

Edoardo Colella

Software Engineer

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Experience

Amazon

SOFTWARE DEVELOPMENT ENGINEER

Dublin, Ireland

Feb 2025 – Present

- Contributed to the design and implementation of a **novel caching solution** for DynamoDB metadata systems, improving performance and system reliability at scale.
- Led an operational excellence initiative** to reduce incoming tickets, achieving a **>50% reduction** through root cause analysis, architectural improvements, and automation.
- Active member of the **high-severity on-call rotation**, owning the mitigation of critical production incidents in a large-scale distributed system.
- Played a key role in the **migration of the secrets management system** across the entire DynamoDB fleet, strengthening security, scalability, and operational resilience.
- Played a key role in the **launch of a new metadata backup access system** for internal customers, enabling **significant cost savings** and more efficient access to backup data.

Alten Technologies (Client: Amadeus)

SOFTWARE ENGINEER

Sophia-Antipolis, France

Apr 2024 – Jan 2025

- Developed and maintained **high-performance C++ code** for the Flex Pricer product, a core component of airline shopping services used by multiple airlines worldwide.
- Developed and maintained **internal tools and shared libraries** to improve developer productivity and optimize the performance of the final product.

Education

Politecnico di Torino

M.SC IN COMPUTER ENGINEERING - FINAL MARK: 110L/110

Turin, Italy

Apr 2024

Focus on **system programming**, **backend**, and **cloud computing**. President of the IEEE-HKN Mu Nu Chapter, leading tutoring sessions, company visits, corporate trainings, and public events. Final project: six-month contribution to the development of the IFC file import module for Edilclima's EC700 energy performance software (C++, ODA SDK).

Politecnico di Torino

B.SC IN COMPUTER ENGINEERING - FINAL MARK: 100/110

Turin, Italy

Mar 2022

Strong foundation in mathematics and computer science with focus on **advanced programming** and **problem solving**. Student Teaching Assistant for multiple courses, supporting labs and assisting students with Java, Python, and core programming concepts.

Projects

P-WAY GRAPH PARTITIONING

Project developed in C++ regarding partitioning of weighted graphs by implementing the Multilevel-KL algorithm, in sequential and parallel versions. ([Repository](#))

TICKETING SERVICE

Backend of a web application, made in Kotlin, Spring, MongoDB and with a microservice architecture, that allows customers of electronic goods to manage assistance tickets. ([Repository](#))

Skills

TECHNICAL SKILLS

C++, Java, Kotlin, Python, JavaScript, SQL · Distributed Systems · Data Structures and Algorithms · Performance Optimization · System Programming · Spring Framework · Cloud Computing · AWS

SOFT SKILLS

Ownership · Communication · Teamwork · Leadership · Problem Solving · Adaptability · Agile

Certifications

[AWS Cloud Practitioner](#) · [MongoDB Associate Developer](#) · [GitHub Foundations](#)