

Marco Micera

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Senior DevOps Engineer – Cutting infrastructure costs by over \$24k/year through cloud optimization

Skills

Cloud & infrastructure	GCP, Azure, AWS, Terraform, Kubernetes, Docker [Compose], Helm, Istio, cert-manager, Terragrunt, Pulumi
DevOps tools & practices	CI/CD (Jenkins, GitHub Actions), Linux, Git, Cloudflare, DoIT, TCP/IP
Programming & scripting	Go, Python, Bash, Java, Groovy, C/C++, JavaScript, SQL
Monitoring & observability	Honeycomb, OpenTelemetry, Sumologic, Prometheus, Grafana, PagerDuty
Databases	MongoDB [Atlas], PostgreSQL, Neo4j
Spoken languages	Italian (C2 – Native), English (C1 – IELTS 7.5), German (B1.1 – Hartnackschule), Spanish (A2)

Professional experience

Senior DevOps Engineer, Ada Health – Berlin, Germany

Apr 2024 – Jun 2025

Ada is an AI-driven digital health company offering symptom assessment and care navigation tools to millions, including major US healthcare firms.

Duties:

- Built a one-click Azure infrastructure bootstrap for a major enterprise client, enhancing DRP readiness to meet 99.9% uptime requirements
- Managed FinOps operations using DoIT and native GCP, Azure, and AWS cost tools to monitor spend, analyze trends, and detect anomalies
- Led Helm chart standardization and migration efforts via Jenkins migration pipelines, tracking progress with Honeycomb dashboards

Achievements:

- Cut MongoDB production costs by 56% (\$22.8k/year) by optimizing database storage and reclaiming unused space with zero downtime
- Saved 7 weeks/year by automating company-wide Helm changes via centralized base charts, cutting deployment time from months to <1 hour
- Ensured GDPR compliance with Terraform-managed GCS archives using TTL rules and audit-proof access controls for deleted medical data

DevOps Engineer, Ada Health – Berlin, Germany

May 2022 – Mar 2024

Duties:

- Developed internal tools to enhance disaster recovery, including exporting PostgreSQL backups to external GCS buckets
- Handled on-call incidents for cloud and Kubernetes with PagerDuty, kubect!, Honeycomb tracing, and E2E testing
- Enabled regulatory compliance in Canada by mentoring the local infra team on secure CI/CD pipelines and access governance
- Improved infrastructure robustness with Terraform, including prevention of accidental destruction and smooth replacement of resources

Achievements:

- Cut Terraform provisioning time by 89% (18 → 2 mins) for 134 customer-specific IaC folders through selective provisioning, saving \$1.8k/year
- Reduced MongoDB IAM-related support tickets by 60% by integrating IAM with Terraform, enabling self-service access via approval workflows

Cloud Infrastructure Engineer, Endocode (now Hoverture) – Berlin, Germany

Jul 2020 – Feb 2022

Endocode was a cloud consultancy and an official Google Cloud Platform (GCP) partner, delivering solutions primarily on GCP and other platforms.

Duties:

- Consolidated multi-provider (GCP, AWS, & Azure) Terraform code for a global health company
- Developed an ad-hoc license detector in Java for the EU-funded project Fasten, integrated into their pipeline (Kafka on Kubernetes on-premise)

Achievements:

- Cut Kubernetes costs 35% by profiling deployments with Goldilocks, right-sizing resources, and reducing nodes by 40%
- Cut Docker build times 79% (from 104 to 22 seconds) by optimizing Maven multi-stage builds, caching artifacts, and enabling BuildKit
- Enabled a team of 3 developers to work concurrently and accelerate delivery by parallelizing the pipeline with selective task execution

Research Assistant, University of Lugano – Darmstadt, Germany

Apr 2019 – Jul 2019

- Built a flow-based cluster scheduler aware of network resources; helped extend its Scala-based simulator and refine the solver's cost model
 - The simulator featured in the 2021 ASPLOS paper "Switches for HIRE: Resource Scheduling for Data Center In-Network Computing"

Personal projects

kubemarks, github.com/marcomicera/kubemarks

Sep 2019 – Feb 2020

Polytechnic University of Turin

Turin, Italy

- Benchmarking tool based on Google Cloud Platform's PerfKit Benchmark that can periodically run benchmarks as CronJobs on Kubernetes
 - The tool was assessed by Polytechnic University of Turin and incorporated into the research of NetGroup during the development of liqo.io

Education

M.Sc. (& B.Sc.) in Computer Engineering

Oct 2013 – Mar 2020

Polytechnic University of Turin (M.Sc.), University of Pisa (B.Sc.)

Pisa, Turin, and Darmstadt

- Master's thesis at the Technical University of Darmstadt, Germany, titled "Data center resource management for in-network processing"