

Andrey Kaipov

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Experience

Software Engineer, *GitHub* • Miami, FL • *Remote*

May 2022 – Present

- Managed the infrastructure for macOS runners for both GitHub Actions and Azure DevOps, coordinating between cloud procurement, system integrators, and obscure Azure teams to make “MacCloud” a reality.
- Automated as much as possible of the bootstrapping, validation, inventory, and telemetry for the management servers, switches, and macOS hosts in our racks, working around Microsoft’s endless red tape and Apple’s EULA.
- Created tooling to make it easier managing our legacy “trashcan Mac” racks, speeding up DRI response times.
- Automated the validation of Datadog agent version upgrades across 85k hosts.

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

Feb 2022 – Aug 2023

- Developed a Terraform-like tool for Target’s PaaS that allowed users to describe their applications as Kubernetes-inspired YAML manifests, allowing users to bundle their deployment configs right alongside their 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 extend our platform so we could migrate from AWS.

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, ingesting over 5TB/day of logs and metrics into our multi-datacenter Elasticsearch and InfluxDB clusters.
- Managed several VM and container-based orchestration platforms for product teams to leverage, including a home-grown 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, \LaTeX .
Tooling	Docker, Terraform, Packer, Vault, Ansible, Chef, Bosh, Concourse, GitLab.
Platforms	Linux, Kubernetes, Cloud Foundry, OpenStack, Azure, GCP, AWS.
Observability	Elasticsearch, Logstash, Kibana, Fluent Bit, InfluxDB, Telegraf, Grafana, Sensu.

Projects

- Go client library to control OBS Studio. [goobs.kaipov.com](https://github.com/andreykaipov/goobs)
- Generate functional options for your Go structs. [funcopgen.kaipov.com](https://github.com/andreykaipov/funcopgen)
- Manage MongoDB connection pools with less headaches. [mongodb-pool.kaipov.com](https://github.com/andreykaipov/mongodb-pool)
- Chef Solo provisioner for Terraform, inspired by the Packer one. [tf-chef-solo.kaipov.com](https://github.com/andreykaipov/tf-chef-solo)
- Kubernetes controller supporting active/standby applications. [active-standby.kaipov.com](https://github.com/andreykaipov/active-standby)

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.