovery and SRE overhead.
- Automated management of workers within Kubernetes clusters to improve utilization and reduce overhead, leading to a 30% decrease in hardware costs
- Architected system to create on-demand isolated environments within a cluster using a shared worker pool and custom scheduler
- Introduced LUKS encryption using a cloud KMS w/ BYOK and in-place expansion of storage volumes through a custom driver
- Implemented elastic zero-downtime vertical scaling for stateful services on Kubernetes
- "Level 3" SRE, responsible for debugging and remediating escalated issues, requiring deep knowledge of Kubernetes, Linux, and databases,

Oct. 2015 -- Dec. 2017

Compose.io (acquired by IBM)

Japan/USA (remote)

Platform Engineer

Engineer on the team building the platform to orchestrate hundreds of thousands of stateful containers running Compose's suite of databases (PostgreSQL, etcd, Redis, MongoDB, RabbitMQ, and more) on a variety of public and private cloud environments.

- Built out new etcd3 and ScyllaDB services on Compose, used to back several key internal services on IBM Cloud, tested in Travis CI, built into container.
- Refactored and maintained open source Transporter ETL tool, made available as a free service to easily load data from external databases into a Compose instance, increasing customer acquisition

Aug. 2013 -- Oct. 2015

Gengo (acquired by Lionbridge)

Tokyo, Japan

Full Stack Software Engineer

Engineered Gengo's microservice architecture serving hundreds of millions of requests per day on AWS.

- Advocated for and redesigned monolithic PHP API to microservice Golang-based architecture, cutting average response times by 10x and reducing availability events by 90%
- Spearheaded event-driven architecture shift, providing an extensible solution for separating application and async concerns

interests

professional: golang, kubernetes, operators / controllers, SaaS, DBaaS, software architecture, scalability, observability **personal:** tennis, [HN](#), japan, [/r/programming](#), travel, gaming