

I'm an ML Systems / AI Infrastructure Engineer based in Italy, with a senior production-grade software engineering background and strong academic foundations in high performance computing, big data and machine learning.

SELECTED PROJECTS

Domain-Specialized Code LLM Training Pipeline

EFashion Software / Alianthis · Nov 2025 – present

Internal project to specialize a code model on a proprietary Java framework. I designed and built the full training pipeline — dataset construction, syntax-aware Java chunking, FIM generation, LoRA-based continued pre-training and fine-tuning, and inference — on the PyTorch ecosystem (Hugging Face Transformers, PEFT), with custom data-packing and training scripts that replaced early Unsloth prototypes.

The dataset covers 40K Java files and reaches ~2.18M CPT examples (~640K L2R, ~1.54M FIM, ~3.8 GB); training runs on rented GPU clusters, with a 3B-parameter model for testing and a 20B target. Preliminary results show clear domain adaptation, measured via held-out perplexity and human evaluation; automated downstream evaluation is next.

Zero-retention AI platform

EFashion Software / Alianthis · Feb 2026 – present

Production AI platform built around privacy and zero retention by external providers. I designed and operate the entire stack: architecture and deployment automation, LLM gateway integration, document tooling with RAG, search, and transcription, plus observability and pragmatic security engineering.

Built on OpenWebUI, LiteLLM, AWS Bedrock, Langfuse, and Docker with supporting data and monitoring services, it already serves several users, with four models integrated through the gateway — from smaller models to SOTA.

Order Entry Manager

EFashion Software / Alianthis · Apr 2020 – present

Enterprise B2B order platform for fashion, luxury, and sportswear, translated from business requirements and an existing backend product into a new web product. I led the web side from the start: technology choices and React/Relay architecture, GraphQL adoption with API contract design and backend integration, build and delivery workflows with multi-client customization, and coordination of a four-person frontend team.

The platform serves six major luxury, high-fashion, and sportswear brands, with hundreds of users and billions of euros in annual orders managed.

CI/CD and Delivery Platform

EFashion Software / Alianthis · Dec 2021 – Feb 2023

Internal CI/CD and delivery platform on GitHub Actions and AWS, born from the operational complexity of Order Entry Manager. It simplified environment management, supported customer-specific customizations, and made releases repeatable — used for years to automatically spin up hundreds of test environments for new features and to build release candidates.

C source code static analyzer

University of Padua · 2023

BSc thesis in Information Engineering (Automatic coherence evaluation between source code and its related documentation), completed after several years of professional experience. The core is a static analyzer for C90 source code: a custom DFA lexer, a Bison parser, a graph-backed AST with custom data structures, semantic analysis and diagnostics, and manual memory management validated with Valgrind.

Wikipedia graph community analysis

University of Padua · Oct 2024 – Jan 2025

Project for the Learning From Networks MSc course: large-scale graph construction, community detection, and graph analytics on the Wikipedia graph — ~3M vertices and ~55M edges. Built in Python with igraph, comparing Leiden, Louvain, and label propagation on modularity and partition stability (adjusted Rand index), plus centrality and inter-cluster analysis.

AI-driven sustainable meal planning

University of Padua · Apr 2025 – Jun 2025

MSc project for the Artificial Intelligence course: a prototype for institutional canteen planning that combines ranked pairs voting, a genetic algorithm, and multi-objective optimization.

TIMELINE

- 2014 – 2019
Self-taught programmer
- Apr 2020 – Oct 2025
Web / Product Platform Lead
EFashion Software / Alianthis
- 2023
BSc in Information Engineering
University of Padua
- Jan 2024 – Sep 2024
Independent Product Consultant
- 2023 – present
MSc in Computer Engineering
University of Padua
- Nov 2025 – present
ML Systems / AI Infrastructure Engineer
EFashion Software / Alianthis

EDUCATION

MSc in Computer Engineering
High Performance and Big Data Computing
University of Padua
2023 – 2027 (expected)
Average grade: 28+/30
Thesis: Expected spring 2027

BSc in Information Engineering
University of Padua
2018 – 2023
Average grade: 28.7/30
Final grade: 110/110
Thesis: C source code static analyzer