Filippo Spinella

EDUCATION

University of Genoa Masters of Science in Computer Science	2025 - 2027
University of Genoa Bachelors of Science in Computer Science	2022 - 2025
ITIS Italo Calvino High School Diploma in Computer Science	2017 - 2022
CyberChallenge National project for CyberSecurity training	2023 - 2023

EXPERIENCE

Wikicasa.it 2023 - Present Back-end developer, Part-Time Genoa (Hybrid), Italy

- Improved the speed of reading agency data from MySQL to ElasticSearch by -83%
- Implemented a new microservice for managing geospatial polygons, going from $\sim 160 \text{ms}$ to $\sim 13 \text{ms}$
- Migrated queries from MongoDB to ElasticSearch
- I created the first cluster with Kubernetes in companies on bare-metal servers. Managing all CI/CD with Bitbucket pipeline and ArgoCD
- Created a microservice in Go and gRPC for converting images into different formats and sizes, handling over 25TB of data and 270 million images. Optimized storage on GCS Bucket, with a 40% cost reduction.
- I identified and resolved significant inefficiencies in the main application cache, which significantly slowed down the startup process. By implementing a cache serialization system, I reduced application startup time by 45 seconds, improving overall performance

Ikinova 2022 - 2023

Full Stack developer, Part-Time

Acqui Terme (Remote), Italy

- Restructured backend from php to typescript and clustered with pm2
- Built a CI/CD environment from scratch with mochajs and GitHub actions
- Created a daemon that auto-synchronises patient data from an API of the Piemonte region
- Collaborates for the realization of some parts of the front-end with Ionic and Angular2

Projects

University ChatBot 2024 - 2024

Google x IANUA

- In a team of 4, I created a chatbot in Next.js and Python to support university students, using Gemini as the LLM for retrieval-augmented generation (RAG) from the university site.
- used for building: nextjs, python, github, vercel, gemini, django

Management Orders 2023 - 2023

PLC company

- Developed and managed as project manager and back-end developer, a small order management application for a PLC company
- used for building: github, mongodb, mongoose, express, docker, react, postman, jest, mdbootstrap

Achievements

Participant - Samsung IC	The Samsung Innovation Campus is a specialization course in the IOT and innovation field.	2023
Student - IANUA	IANUA offers a special study plan to the most brilliant students at the University of Genoa (top 10 th percentile).	2022
Mentee - LeadTheFuture	Among the few Italian students selected to be mentees for LeadTheFuture, a leading mentorship non-profit organization for students in STEM, with acceptance rate below 20% .	2022
Finalist - Kangourou	Kangourou is a nationwide math and programming competition for the best students	2022

in Italy