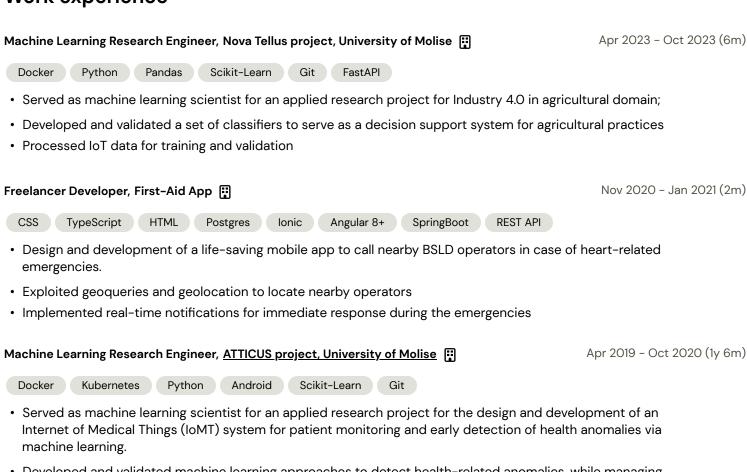
### Giovanni Rosa

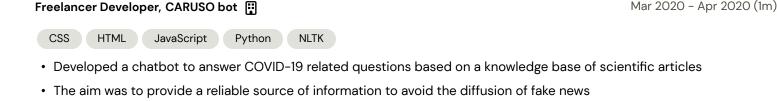


# Work experience

SpringBoot, REST ...



- Developed and validated machine learning approaches to detect health-related anomalies, while managing DevOps activities and deploying ML models.
- Acquired skills in Decision Support System (DSS), Kubernetes, git, GitLab CI/CD, Docker, Scikit-Learn, TensorFlow, Android, Bluetooth Low Energy (BLE), GATT server and client.



 Acquired expertise in HuggingFace and BERT (LLM), Natural Language Processing (NLP) techniques through hands-on development and implementation of the chatbot

#### Freelancer Developer, SearchEngine4Legal

Feb 2019 - Apr 2019 (2m)

Elasticsearch

SpringBoot

REST API

- Designed and developed a prototype of a search engine specifically designed for legal documents.
- Developed expertise in Elasticsearch, Spring Boot, Natural Language Processing (NLP), and web crawling techniques.

## Education

University of Molise Oct 2020 - Present (3y)

Ph.D. Software Engineering

- My primary focus is to study the quality and maintenance of Docker artifacts
- · I participated in various international conferences presenting my research results
- I also served as a teaching assistant and as a research engineer in applied research projects involving practical applications of machine learning methods.
- More details can be found on my academic website (giovannirosa.com)

#### Grupo de Sistemas y Comunicaciones, Universidad Rey Juan Carlos

Nov 2022 - Feb 2023 (3m)

Oct 2018 - Oct 2020 (2y)

Visiting PhD Student Software Engineering

- Visiting period as a PhD student under the supervision of Prof. Gregorio Robles.
- We conducted an empirical analysis of the design flaws (smells) present in Dockerfiles.

University of Molise

Master's Degree (110L) Sosftware systems security

- During my master's degree I learned concepts covering security, machine learning, optimization methods, and project management
- In a project management-related exam, I was the top performer among my colleagues, as I successfully guided a group of ~20 peoplefor the development of a full-working chat system using MongoDB, MySQL, Ionic, Socket.io, and NodeJS.
- My thesis work on software bugs was submitted and presented at the ICSE 2021 conference

### Software Institute, USI Universita della Svizzera italiana

Mar 2020 - Apr 2020 (1m)

Visiting Master Student Software Engineering

- The visiting period covered the first part of my master's thesis project in collaboration with USI.
- The topic of the thesis was an empirical study of the SZZ algorithm, which allows the identification of bug-inducing commits.
- The final work was submitted and presented as a scientific paper at the ICSE 2021 conference.

University of Molise

Oct 2015 - Dec 2018 (3y 2m)

Bachelor's Degree Computer Science

Erasmus Taineeship Computer Science

- Erasmus traineeship period at UCL CREST research group under the supervision of Prof. Jens Krinke for my bachelor's thesis project.
- During the visiting period, I contributed to a scientific research project evaluating how developers perform code reviews and how they deal with code smells and coding conventions.
- Part of the work was submitted and presented at SCAM 2020.

# **Snippets**

#### PySZZ Ø github.com

An open-source implementation of several versions of the SZZ algorithm for detecting bug-inducing commits. Currently, it is used by the research community.

#### MonUP Ø github.com

Open-source Android app to show crypto prices and news.

Available for free in the Google Play Store. Currently suspended because it is undergoing maintenance.

#### MicrosatCUDA @ github.com

A CUDA porting of MicroSAT, a tool implementing a SAT solver used for software verification.

## More about me

#### I want to work for a company that...

Values a good work-life balance and offers various opportunities to grow and learn new things

### Languages spoken

Italian, english

#### Interests

Video games, bike riding, music and films