

# Andrea Giovanni Perozziello

## Academic Qualifications

EPFL École Polytechnique Fédérale de Lausanne — *Master in Computer Science* Sept. 2021 - Jul. 2024

USI Università della Svizzera Italiana — *Bachelor in Informatics Science* Sept. 2015 - Jan. 2020

## Work Experience

eProd Nairobi, Kenya — *Intern* Aug. 2023 - Feb. 2024

- Led a transformative agri-tech integration project, pioneering data-driven farming advice through strategic partnerships. Designed and optimized data ingestion pipelines for farm advisory systems, enhancing database functionality and data retrieval efficiency. Integrated external data sources to improve predictive insights for sustainable farming practices (Python, MySQL, Delphi).

EPFL Lausanne, Switzerland — *Object Oriented Programming Teaching Assistant* Feb. 2023 - Jul. 2023

- Teaching OOP basics during exercise sessions. Individually coordinating and evaluating seven C++ final projects of fourteen students (C++).

T&O Italia Milan, Italy — *Junior Software Developer* Sept. 2019 - Jan. 2022

- Served as an iOS developer for CRM and order entry systems. Improved the performance and architecture of a computer vision project involving offline image recognition and data processing optimization. Designed an automated data processing pipeline for sales representatives, leading to a patented software solution. (Objective-C, Swift, MySQL).

## Projects

Master Thesis Project : MyFoodRepo – Enhancing Personalized Nutrition with LLM Integration

*Digital Epidemiology Lab* *Advisor: Prof. Marcel Salathé*

- Integrated a Large Language Model (LLM) into MyFoodRepo, a personalized nutrition app, by designing a scalable backend pipeline for dietary data processing. Developed and deployed AI-driven feedback models to improve dietary tracking accuracy and enhance user engagement. Implemented a REST API for structured data retrieval and storage (Python, SQLite, Flask).

Master Semester Project : EcoLens – Raising awareness around food habits

*Data Science Lab* *Advisor: Prof. Robert West*

- Developed a data-driven mobile app that analyzes and ranks the environmental impact of campus food choices. Designed a structured MySQL database to manage menu data and ecological impact scores efficiently. Implemented an automated data collection pipeline to track and reward sustainable eating habits (Swift, Java, MySQL).

Bachelor Thesis Project : Visualising and Monitoring Ecosystems in a Mobile App

*Software Institute* *Advisor: Prof. Gabriele Bavota*

- Monitoring softwares' quality and specific information at the same time, at any time, by querying software informations (from GitHub), and quality metrics (computed on tools developed in the context of Object-Oriented systems) (Swift, Java, MySQL).

## Languages

**Italian:** Mother tongue — **English:** Advanced — **Spanish:** Advanced — **French:** Intermediate

## Computer skills

### Programming Languages

*Expert* Swift, Java, Python, C++

*Confident* Go, C, Objective-C, Javascript

*Familiar* Ruby, Haskell, Delphi

### Other Skills

Shell

GIT, SVN, Docker

MATLAB

MySQL, SQLite, MongoDB, GraphDB

### Frameworks

*Backend & API Development:*

Flask, FastAPI, GraphQL, SQLAlchemy

*Data Engineering & AI:*

Pandas, NumPy, OpenAI, OpenCV

*Automation & Quality Assurance:*

Pytest, Twilio, JUnit

*UI & Frontend Development:*

SwiftUI, Cocoa, Native