



# Francesco Penasa

SOLUTION ARCHITECT · SERVICE AND SOFTWARE ARCHITECTURES - CYBERSECURITY - BIOINFORMATICS

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🌐 Francesco Penasa | Bioinformatics - Cybersecurity - Clean Code - Agile development

*"Enjoy the little detours to the fullest."*

## Education

### UNITN (The University of Trento, DISI)

Trento, Italy

MASTER IN COMPUTER SCIENCE - SERVICE AND SOFTWARE ARCHITECTURES / BIOINFORMATICS: 104/110

Sep. 2019 - Dec. 2021

- Master's thesis: **Sedute Online**  
*Revision of a Voting System Application through Cross-platform mobile framework with a focus on Security and Performance.*
- Area Bioinformatics: Laboratory of Biological Data Mining, Algorithms for Bioinformatics and Bioinformatics Resources
- Area Software and Service Architectures: Formal methods, Security Testing, Autonomous software agents and Multimedia data security
- Area Data Science: Machine learning and Deep learning
- Laboratory of Computer Science Education

### UNITN (The University of Trento, DISI)

Trento, Italy

B.S. IN COMPUTER SCIENCE: 99/110

Sep. 2016 - Sep. 2019

- Bachelor's thesis: **BPMN redesign through planning**  
*Dynamic failure recovery, optimization and alternate path creation through a BPMN and PDDL integration.*

### ITCG Pilati (ITET C.A. Pilati Cles)

Cles, Italy

SECONDARY EDUCATION - SURVEYOR

2011 - 2014

- CAD 2D certificate. 90/100

## Skills

**DevOps** AWS Solution Architect, Azure OpenAI Service, Docker, Travis, Heroku, Swagger, Mobile App Deployment

**Back-end** Express, Django, REST API, LAMP, Web Service, Flask, MySQL

**Front-end** Flutter, React, Next.js, HTML5, JQuery, JavaFX

**Programming** Python, Node.js, Dart, PHP, C#, Java, NuXMV, C, C++, SML, R, MATLAB

**Misc.** Optical Fiber join, Raspberry Pi, Arduino, LaTeX, Git, AutoCAD, Telegram Bot

**Languages** Italian, English, German

## Experience

### Reply, Cluster Clash IT

Milan, MI 20152, Italy

CONSULTANT

May 2023 - PRESENT

- Generative AI: Prompt Engineering, development of Generative AI Solutions through Azure OpenAI API and SDK, Flask and React
- Development in Low Code Power Platform
- Backend: in Python (Flask) and .NET (EF Core, Dapperer, ASP.NET) with SQL db interaction
- Frontend: React and Redux

### Alpinformatica

Malè, TN 38020, Italy

SOFTWARE ENGINEER

Jan. 2022 - May. 2023

- Main Mobile Developer: build, management and deployment (iOS, Android and Huawei) of applications in Flutter
- ERP, CRM and REST API development: PHP in LAMP environment on AWS resources
- AWS Serverless development: telegram bot, GPS analysis and computation, authentication services in Python and NodeJS
- Research and optimization of company DevOps Pipeline
- Internal utility tool development and research: personalized db migration tool, pdf modifier and various utility tools in Python
- SPID and CIE integration to mobile applications; SPID and CIE company accreditation
- **Soft Skill developed:** Functional communication

### Alpinformatica

Malè, TN 38020, Italy

INTERNSHIP IN SOFTWARE DEVELOPMENT DEPARTMENT

Aug. 2021 - Dec. 2021

- Development of the thesis project, the voting system: Sedute Online
- SPID integration to mobile applications and SPID company accreditation

## Funivie Madonna di Campiglio

INTERNSHIP IN IT DEPARTMENT

- Web-app development, web-app testing, code refactoring, integration of BancaIntesa's API
- Optical fiber management, tech assistance, mobile Operative Systems compilation

## University of Trento

PART-TIME STUDENT WORK IN IT DEPARTMENT

- Internal tool development

## MMape

TECH SUPPORT

- Paypal API, Tech Support, Networking, Wordpress development and assistance

## MMape

MUSEUM GUIDE

- **Soft Skill developed:** public speaking, team-working and time-management

## Studio Tecnico Fantelli

SURVEYOR

- CAD 2D, CAD 3D and Google Sketchup for blueprints developments.

## Progetto Giovani - APPM

CIVIL SERVICE - EDUCATOR AND EVENTS ORGANIZER

- **Soft Skill developed:** problem-solving, communication and team-working.

Madonna di Campiglio, TN 38086,  
Italy

Jun. 2019 - Aug. 2019

Trento, Italy

2018

Croviana, TN 38027, Italy

Sep. 2016 - PRESENT

Croviana, TN 38027, Italy

Apr. 2016 - Sep. 2016

Dimaro, TN 38025, Italy

Apr. 2016 - Sep. 2016

Dimaro, TN 38025, Italy

Jun. 2015 - Jun. 2016

## Extracurricular Activity

### DailyQuest.it (Gaming - News and Insights)

EDITOR

- Editor for Insight articles and step-by-step guides

### Battlecraft.it (Gaming - News and Insights)

EDITOR

- Editor for Insight articles and step-by-step guides

### CoderDojo Trento (community-based computer programming clubs for young people)

VOLUNTEER

- Computer Science Education for children

### Progetto Giovani - APPM (Music and boardgames laboratories)

VOLUNTEER

- Education and Social cohesion for teenagers

Italy

Nov. 2018 - PRESENT

Italy

June 2015 - Nov 2018

Trento, Italy

Oct. 2017 - PRESENT

Dimaro, Italy

Dec. 2013 - 2015

## Certifications and Challenges

Sep. 2023 **Develop Generative AI Solutions with Azure OpenAI Service MOC AI-050**, Pipeline

Aug. 2023 **Azure AI-050T00**, Workshop at Microsoft Italia

Jul. 2023 **Azure PL-900: Microsoft Power Platform Fundamentals**,

2022 **AWS Certificate**, Certified Cloud Practitioner

2022 **AWS Certificate**, Solution Architect

2021 **Google Hashcode 2021**, 2933rd

Milan, Italy

Online

## Referenze

### Maurizio Varese

BUSINESS UNIT MANAGER

- m.varese@reply.it

Reply Srl

2023 - Present

### Giovanni Sonna

CEO

- g.sonna@alpinformatica.com

Alpinformatica di Giovanni Sonna -  
Malè

2021-2023

**Michele Bezzi**

COORDINATOR

- pgvsole@appm.it

*APPM*

2015

**ing. Nicola Mosca**

SYSTEM ADMINISTRATOR

- nicola.mosca@funiviecampiglio.it

*Funivie Madonna di Campiglio*

2019

**Anna Benedetti**

GENERAL MANAGER

- annabenedetti88@gmail.com

*MMape*

2016 - Present