

Senior Cloud Engineer with 8 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 recently, 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:
 - Providers: Cloudflare, AWS, GCP
 - Tools: Kubernetes, Docker, Terraform, ArgoCD, Github Actions
 - Observability: Prometheus, Loki, Grafana

Work Experience

Senior Cloud Engineer

Monokle Cloud

Kubeshop

Delaware, United States (Remote)

Dec 2022 – Mar 2024

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.

Senior Platform Engineer

Cloud & Infrastructure

Bitdefender

Iasi, Romania

2018–2022

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
Iasi, Romania

2017–2018

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
Iasi, Romania

2016–2017

Worked on designing and implementing an internal employee management application.

Junior Software Developer

TSS-Yonder
Iasi, Romania

Autumn 2016

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 cluster setup hosted in my office.