MARGHERITA GAMBINO

Software Engineer

- Amsterdam (NL)
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- marguels

Software Engineer with a focus on back end development, with more than four years of experience and a background in Theoretical Physics. My career is driven by curiosity, the enjoyment I get from problem-solving and learning.

SKILLS

Tech

- ●●●●● Java & Spring boot
- ●●●●○ TypeScript & React
- ●●●●○ Python
- ●●●○○ SQL

Others

- Mathematics & Statistics
- Physics
- Docker
- Kubernetes
- Git
- New Relic
- Agile & Scrum

Soft

▷ Great documentation and communication skills
▷ Excellent organization and time-management skills
▷ Natural inclination to be a supporter figure in a team

PROJECTS

Generative AI Hackathon winner

- Elsevier
- 2023

Created a LLM-based Java application to automate project reviews.

Geocoding communities

- South Working (Volunteer)
- 2020 – 2021

Creation of an interactive map of italian cowork spaces (MapboxGL JS).

INTERESTS

- Sustainability & Environment
- Science & Innovation
- Technology & Computer science
- Learning languages

WORKING EXPERIENCE

Software Engineer III

- Scopus - Elsevier B.V. (Amsterdam)
- 2019 – Today

Scopus AI project

▷ Contributed to system design and development of Scopus AI, LLM-based application with vector storage, developed and launched in record time for Elsevier.
▷ Led the system design and development of a new streaming solution, incorporating innovative infrastructural components.
▷ Achieved a 75% reduction in Time To First Byte (TTFB), decreasing from 10 seconds to 2.5 seconds, significantly enhancing user experience.
▷ Contributed to the design and implementation of Server Sent Events (SSE), enabling real-time data streaming and improving platform responsiveness.

Tech stack I use daily:

`Python` `Java 17 & Spring boot 3` `Reactive programming` `React` `AWS Lambda` `Redis` `Kubernetes & Docker` `NewRelic` `Kibana`

Scopus Assess literature project

▷ Developed and optimized a new export functionality microservice, reducing errors and enhancing performance, supporting 76k transactions daily.
▷ Created custom shared libraries, significantly improving development processes and efficiency within the Scopus team.
▷ Developed data-aggregator microservice for Scopus's most visited page, handling 1.9M transactions daily, demonstrating significant performance improvement.
▷ Crafted Custom Web Components for Scopus styleguide, improving UI consistency and user experience.
▷ Acquired full-stack expertise, developing and managing end-to-end features, ensuring seamless deployment to production.

EDUCATION

M.Sc. Theoretical Physics

- Utrecht University
- 2016 – 2019

Research project in Early Universe Cosmology and Information theory.

B.Sc. Physics

- Università degli Studi di Palermo
- 2013 – 2015

Thesis in Quantum Information Theory and Quantum Computing