Dmitry Kutakov

Lead/Senior Software Engineer

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Tech skills

Go, Python, Typescript, PostgreSQL, NoSQL, Kafka, Nats, Linux, GCP, AWS, Docker, Kubernetes, Helm, Terraform, Pulumi, Prometheus, Haskell, Factorio

I do backend and infrastructure; design and build a reliable and maintainable system. Which will be ready for high load traffic and be extendable in the next iteration of a product. I follow the best and reasonable set of necessary engineering practices with security awareness. I'm comfortable working in an environment with uncertainty.

Lead Engineer - [Startup] GlassFlow (old version from web.archive.org)

Berlin, Germany, Oct 2023 - May 2025 (1 year 8 months)

<u>Tech stack: Go. Python. k8s. k8s controllers. GCP. PostgreSQL. Nats. Terraform (Pulumi). Helm. Github Actions</u>

GlassFlow is a serverless, Python-centric real-time data processing platform to transform data in real-time for end-to-end data pipelines.

The Data Engineers write Python functions and we manage the infra. Built-in monitoring and logs to see the progress of pipelines and debug the transformations per event. Multi-function transformations.

- Joined as a first hired engineer on the pre-seed round.
- The concept of a product was that we run Python functions for every event the user sent. <u>[GCP, Nats. PostgreSQL]</u>
- Development planning was on a monthly basis and sync of current progress twice per week.
- As a single engineer I built the whole backend implementation and set up an infrastructure from scratch.
- Built a REST API service (**openapi specification first**) which is designed to be publicly available and being used by the Web App and the CLI tool.
- CI/CD were configured to check by linters every commit and new version automatically deployed by a new git tag.
- Infrastructure is fully covered with an **infrastructure-as-a-code** approach with security awareness. [Pulumi, Helm, Github Actions, GCP, Cloudflare]
- The first implementation was able to handle 2k events per second on a small instance (MVP).
- The latest implementation was able to handle 6M events per second.
- The solution has different ways of integration, like direct API, CDC (change data capture) from DBs, many other NoSQL databases, S3 integration, etc.
- Prepared "bring your own cloud" (BYOC) feature.
- Have been responsible for keeping up and running the implementation for 24/7. [Grafana, Prometheus, Alerts, UptimeRobot]
- After the seed round I interviewed and formed the backend team into which I hand over the maintenance of the implementation.

Senior Software Engineer - Snap Inc (https://www.snapchat.com)

Berlin, Germany, Feb 2020 - Feb 2023 (3 years)

Tech stack: Go, Python, Node.is, k8s, GCP, Kafka, PostgreSQL, BigTable, Helm, Terraform

- Led the technical implementation of backend services, infrastructure, and the automation of ML pipelines in an independent cross-functional team. [Go, microservices, k8s, Argo workflows]
- Built a solution to deliver recommendations from Data Sciences to end users.
- Built the REST API (openapi specification first) service.
- The API service handles production with 99.95% uptime SLO even during Black Friday's highest peak.
- SLO counted as successful requests (2xx) within 250ms.

source: https://cv.kutakov.me

- Mentored Data Sciences to use the unit tests on ML Python code, which increased the quality of the whole codebase.
- Made the builds reproducible and consistent, particularly in the context of versions of Go, linters, tools of
 code generation, etc. and regardless of which machine builds started. [Makefile, Docker, Go, Unix, CI GCP Cloud Builds]
- Introduced and integrated Kafka into the process of collecting metrics, it helped during the Black Friday season to persist metrics events. [Go, microservices architecture, Kafka, Docker]
- Led weekly knowledge-sharing sessions about Go, which helped to share the understanding of the new language across many teams and to start migrating from NodeJS.

Senior Software Automation Engineer - N26 (https://n26.com)

Berlin, Germany, Jul 2019 - Jan 2020 (6 months)

Tech stack: microservices, Go, Docker, PostgreSQL

- Worked on internal tools of employee automation.
- Was laid off since our team was closed and N26 didn't use Golang at that moment.

(Senior) Backend Software Engineer (summary experience of several employers)

2012 - 2018 (7 years)

<u>Tech stack: microservices, Go, Docker, Python, PHP, Docker, PostgreSQL, Kafka, ClickHouse (column NoSQL), MongoDB. Redis. RabbitMQ</u>

- worked for an email marketing company
- built an advertising management tool
- worked on an advertising exchange platforms
- highload projects with high RPS and billions of stats and metrics

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more detailed information can be found on my LinkedIn profile: https://www.linkedin.com/in/vkdcastle

Education

Master's and Bachelor's degree, Computer Science, 2008 - 2014

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