Stefan Muraru

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Senior Cloud Engineer with 9 years of hands-on experience designing and building cloud-native projects. Specialized in crafting high-throughput applications using modern technologies across the entire back-end stack, like NodeJS, Typescript, MongoDB, PostgreSQL, Kubernetes and Go. Proficient in building, managing, monitoring and scaling infrastructures due to specific needs with security and costs in mind on both AWS and GCP using IaC tooling.

Technologies

Languages: NodeJS, Typescript, Go

• Data: MongoDB, MySQL, Postgres, Redis, Elasticsearch

Infrastructure:

o Providers: Cloudflare, AWS, GCP

o Tools: Kubernetes, Docker, Terraform, ArgoCD, Github Actions

o Observability: Prometheus, Loki, Grafana

Work Experience

Team Lead CloudQuery May 2024 – Present

Plugins Team Tel-Aviv, Israel (Remote)

Team lead of the Plugins team, responsible with CloudQuery plugin development. Leading a team of 4 engineers through the entire development and support lifecycle of different CloudQuery Plugins.

Senior Software Engineer CloudQuery Apr 2024 – Present

Framework & Plugins Team Tel-Aviv, Israel (Remote)

Working on the Framework team, handling the open source software (CLI, SDKs, etc.) as well as the private plugins and internal software components.

- Implemented new source plugins based on demand for platforms like Wiz, Tenable and Plaid.
- Implemented features in the Core SDK like tracking sync usage per-table and adding support for additional types.
- Implemented resources and bugfixes to core plugins like GCP, AWS, Github & Snyk.

Senior Cloud Engineer Kubeshop Dec 2022 – Mar 2024

Monokle Cloud Delaware, United States (Remote)

Led the **infrastructure management** as well as **end-to-end architecture and development** of the authentication framework, microservices and GraphQL APIs for the Monokle Cloud application at Kubeshop.

- Cut existing cloud costs by over 60% while also leveraging monitoring, logging and alerting stacks for improving application and infrastructure availability.
- Implemented OAuth2.0 + OpenID Connect authentication by deploying and configuring an on-prem Authorization Server as well implementing and testing individual Authorization Code, Client Credentials and Device Code flows.
- Implemented a high-throughput content streaming API for fetching repositories from multiple GIT providers by integrating provider APIs or leveraging SSH / HTTPS git authentication.
- Created and maintained Github Actions configuration files for building and testing as well as Helm Charts & Kustomizations deployed on ArgoCD to sum up for an end-to-end CI/CD process.
- Improved build times by more than 80% while also scaling down image sizes by an entire order of magnitude by leveraging Github Actions concurrency and caching as well as Docker multistage builds and distroless images.

2018-2022

Cloud & Infrastructure

Worked on **building an internal platform** that enabled developers and ML researchers to easily manage their code's lifecycle after development, from building, to deploying to multiple testing and staging environments and ultimately going to production.

- Implemented multiple Kubernetes operators for technologies such as RabbitMQ, Prometheus and the Elastic Stack (deep diving into operations like HA clustering, sharding, etc.) in order to be able to ship them as managed services.
- Designed and implemented a hardware and software discovering and inventorying system that in only a couple of months helped the company pass a SOC2 audit while also saving on alternative paid solutions.
- Designed and implemented a highly-available, multi-region mail templating gateway through which the client
 emails are being sent on behalf of the products. Built, managed and worked with multiple message brokers and
 SMTP gateways connected on a multi-region scale, on high-availability requirements.
- Participated in the design and implementation of infrastructure, Kubernetes deployment on public and private cloud providers (Google Cloud Platform, Amazon AWS and on-premise infrastructure) as well as migration (Virtual Machines to Kubernetes), replication, scaling and authentication of services like MongoDB, RabbitMQ, Redis and Elastic Stack components using OAuth2.0 flows.

Software Developer TSS-Yonder 2017–2018

Iasi, Romania

Worked on a Data Warehouse & GIS mapping project used by government entities.

- Developed frontend components using Angular, based on specific instructions & designs
- Mapped GIS, JSON and XML data through .NET and NodeJS APIs.
- Dockerized all the dev and staging environments in order to facilitate local development and shorten build and release times.

Junior Software Developer Maxcode 2016-2017

lasi, Romania

Worked on designing and implementing an internal employee management application.

Junior Software Developer TSS-Yonder Autumn 2016

Iasi, Romania

Education

• Master's degree, Distributed Systems, "Gheorghe Asachi" Technical University of Iasi, Romania. 2018–2020

Bachelor's degree, Information Technology, "Gheorghe Asachi" Technical University of Iasi, Romania.
 2014–2018

Projects

- **File streaming API**, Kubeshop highly-available system that handles pulling repository metadata and content from different GIT providers (eg. Github, Gitlab, Bitbucket). Main challenges were different authentication mechanisms on different providers and even on different versions of a provider, as well as having a lower latency as possible.
- Mail templating gateway, Bitdefender platform that enabled defining of mail templates in Mustache syntax with
 microservices and workers for sending emails distributed on 4 continents and 7 regional data centers. Challenges
 included having a 5 digit uptime, for which a message broker bouncing system was eventually employed.
- **Console**, Bitdefender internal platform that enabled developers and ML researchers to deploy services and workflows on top of multiple Kubernetes clusters from different public and private cloud providers.

Interests

Homelab and home automation enthusiast, tinkering in spare weekends with a 3-node NAS & Kubernetes clusetup hosted in my office.						