Luigi Emanuele Zippo

iOS Developer

Mathematics Master's student and participant in the Pier Program @ Apple Developer Academy with two years experience developing apps for Apple platforms. Passionate about Data Science and Machine Learning as tools to build solutions that serve real-world needs.

Education

Pier Program @ Apple Developer Academy

JULY 2024 - JUNE 2025

- Developed a suite of **iPadOS** and **MacOS** app using **SwiftUI** and **MVVM** architecture for the NGO "**iSchoolAfrica".** Implemented local data persistence with **SwiftData** and ensured **synchronization** with the remote database, even under poor network conditions
- Built a centralized **FileMaker database**
- Built a shared Swift package to manage **REST FileMaker OData API** integration and error handling, leveraging **Swift Package Manager** for modular code organization
- Developed a complementary web app using FileMaker **WebDirect**
- Maintained high-quality code using **GitHub** and **Xcode**, submitting regular **SwiftLint** compliant pull requests reviewed by tech leads.
- Authored technical documentation with **DocC**, as well as client-facing guides and product presentations
- Served as **Scrum Master**, facilitating daily stand-ups, sprint planning, retrospectives, and backlog refinement using **Jira** and **Confluence**
- Led communication with stakeholders and product managers, acting as a **key bridge between technical and non-technical roles**

Apple Developer Academy

SEPTEMBER 2023 - JUNE 2024

- Built a Machine Learning model sing **CreateML**. Used **CoreML** to include it in **Beep**, app published on the **App Store**
- Developed the ability to **independently learn** new technologies, using **Challenge Based Learning**
- Presented projects to diverse external audiences, tailoring communication to suit varying stakeholder needs

Bachelor Degree in Mathematics

UNIVERSITY OF NAPLES "FEDERICO II", SEPTEMBER 2020 - SEPTEMBER 2024

- Graduated with a **Bachelor's degree in Mathematics (score: 106/110)**
- Authored a thesis titled "Mathematical Foundations of Deep Learning: A Study on Neural Networks", **blending** theoretical **analysis** with **TensorFlow**-based experiments
- Manipulated data structures in **C/C++**
- Applied **Machine Learning** techniques and **Fourier analysis** to **complex biological datasets (HDF5)** using **Python**
- **Optimized** classic algorithms across multiple **MATLAB** projects, focusing on **performance**

Skills

Languages

- Swift
  SWIFTUI, SWIFTDATA, COREML, CREATEML
- C and C++
  DATA STRUCTURES, ALGORITHMS
- Python
  TENSORFLOW, PANDAS, SCIKITLEARN, SEABORN
- Matlab

App Development

- Design Patterns
  MVVM ACHITECTURE
- REST API integration
  FILEMAKER ODATA, JSON PARSING
- Version control
  GITHUB, BRANCHING
- Code quality assurance
  SWIFTLINT, PULL REQUESTS
- Modular architecture
  SWIFT PACKAGE MANAGER

Project Management

- Scrum
  DAILY STAND-UPS, SPRINT PLANNING, RETROSPECTIVES, BACKLOG REFINEMENT, JIRA AND CONFLUENCE

Data Science

- Deep Learning
  NEURAL NETWORKS, UNIVERSAL APPROXIMATION THEOREM
- Machine Learning
  DATA PREPROCESSING, SUPERVISED/ UNSUPERVISED, LEARNING, MODEL EVALUATION
- Fourier Analysis
  TIME SERIES