## LORIS **GIRAUDO**

# Master's Degree in Computer Science | Software Developer

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I obtained a Master's Degree in Computer Science from the University of Turin, specializing in "Artificial Intelligence and Information Systems." The main courses attended include: Machine Learning, Deep Learning, Natural Language Processing Technologies, Bioinformatics, and Advanced Software Technologies and Architectures. Through work experiences and personal projects, I have gained practical skills in software development using various programming languages and frameworks.



### **EDUCATION**

Master's Degree in Computer Science, University of Turin, Department of Computer Science, spe-2022/23 cialization in "Artificial Intelligence and Information Systems". Final Grade: 110 cum laude (April 14,

2020/21 Bachelor's Degree in Computer Science, University of Turin, Department of Computer Science. Final Grade: 110/110.

2017 High School Diploma, Istituto Tecnico Superiore G. Vallauri, Fossano (IT), Technological Sector with specialization in "Computer Science and Telecommunications". Final Grade: 79/100.



### Work Experience

## June 2025 January 2024

#### CTO and Co-Founder, LUMEN LABS - TALKKIT, TURIN IT

> Co-founder and CTO of an innovative startup in the Ed-Tech sector. Our product, Talkkit, is a language learning app that enables natural conversations with an intelligent virtual avatar. The app was developed using Flutter and distributed on both iOS and Android, integrating a Unity module to handle the 3D avatar, including animated models and lip-syncing.

As CTO, I was responsible for all phases of the product life cycle: from ideation and initial research to design, development, testing, and deployment in Azure cloud environments. The backend was built using FastAPI (Python).

As Co-Founder, beyond technical responsibilities, I was also involved in cross-functional startup operations, covering areas like marketing, communication with potential investors, and defining the business development strategy.

Flutter FastAPI Unity Azure

### Present April 2023

#### Full Stack Developer, DoInn SRL, Mondovì IT

- > Involved in all stages of the software development lifecycle for custom web-based solutions for clients such as **Banco Azzaglio SpA**. I handle requirements gathering, analysis, design, development, testing, and deployment—both independently and as a *Team Leader*.

  Contributed to several key projects:
  - 1. **Corporate Welfare Platform**, developed as an ecosystem composed of **four distinct interfaces** for various stakeholders: *Employees*, *Companies*, *Merchants*, and *Admins*. The system includes:
    - > A **Next.js** interface for the *Admin panel*, managing approvals, monitoring, census, public grants, and reporting.
    - > A **Next.js** interface for *Companies*, allowing onboarding of employees, welfare fund management, and expense tracking.
    - > A **React Native** app for *Employees* to view available credit, request and use vouchers, and browse grants and benefits.
    - > A **React Native** app for *Merchants* to manage voucher redemption and view transaction history.

The system is powered by a centralized **Laravel** backend exposing REST APIs and managing authentication, authorization, business logic, and integration with external services for voucher issuance and public grants.

- 2. **Sound Therapy Platform**, developed to support personalized therapeutic programs, enabling healthcare professionals to assess well-being using an electromagnetic device. The platform is **multi-tenant** and features:
  - > End Users with access to an e-commerce portal for purchasing products and services.
  - > Doctors managing patients and conducting assessment programs.
  - > Admins with a custom CMS for creating evaluation programs and managing configurations. Stack: React, Laravel, FastAPI.
- 3. **RAG Chatbot** (Retrieval-Augmented Generation), integrated with an internal document archive in a banking intranet. It allows retrieval and contextual consultation of PDF content using GPT models and a vector engine powered by **QDrant**. *Stack: Sencha Ext JS, FastAPI, QDrant*.
- 4. Securitization Management System for internal use within a banking institution. It enables the complete management of securitization operations with focus on data versioning, data validation, and official report generation for communication with other financial institutions and authorities. Stack: Sencha Ext JS, Laravel.
- 5. **Hardware Rental Platform**, a **multi-tenant** system for companies renting tech equipment. Each company has its own dashboard to manage clients, configure products, set prices, and generate rental orders. *Stack: React, Laravel*.

NextJS Sencha Ext JS Laravel React FastAPI QDrant

### January 2023 September 2022

#### Thesis Internship - Data Scientist, ALTEN ITALIA S.P.A., TURIN IT

- > Studied and analyzed time series data for anomaly detection.
- > Applied machine learning methods for detecting irregular patterns.

Machine Learning Deep Learning Anomaly Detection Time Series

## September 2022 December 2019

#### Full Stack Developer, Squang Informatica SRL, San Rocco IT

- > Developed web-based management software according to client specifications using **JavaScript** (Vue.js) for frontend and **Python** (Django) for backend. Involved in all phases of the process—from data gathering to server deployment.
  - These systems typically focused on customer management, appointments, sales orders, quotes, rentals, interventions, or maintenance operations.
- > Managed web hosting, domains, and VPS through services such as Aruba, Register, and Netsons.
- > Developed small web applications in PHP.
- > Built websites using WordPress.

Vue Django WordPress XAMPP



Languages TypeScript, JavaScript, Python, Java, Kotlin, Dart, PHP, C#.

Frameworks Flutter, Spring, Django, Vue, NextJS, React, FastAPI, Laravel, Sencha Ext JS, Unity.

**Mobile Development** Native (Java/Kotlin & XML/Compose) and Cross-platform (Flutter).

**Databases** MySQL, PostgreSQL, SQL Server, QDrant.

**Development Tools** JetBrains IDEs, Code Editors, GIT, Jira, Docker, Heroku, CI.

Modeling UML, ORM, BPMN.

Al Data Analysis & Machine Learning Models, RAG, LLMs.

# A LANGUAGE SKILLS

Italian Native speaker.

English Good listening, writing, and reading skills. Fair speaking ability.

# SKILLS

Organizational Skills Ability to work under stress, especially in situations involving public interaction and deadlines related to work activities.

Interpersonal Skills Proficiency in team management and achievement of individual goals:

> Willingness to explore and embrace new opportunities.

> Strong communication and interpersonal abilities.

> Ability to manage commitments independently with punctuality and precision.

**Entrepreneurial Skills** Direct experience in founding and managing a tech startup:

> Habit of making guick decisions in uncertain and fast-changing contexts.

> Problem-solving attitude and continuous experimentation, even with limited resources.

> Experience in defining and validating a product, from design to development and release.

> Cross-functional management of non-technical activities: stakeholder communication, planning, fundraising, marketing, and administration.

# Personal Projects

#### **Unsupervised Anomaly Detection for a Manufacturing Industry**

2023

Research thesis for the Master's degree. The study focused on unsupervised anomaly detection in time series data from a manufacturing industry.

github.com/lorisgir/TESI-MAGISTRALE

Machine Learning Deep Learning Time Series Model Selection Anomaly Detection

BOOKSRIVER 2022

Booksriver is a mobile application. It offers a wide library of books that users can browse, track their reading progress, write reviews, and follow other users. The app was developed in three versions: native Android using Java and XML, native Android using Kotlin and Compose, and cross-platform using Flutter.

The backend was designed using the Spring Boot framework following a microservices architecture, including communication and coordination services such as RabbitMQ, EUREKA, and Gateway. Deployment was handled via Docker Compose and GitLab CI pipelines.

github.com/lorisgir/Booksriver

Spring Java Kotlin Dart Flutter Compose Docker Microservices