Lattaruolo Andrea

Software Engineer I

 $\textbf{Email:} \ \text{lattaruolo.} 96@\text{gmail.com}, \ \textbf{LinkedIn profile} \ \text{and} \ \textbf{GitHub profile}.$

Skills

- Identify and resolve issues during the **software design process** in architecture design for personal and work projects. Experienced in both **solo and team development**. **Adaptable** in using different coding languages over years of experience. while being passionate about solving complex coding challenges and committed to personal projects.
- Advanced: Python (FastApi,Pandas), JavaScript (Angular), Dart (Flutter)
- Intermediate: Java (Spring Boot), TypeScript (Ionic)
- Tools & Platforms: Git, Docker, Llama

Working experience

Fondazione Bruno Kessler / Software engineer

March 2021 - Present, Trento, Italy

- 2 + years in developing and maintaining a Windows application for satellite image downloading and processing. Used **Python** for backend logic and **Ionic** for frontend interfaces. This application streamlined multiple phases, significantly enhancing process efficiency and speed. Applied **incremental development** principles to design a scalable architecture, ensuring modularity and maintainability. Created **Docker images** to standardize the deployment environment, making the application environment-independent and robust. Additionally, contributed to the **CDSE tool library** (used in the project) by proposing improvements and implementing features, demonstrating a commitment to collaborative software development and continuous code enhancement.
- 1+ years Developed a **manager console** with **Angular**, focusing on responsive, component-based design, and implemented a **microservices architecture** using **Java Spring Boot** to improve modularity and scalability across applications. Worked on **LLM** research with Llama and **HuggingFace** models, enhancing NLP capabilities.

Personal Projects

Khamilia / Flutter App - Google Firebase

June 2024 - Ongoing, Trento, Italy

• Developed Khamilia, a personal journal assistant app, during the *Gemini API Developer Competition*. Technology used Firebase as a non-relational database; developed with Flutter. Khamilia showcase video

Soft Skills

• Cultivated strong teamwork skills through professional experience and competitive volleyball, demonstrating effective **communication**, **cooperation**, and **support**. Known for adaptability and the ability to quickly adjust to dynamic, fast-paced environments, contributing positively to team success and cohesion.

Education

- Master's Thesis: "Convolutional Neural Networks for Protein Folding Prediction". University of Udine / Master's Degree Algorithms and Automatic Reasoning (2018 2020).
- Bachelor's Thesis: "Microprocessor Case Study in Java and Python". University of Udine / Bachelor's Degree -Computer Science (2015 2018).