Espen Albert

✉ albertespen@gmail.com

in linkedin.com/in/espen-albert-b97424ba

Summary

I'm a Norwegian developer living in Spain with six years of experience in building and deploying software across the stack and clouds.
I have the most experience with Python, Terraform, and AWS, but I'm always open to using other technologies.
I hold a master's degree in Computer Science from the Norwegian University of Science and Technology.
I care about every stage of the software development cycle, from idea to delivery. I'm passionate about writing clear code, DevOps best practices, and contributing to open-source.

I have the ability to stay focused, and I'm enthusiastic about learning and improving my skills. I enjoy having a never-ending list of tools to explore and use. I actively seek feedback, and I'm happy to contribute mine. I have a positive attitude and try to take everything with a smile. I'm more of a hands-on type than a manager.
I use systematized workflows and weekly/quarterly summaries to reflect on and plan how to allocate my time and improve my skills.

When I'm not coding, I enjoy climbing, lifting weights, walking on my hands, exploring nature, and trying new activities or sports. I believe in using code to improve the world, and I'm on a mission to build and use skills for the greater good.

Experience

DevOps Engineer

wheel.me

Feb 2021 - Present (2 years 7 months)
- Built a SaaS product with multiple tenants on AWS running on EKS with an istio service mesh using mostly Python, Terraform, and AzureDevops pipelines
- Built a serverless observability system running multiple Python lambda functions, using open source collectors, and working with AWS CloudWatch logs, metrics, alarms, and dashboards + slack notifications
- Built an SSO (single-sign-on) system containing two FastAPIs deployable as Istio External Authentication or as an AWS Lambda function to enable employees secure access to debugging tools (e.g., pgadmin and rabbitmq-admin)
- Built a system for "lightweight" deployments, using Terraform, cloud-init, lets-encrypt, and an envoy-proxy to create a ready-to-use EC2 instance
- Built a custom CI system written in Python and Terraform. Event-driven microservices using Kafka and MongoDB with a Dash UI. Integrating with GitLab to show build statuses and run custom runners on AWS that supports docker-compose based testing with a custom Pytest format and publishing test reports and alerts to Slack.
- Built a GitOps based deployment system using a kOps managed kubernetes cluster and Flux 2 with SOPS. Service mesh using Istio Operator. Monitoring with a modified Telegraf-Operator to simplify sidecar injection and metrics. Local testing with kind

Full Stack Developer

wheel.me
Dec 2018 - Jan 2021 (2 years 2 months)
- Built a Python grpc api using MongoDB, PostgreSQL, and rabbitmq to communicate with robots and frontends
- Built a rabbitmq consumer (bridge) forwarding messages to ROS
- Built a Python Dash UI using OpenCV to modify pgm files and support reading writing to a grpc API
- Used PantsBuild Pants for linting, testing, dependency management, and packaging. Created a few custom plugins for docker build, environment variables in docker-compose files, and helm-chart exporting
- Built a Python service running selenium-based tests by reading yaml files and using screenshots +OCR (optical character recognition) to test a flutter app

Software and Web Developer
Rocketfarm AS
Aug 2017 - Dec 2018 (1 year 5 months)
- Built a full-stack application for controlling wheels in a vrep simulation. Python backend with flask-socketio framework and celery using rabbitmq for background tasks. And a javascript react+redux frontend. Hosted on Heroku
- Part of maintaining a "smart-house" API powering a smart house with ZigBee devices. .net backend and Angular Javascript frontend.
- Created an Udemy course: Quick introduction to InfluxDB

Tester and Programmer
Feb 2014 - Apr 2015 (1 year 3 months)
Testing: Test cases + integration tests.
Translation.
Documentation.
Selenium webdriver integration testing.
Visual studio.
C#., Jenkins

Paratrooper
Forsvaret - Norwegian Armed Forces
Jul 2011 - Jun 2012 (1 year)
A year of intense physical challenges and camaraderie
I learned about:
- Working in a team and giving/receiving feedback during de-briefs
- Planning and preparing for missions by creating "what-if" scenarios and presenting them to leaders
- Making decisions in high-pressure situations
- Pushing my own limits both mentally and physically

Education

Norwegian University of Science and Technology (NTNU)
Master's degree, Computer Science
2012 - 2017

4th year finished at NTU - Nanyang Technological University (Singapore)

Kristiansand Katedralskole Gimle

Realfag

2008 - 2011

Skills

Python • Kubernetes • AWS • Android Development • Scrum • Maskinlæring • InfluxDB • SQL •
React.js • JavaScript