

Matteo Iorio

SOFTWARE ENGINEER · DEVOPS

✉ matteo.iorio01@gmail.com | 🏠 matteiorio11.github.io | 📺 MatteoIorio11 | 🌐 ioriomatteo

Experience

Back End Developer | DevOps Engineer

Remote

TRUST-IT SERVICES

Jul 2023 - Present

- **Main research topics:** Cloud Architectures, Servers Migration, Process optimization and Database Management, Back End Software.
- Developed an autonomous way to migrate old website stored inside EC2 into a newer AWS EKS infrastructure.
- Developed an autonomous way to install new databases for the Kubernetes Pods by using S3 buckets and AWS SSM.
- Worked on **European** software projects.
- **Tech Stack:** [Python3, Laravel, Angular, Boto3, MySQL, Kubernetes, Helm Charts, AWS, Linux, Docker, Git, Gitlab CI].

Software Engineer | Medical Imaging Researcher

Meldola (FC), Italy

ROMAGNA INSTITUTE FOR CANCER STUDY "DINO AMADORI" - IRST

Dec 2022 - Sep 2023

- Worked inside the **MiAi** (Microscopy & Artificial Intelligence) team.
- **Main research topics:** Image Processing, Image Alignment, Big Data Images, Image Fusion, and Image Reconstruction applied to the field of Oncology.
- Developed a plugin for the ImageJ and Fiji platforms, capable of performing manual and automatic 2D image alignments. (*Image Alignment*).
- **Tech Stack:** [Java, OpenCV, ImageJ/Fiji, Parallel Computing Toolbox, Gradle].

Software Engineer Intern | DevOps

Remote

MLH FELLOWSHIP - G-RESEARCH

Sep 2022 - Dec 2022

- Selected as one among 220 fellows out of thousands of applicants in the *MLH Summer Fellowship Program*.
- Worked with the *G-Research DevOps OpenSource* team.
- Optimize the *Cloud Architecture* using *AWS Lambda and Probot*.
- Created an autonomous way to manage self-hosted runners with the using of the library *Probot* with *AWS Lambda*. Achieved a significant productivity improvement.
- **Tech Stack:** [Java, JavaFX, NodeJS, Probot, AWS, GCP, Linux, Gradle, GitHub/GitHub Actions].

Education

MSc in Computer Science and Engineering

Cesena, Italy

UNIVERSITY OF BOLOGNA

Sep 2023 - Present

- **Focus:** Distributed Systems, Deep Learning, Machine Learning, Computer Vision, Parallel and Distributed Computing, Advanced OOP and Smart Veichular Systems.

BSc in Computer Science and Engineering

Cesena, Italy

UNIVERSITY OF BOLOGNA

Sep 2020 - Jul 2023

- Final mark: **107/110**, GPA: **27.5/30** (top 4%).
- **Focus:** Algorithms and Data Structures, IoT-Embeeded Systems, Computer Vision, Machine Learning, Operation Research and OOP.
- **Excellence Scholarship:** merit award granted to the 69 best students of the School of Engineering and Architecture (top 1%).

Projects

Real-Time Collaborative Text Editor

- Developed a real-time collaborative text editor; additionally, we have implemented various permission options for a single document, including read, write, and no access
- **Tech Stack:** [Kotlin, NodeJS, Ktor, ShareDB, OT, ETCD, PostgreSQL, Docker, RAFT].

Autonomous Drone Racing Team

- Partnership with the *Technology Innovation Institute of Abu Dhabi (TII)*.
- Developed a simulated **autonomous drone** presented to the *ICRA DodgeDrone Challenge*.
- **Tech Stack:** [Python, ROS, AWS, Keras, TensorFlow].

Publications

Filippo Piccinini, Vincenzi Fabio, **Iorio Matteo**, Marcella Tazzari, Maria Maddalena Tumedei, Jae-Chul Pyun, Enrico Giampieri, Giovanni Martinelli, Gastone Castellani, Antonella Carbonaro (2024). *DS4H Image Alignment (DS4H-IA)*, an open-source ImageJ/Fiji plugin for aligning multimodality 2D microscopy images

Filippo Piccinini, **Iorio Matteo**, Vincenzi Fabio, Marcella Tazzari, Maria Maddalena Tumedei, Jae-Chul Pyun, Enrico Giampieri, Giovanni Martinelli, Gastone Castellani, Antonella Carbonaro (2024). *User-friendly open-source tools for aligning multimodality 2D microscopy images and performing single-cell co-localization analysis*

Awards

Lead The Future Mentee

Among the few Italian students selected to be mentees for *LeadTheFuture*. *LeadTheFuture* is a leading mentorship non-profit organization for students in STEM, with an acceptance rate below 20%.

University of Bologna Startup Project Competition

Achieved third place in the prestigious competition hosted by the University of Bologna for presenting an innovative startup idea