

## Education

### University of Salerno

Master's Degree in CyberSecurity

Expected March 2025

Salerno, Italy

- **Relevant Coursework:** Advanced Cryptography, Network Security, Penetration Testing, Secure Software Development, Digital Forensics.

### Apple Developer Academy - University of Napoli Federico II

Student

Expected June 2025

Naples, Italy

- Challenge Based Learning (CBL) academy that teaches Coding, Graphical User Interface Design (GUI), and Business

## Experience

### Charos s.r.l.

Co-founder & iOS Developer

May 2024 – Current

Naples, Italy

- Founded with a prize of €7500 won in SeiUnisa Pre-seed phase pitch competition
- Collaborating for the development of an iOS app, working on the frontend following Human Interface Guidelines (HIG).
- Developed a landing page using Tailwind CSS and managed a mailing list with over 700 subscribers.

## Projects

### Quantum Generative Adversarial Network (QGAN) in Anomaly Detection

Research Thesis on Quantum Computing

July – December 2024

Salerno, Italy

- Designed and implemented a Quantum Generative Adversarial Network (QGAN) using Qiskit for anomaly detection tasks.
- Trained a hybrid QGAN with a quantum generator and a classical discriminator, achieving 86% accuracy on simulated data.
- Utilized Qiskit's circuits and simulators noise models to replicate real-world quantum device conditions for robust model evaluation.
- Demonstrated the potential of quantum machine learning in classification of anomaly data in a network.

### BeHappy

iOS App - Built in team

November 2024

Naples, Italy

- Developed using SwiftUI, and designed to improve serotonin levels by encouraging users to smile daily, based on scientific research.
- Integrated CoreML models trained using CreateML to detect smiles through the device camera, used Swift Concurrency for managing it.
- Implemented real-time feedback and sounds using AVFoundation to ensure a smooth user experience.
- Collaborated effectively with the team using GitHub for version control and project management.

### Tier List Maker

iOS App

September 2023

Naples, Italy

- Designed and developed with Swift, SwiftUI, and SwiftData, enabling users to create and share personalized tier lists.
- Published on the App Store, achieving an average of 40 daily downloads and strong user engagement.
- Implemented RevenueCat API for including in app purchases.
- Sold the app in November 2024 for \$2,000 to another indie iOS developer, demonstrating its market value and business potential.

### Programming Pepper Robot for Hospital Assistance

Project for the university course of Data science and machine learning - Built in a team

March 2023

Salerno, Italy

- Used NaoQI API, connected with Alexa for intuitive voice-based interactions with hospital staff and patients.
- Implemented facial recognition for patient presence detection using Pepper's embedded cameras.
- Utilized Firebase NoSQL database to store and manage hospital room and patient information.
- Developed a mapping system to assist in navigating and identifying rooms requiring medical attention.

### Daily Weights

iOS App

November 2022

Naples, Italy

- Developed in Swift, it helps users track their body weight and BMI, visualize trends through dynamic charts, and analyze weekly progress.
- Leveraged CoreData for efficient local storage and retrieval of user weight entries.
- Implemented RevenueCat API for including in app purchases.
- Implemented advanced statistical calculations, including weekly averages and variance analysis, to provide actionable insights.
- Designed an intuitive user interface with SwiftUI to enhance user engagement and usability.

Awards

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SeiUnisa Pre-seed phase, Won a startup pitch competition prize of €7000, University of Salerno.	2022, 2023
SeiUnisa Seed phase, Won a startup validation competition prize of €15000, University of Salerno.	2023, 2024

Skills

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Programming languages and technologies: *Proficient:* Swift, Python, C, Java, Qiskit, Javascript, LaTeX *Familiar:* TensorFlow, PHP, HTML/CSS, SQL  
Languages: *Italian* Native, *English* B1      *Soft Skills:* Teamwork, Time management, Problem solving, Leadership, Decision Making