# Andrey Kaipov



### **Experience**

Software Engineer, GitHub • Miami, FL • Remote

May 2022 - Present

- Refactored our logging pipeline, specifically by breaking up the monostate into tinier Terraform workspaces via meticulous state surgeries, replacing bespoke Azure Event Hub clusters with neatly managed ones, and replacing legacy Kafka consumers with Azure Functions instead.
- Automated Datadog agent version upgrades across GitHub's fleet of VMs.
- Managed the migration of our macOS runners across both GitHub Actions and Azure DevOps, by coordinating between cloud procurement, system integrators, and obscure Azure teams.

Lead Site Reliability Engineer, Target • Miami, FL • Remote

Feb 2022 - Aug 2023

- Developed a Terraform-like tool for Target's PaaS allowing users to describe their applications as Kubernetes-inspired YAML manifests so that deployment configs could be bundled alongside code, instead of manually managing deployments through monotonous clicks in the UI.
- Worked on a handful of proof-of-concepts to help bring tracing to the organization by writing and contributing upstream a variety of custom OpenTelemetry processors, exporters, and extensions to adhere to Target's standards.

**Sr Site Reliability Engineer**, *Ultimate Kronos Group* • Weston, FL • *Remote* 

June 2020 - Feb 2022

- Developed and maintained Terraform modules abstracting development teams' access to public cloud services, and created workflows to promote a seamless and transparent user experience transitioning from the private cloud system.
- Developed tooling to automate the management of volume snapshots and backups for our MySQL and MongoDB services to meet some short-notice compliance audit deadlines.
- Worked closely with traditional Windows sysadmins and application owners to automate the heavily involved and manual configuration of our core products via Ansible playbooks, evangelizing SRE principles along the way.

Site Reliability Engineer, Magic Leap • Plantation, FL • Hybrid

Jan 2020 - June 2020

Developed Kubernetes operators to manage GCP resources to make the migration from AWS easier.

Site Reliability Engineer, Ultimate Software • Weston, FL • Hybrid

Jan 2017 - Jan 2020

- Developed and managed a centralized logging and metrics collection platform for company-wide use with Chef, ingesting over 5TB/day of logs and metrics into our milti-datacenter Elasticsearch and InfluxDB clusters.
- Managed several VM and container-based orchestration platforms for product teams to leverage, including a homegrown PaaS, on-prem Pivotal Cloud Foundry, and on-prem Kubernetes clusters.
- Did all the other silly SRE things, e.g. automated toil away, tracked outages, conducted postmortems, troubleshot all kinds of systems, woke up at 4am because someone from the NOC called the wrong number by accident.

**Software Engineer Intern**, Best Buy • Richfield, MN • On-site

Summer 2016

#### Skills

Languages Go, Shell, Python, JavaScript, TypeScript, Ruby, Java, Kotlin, F#, Lisp, Languages Languages

**Tooling** Terraform, Vault, Packer, Docker, Ansible, Chef, Bosh, Concourse. **Platforms** Linux, Kubernetes, Cloud Foundry, OpenStack, Azure, GCP, AWS.

**Observability** Datadog, Elasticsearch, Logstash, Kibana, Fluent Bit, InfluxDB, Telegraf, Grafana, Sensu.

## **Projects**

• Go client library to control OBS Studio.

goobs.kaipov.com

Generate functional options for your Go structs.

funcopgen.kaipov.com

• Manage MongoDB connection pools with less headaches.

mongodb-pool.kaipov.com

• Chef Solo provisioner for Terraform, inspired by the Packer one.

tf-chef-solo.kaipov.com

Kubernetes controller supporting active/standby applications.

active-standby.kaipov.com

#### Education

**BS in Mathematics & Computer Science**, *Florida International University* • Miami, FL *Aug 2013 – Dec 2016* Honors: Summa Cum Laude, Phi Beta Kappa, FIU Ambassador Scholar, Florida Academic Scholar.