Carmelo **Riolo**

SENIOR BACKEND ENGINEER

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Summary

Currently working as a Senior Backend Engineer at Subito, the leading online digital marketplace in Italy. I initially began my career as a DevOps Engineer, with a strong inclination toward Software Engineering. In recent years, I transitioned to a Software Engineering role while maintaining a deep knowledge of networking and infrastructure.

Skills

Languages	Go, Python, Bash scripting, Java (Academic experience only)
Frameworks	go-kit (Clean Architecture), Spring Boot (Academic experience only)
DBMS	PostgreSQL, Elasticsearch, Redis, DynamoDB
Other	Amazon Web Services, Akamai, Docker, Kubernetes, Kafka, Prometheus, Terraform, Git, Grafana, Linux, Jenkins, Maven, Nexus, Artifactory, SonarQube, Ubuntu, Debian, CentOS, Packer, Flyway, Apache2, Nginx, Fluentd, Logstash

Jobs

Subito
Remote

SENIOR BACKEND ENGINEER — *Gen. 2023 - now*

- I was promoted to a Senior level while having the opportunity to make a horizontal career switch, focusing more on Backend development
- Improvement of hiring challenges and processes for new Backend Engineer candidates
- Microservices development within the payments domain
- Microservices development within the compliance domain for EU normatives (GDPR, DAC7, DSA)
- Development on an internal tool to manage container orchestration
- Development of common library modules used by all microservices
- Troubleshooting and fix of scalability bottlenecks, allowing services to handle critical workloads (30k req/min)
- Maintenance of legacy services in PHP and Kotlin
- Dismission of legacy services
- Security patching
- On call rotation 24/7

Subito
Milan, Italy and Remote

DevOps ENGINEER — *Apr. 2020 - Gen. 2023*

- Shift and lift migration from bare metal to cloud
- Migration of 100+ microservices between two Kubernetes cluster
- Development of several Terraform modules to automate infrastructure management on AWS
- Development of an internal tool to automate Backup and Disaster Recovery
- Microservices development to improve the observability of the platform
- Performances improvement of the internal logging platform
- On call rotation 24/7

Sky Italia
Milan, Italy

DevOps ENGINEER — *Mar. 2018 - Apr. 2020*

- Development of CI/CD pipelines with Jenkins
- Cloud infrastructure setup and automation on AWS via Terraform
- Network setup between cloud and on premises (two datacenters between Milan and Rome)
- CDN setup and deploy on AWS CloudFront
- Monitoring and alerting
- Relevant projects: Cloud infrastructure management for the Sky WebSelfcare, Sky GuidaTv and My Sky App.
- On call rotation 24/7

Metrostaff
Rivoli, Italy

SOFTWARE ENGINEER — *Sep. 2017 - Feb. 2018*

- Development of GUIs in C# (WPF) for Windows desktop applications.

Education

Polytechnic University of Turin   *Turin, Italy*

MASTER'S DEGREE IN COMPUTER ENGINEERING - 109/110   *Oct. 2015 - Apr. 2018*

Thesis: Project and implementation of a real time architecture for multiplayer videogames (Technologies: Java, Spring Boot, MongoDb, Docker, RabbitQ, Docker Compose)

University of Catania, Italy   *Catania, Italy*

BACHELOR'S DEGREE IN COMPUTER ENGINEERING - 110/110 WITH HONOURS   *Sep. 2011 - Oct. 2015*

Thesis: Development of a social network in Ruby on Rails (Technologies: Ruby on Rails, MySQL, Redis)

Liceo Scientifico Principe Umberto di Savoia, Italy   *Catania, Italy*

ITALIAN DIPLOMA (NATIONAL PLAN OF COMPUTER STUDIES)   *Sep. 2006 - Jul. 2011*

Contributions

THESIS: ANALYSIS ON "HACKING TOOLS" WITH A FOCUS ON WEB APPLICATION SCANNERS   *May. 2022*

- This thesis was done for the "Computer system security" course at Polytechnic University of Turin.
- Analysis on Web application scanner tools for well-known web vulnerabilities.
- Mainly focused on exploiting OWASP Top 10 vulnerabilities on compromised systems

OSS CONTRIBUTOR @ INFRACOST   *May. 2022*

- Extended support for price estimation of AWS resources with reservation plans

LINUX SYSTEM ADMINISTRATOR @ OPENSCUOLA (POLITO)   *2017-2018*

- Worked as system administrator for the Openscuola project at Polytechnic University of Turin.
- Migration of the internal Wiki
- Bringing new life to old hardware by installing lightweight Linux distros
- Installation of several Computer laboratories in primary schools of Turin area

MEMBER @ SICILY ON RAILS   *2014-2015*

- Member of a local Ruby on Rails community
- Event speaker to promote the Rails framework for web development