Walter Catalfamo

EDUCATION

Master's Degree in Computer Engineering

Sep 2020 - Jan 2023

Politecnico di Milano

Milan, Italy

Bachelor's Degree in Computer Engineering

Sep 2017 - Jul 2020

Politecnico di Milano

Milan, Italy

SKILLS

Programming Languages

Python | Java | C++ | SQL | PHP

Technologies

Apache Kafka | Hibernate | Node.js | MongoDB | Couchbase | MySQL | Docker | Kubernetes | Micros

EXPERIENCE

Amadeus 2023 - Present

Backend Developer

Nice, France

• Developed and maintained RESTful APIs for a distributed, cloud-native system on Azure using Java and Quarkus, focusing on performance, security, and scalability. • Deployed and managed applications on Kubernetes using Helm and Argo CD, following GitOps principles for consistency and reliability. • Integrated event-driven communication using Apache Kafka and managed NoSQL databases (Couchbase) for data persistence. • Configured Istio service mesh for traffic management, mTLS encryption, and observability (distributed tracing, metrics). • Acted as Scrum Master within a SAFe framework to guide team productivity and organization.

Politecnico di Milano Sep 2021 - Feb 2023

Teacher Assistant Milan, Italy

• Led lab sessions and graded assignments for the *Probability and Statistics* course. • Co-taught fundamental programming concepts in C and MATLAB for the *Foundations of Computer Science* course.

Private Tutoring Sep 2019 - Present

• Provide private tutoring in advanced subjects across Math, Physics, Electronics, and Computer Science.

UniTrekking Oct 2021 - May 2023

Mountain Guide Milan, Italy

Responsible for leading groups on treks in the Alps, developing strong leadership and social skills.

NOTABLE PROJECTS

Skillogue 2022

Full-Stack Social Network Personal Project

• Developed a social network from the ground up to connect people based on shared hobbies and passions, managing the project from conception to deployment. • **Tech Stack:** Flutter/Dart (front-end) and Supabase (backend-as-a-service).

NikiTranslator 2022

Multi-Language Learning App

Personal Project

• Built a translator app that translates sentences into multiple languages simultaneously and helps users track frequently used words in a personal dictionary. • **Tech Stack**: Developed as a desktop application in Python.

Schema Query Reverse Engineering

2022

Data Engineering Tool

Academic Project

• Designed and implemented an algorithm to reverse-engineer a database's schema mapping based on a series of query outputs. • **Tech Stack:** Core logic implemented in Python.

PUBLICATIONS

• Walter Catalfamo, et al., "Schema Query Reverse Engineering," Politecnico di Milano, Oct 2022.

LANGUAGES

• Native: Italian, Sicilian • Fluent: English, French, Spanish • Conversational: Portuguese • Basic: Dutch, German,

Turkish