

Alessandro Mariani

SOFTWARE ENGINEER

Italy, available to relocate

✉ mariani.alessandro.ma@gmail.com | 🏠 marianialessandro.com

Profile

I am a Computer Science student from the University of Pisa with a long-standing passion for algorithms and software engineering. I have always engaged in challenging my skills with personal projects that could potentially have a real-world impact, beyond academic theory.

Experience

Premium Coffee and Liquor Online Shop

SOFTWARE ENGINEER

Feb 2024 - Jan 2025

- Designed, developed, and deployed a CRM developed in NextJS, to address business-specific needs, resulting in a 23% reduction in client-relationship management overhead
- Moved the public-facing company's full-stack website to hosting, leveraging autoscaling to minimize downtime, while reducing hosting costs by 32%.
- Employed ChatGPT APIs to automate the abandoned cart email, resulting in a 9% increase in purchase conversion

Education

University of Pisa

Pisa

MSc IN COMPUTER SCIENCE

Sep 2025 - Oct 2027 (Expected)

- Relevant Courses: Algorithm Engineering, Algorithm Design, Information Retrieval, Compilation Techniques, Parallel And Distributed Systems.
- Achieved full score in: Advanced Programming

University of Pisa

Pisa

BSc IN COMPUTER SCIENCE

Sep 2022 - Dec 2025

- Relevant courses: Calculus, Linear Algebra, Algorithms & Datastructures, Databases, Operating Systems
- Achieved full score in: Programming Languages, Laboratory, Cryptography, Statistics

ITIS E. Fermi

HIGH SCHOOL IN COMPUTER SCIENCE

Projects

CARBON-AWARE PLACEMENT

Extended a Prolog-based guaranteed-latency forwarding framework which selects end-to-end paths and configures per-hop delays to meet strict latency windows into a carbon-aware placer to minimize CO₂ emissions while preserving bandwidth and latency constraints.

SOSSOLDI

Contributed to Sossoldi's development, enabling +15K users to easily monitor their finances through an easy-to-use mobile application built with Flutter.

HIGH-SCHOOL EVALUATION PORTAL

Designed the authenticated PHP back-end application, using Google APIs for login, to allow teachers to manage their end-of-the-year evaluations and reports.

PAGERANK MULTI-THREAD

Implemented an efficient multi-threaded PageRank algorithm in C, designed to handle large-scale graph datasets, achieving a 1.4x speedup compared to standard implementations.

FULL-STACK CRYPTO EXCHANGE

Developed a reliable full-stack application in Java to handle multiple-user bids in an attempt to secure financial assets.

MYCAML

Designed a programming language, modelled after OCaml, by developing its dynamic type-checked interpreter in TypeScript.

Skills

Programming Python, JavaScript, TypeScript, PHP, Java, Swift, C/C++, MySQL, Prolog, HTML/CSS

Frameworks React, Next.js, Java Spring

Other Linux, Bash/Shell, Git, JetBrains Tools