# POL FUENTES CAMACHO

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## **EDUCATION**

ETH Zurich & EPFL

Zurich/Lausanne, Switzerland

Joint Graduate program in CS and Cybersecurity; Master's degree

September 2024 - (Expected) June 2026

· Coursework: Decentralized Systems Engineering, Information Security & Privacy, Applied Data Analysis, Engineering Ethics

**EPFL** 

Lausanne, Switzerland

Computer Science Bachelor's degree; GPA: 4.0

September 2021 - June 2024

• Coursework: Analysis, Object Oriented Programming, Machine Learning & AI, Algorithms, Functional Programming, NLP, OS, Databases, Probability and Statistics, Processor Architecture, Stochastic Models for Communications, Linux(Unix) File System

## Lycée Français de Barcelone

Barcelona, Spain

French Baccaleaureate and Spanish Baccaleaureate; Highest Honors

September 2017 - June 2021

#### **EXPERIENCE**

Finplify

Geneva, Switzerland

Cloud and Data Engineer

June 2024 – September 2024

- Led the engineering of a robust serverless API by integrating AWS and Google Cloud Functions, balancing scalability, performance, and cost optimization
- Parallelization of core functionalities leading to a 10x speed increase
- · Built custom LLM agents leveraging technologies like Autogen to assist users in making financial decisions with tailored data
- Led the team in dataset creation, leveraging insights from literature on fine-tuning and prompt engineering increasing accuracy

MIT J-Clinic

Cambridge, MA, US

Data Science Research Intern

*July* 2023 – *September* 2023

- Conducted comprehensive data mining on vast datasets related to occupational health, revealing intricate patterns and correlations which are often overlooked
- Experimented with multiple configurations within the k-modes algorithm to ensure robustness and accuracy of clustering results

**EPFL Spacecraft Team** 

Lausanne, Switzerland

Telecommunications & Ground Segment Team

September 2022 – September 2023

- Assembled antenna systems for reliable satellite communication, ensuring robust ground-segment infrastructure
- Proposed and implemented a remote computing system enabling real-time data processing and transmission via secure SSH access, replacing a manual hard drive-based retrieval method. Improved operational efficiency, reducing delays in satellite tracking and control

#### **PROJECTS**

## TravelPros - Award Winning Project at HackUPC

May 2024

- Winners of the TravelPerk challenge at HackUPC in Barcelona, the biggest student Hackathon in Europe
- Led Open Source app development in Python and Django with HTML, connecting individuals by flight schedules and interests, with a robust backend using pandas

## **Deforest Detectives - Finalist Project at TUM.ai Makeathon**

April 2024

• Developed "OnlyForests", an AI-powered platform leveraging Computer Vision to analyze satellite imagery and identify deforested regions, contributing to global environmental monitoring efforts

## TripTracker - Full-stack Android development Project

Spring 2024

- Led the development of the mobile app's home and map screens, working on both the front-end and back-end using Kotlin and Jetpack Compose within the Model-View-ViewModel (MVVM) architecture
- Collaborated in a Scrum team, contributing to the continuous development of mobile app features

#### Javelo - Java Biking Map

Spring 2022

- Developed an interactive map application to calculate the fastest biking routes in Switzerland
- Implemented efficient algorithms such as A\* to compute optimal paths, improving user experience for cyclists

## **SKILLS**

- Programming: Python, Go/Golang, Scala, Kotlin, Java, C/C++, SQL, Docker, AWS, Pandas, TensorFlow, Javascript, VHDL
- Languages: English, French, Spanish, Catalan, German (basic)
- · Activities: Cycling, Guitar, Saxophone, Hiking, Sailing, Photography