Giuseppe Mattia Greco

Date of birth: 24/04/1999 | **Place of birth:** Polistena (RC), Italy | **Nationality:** Italian | **Gender:** Male | **Phone number:** (+39) 3421235170 (Mobile) | **Email address:** giumatt99@gmail.com | **Email address:** greco.giuseppemattia@proton.me | **Email address:** giuseppemattia.greco@pec.it | **Website:** https://giumatt.github.io | **LinkedIn:** www.linkedin.com/in/giuseppe-mattia-greco-099a921b1 |

Address: Via Montessori, 26 , Interno 3, 89010, Terranova Sappo Minulio, Italy (Home)

EDUCATION AND TRAINING

09/2024 – CURRENT Arcavacata di Rende (CS), Italy

MASTER'S DEGREE IN COMPUTER ENGINEERING University of Calabria

Address Via Pietro Bucci, snc, 87036, Arcavacata di Rende (CS), Italy | **Website** https://www.unical.it/storage/cds/47759/ |

Field of study Cybersecurity

10/2017 – 07/2024 Arcavacata di Rende (CS), Italy

BACHELOR'S DEGREE IN COMPUTER ENGINEERING University of Calabria

- Good command of **Python** language;
- Good command of **object-oriented programming in Java language**;
- Fair knowledge, at a functional and non-functional level, of the **most common operating systems** (Microsoft Windows, Linux, MacOS);
- Good command of the **C/C++** language;
- Good command of **bash** programming;
- Good knowledge of network management and technologies and of programming simple network applications in Java;
- Good command of **relational DBMS (RDBMS)** management and consequent knowledge of the SQL language;
- Good command of **HTML/CSS** languages and various frameworks;
- Basic knowledge of **XML** language;
- Basic knowledge of **VHDL** language and basic principles of automation;
- Good knowledge of **software engineering principles**;
- Mathematical Calculus I and II, Operational Research and algorithm optimisation.

Address Via Pietro Bucci, snc, 87036, Arcavacata di Rende (CS), Italy |

Website https://www.unical.it/storage/cds/47758/https://www.unical.it/ | **Field of study** Computer Engineering |

Thesis Applicazione di tecniche di Machine Learning per la diagnosi di malattie cardiache da dati raccolti da dispositivi indossabili

10/09/2012 – 08/06/2017 Polistena (RC), Italy

IT EXPERT Istituto Tecnico Industriale Statale "M.M. Milano"

General subjects
- English;
- Mathematics;
- Physical Education;
- Chemistry, Physics;
- Law and Economics.

Vocational subjects
- Information Technology;
- Systems and Networks;
- Information Technology and Telecommunications Systems Design and Technology;
- Telecommunications.

Address Via dello Sport 25, 89024, Polistena (RC), Italy | **Website** https://www.itispolistena.edu.it/ | **Field of study** Informatica

LANGUAGE SKILLS

Mother tongue(s): **ITALIAN**

Other language(s):

	UNDERSTANDING		SPEAKING		WRITING
	Listening	Reading	Spoken production	Spoken interaction	
INGLESE	B1	B1	B1	B1	B1

Levels: A1 and A2: Basic user; B1 and B2: Independent user; C1 and C2: Proficient user

SKILLS

Good command of Microsoft Office products | C/C++ Programming | Java Programming | Python Programming | HTML/CSS | Perfect command of Windows/MacOS/Linux-based operating systems | Perfect command of Android/iOS mobile operating systems | Good command of Adobe products | Photo and video editing | Hardware and software problem solving | General problem solving skills

PROJECTS

05/2024 – 07/2024

Bachelor's Degree Thesis - Detection of heart rate anomalies using the Matrix Profile algorithm

Three-year thesis project focused on the development of an intelligent system in Python for the automatic detection of anomalies in heart rate data. The work implements the Matrix Profile algorithm applied to the analysis of biomedical time series, with the aim of identifying irregular patterns in heartbeats through advanced data science techniques.

Technical skills:

- Machine Learning & Data Science: Implementation of the Matrix Profile algorithm for pattern analysis in time series;
- Data Preprocessing: Normalisation and cleaning of raw biomedical data;
- Data Visualisation: Creation of graphs and visualisations for the interpretation of detected anomalies;
- Python: Use of scientific libraries (NumPy, Pandas, Matplotlib) for quantitative analysis;
- Healthcare Analytics: Application of data science techniques to the medical/healthcare sector.

Technologies used:
Python, Matrix Profile Algorithm, Time Series Analysis, Data Visualisation, Scientific Computing

Link https://github.com/giumatt/Heartrate-Anomaly-Detection-Matrix-Profiling

11/2024 – 01/2025

Simulated Annealing for Protein Folding Prediction

Developed an advanced system for predicting protein tertiary structures using the Simulated Annealing algorithm. The project focuses on optimising computational performance through implementation in C, with critical sections optimised in Assembly and parallelisation via OpenMP to maximise computational efficiency.

Key features:

- **Simulated Annealing algorithm:** Implementation of the meta-heuristic algorithm to explore the conformational space of proteins;
- **Low-Level optimizations:** Critical sections of code rewritten in Assembly to maximize performance;
- **Parallelization:** Use of OpenMP to exploit multi-core architectures and reduce computation times;
- **High-Performance Computing:** Focus on computational efficiency and resource optimization.

Technical skills:

- **C Programming:** Development of the application core (85.4% of the project);
- **Assembly:** Optimization of computationally intensive low-level routines;
- **Parallel Computing:** Implementation of parallel algorithms with OpenMP;
- **Performance Optimization:** Code profiling and optimisation to improve efficiency;
- **Team Collaboration:** Collaborative development and teamwork coordination.

Technologies used:
C, Assembly (x86/x64), OpenMP, Shell Scripting, Simulated Annealing Algorithm, High-Performance Computing

Link https://github.com/giumatt/Simulated-Annealing-for-Protein-Folding-Prediction

12/2024 – 06/2025

Sentiment Analysis for a Smart Museum

Developed an innovative sentiment analysis system for smart museums that detects and displays visitors' emotional responses to works of art. The project integrates Artificial Intelligence and Natural Language Processing (NLP) techniques to create an interactive, data-driven museum experience, providing valuable insights into audience preferences and reactions.

Key features:

- **Emotion Detection:** Automatic analysis of visitor sentiment through textual feedback and interactions;
- **Data Visualization:** Interactive dashboards to represent aggregated emotional responses per artwork;
- **Multi-language Architecture:** Modular system combining Java (backend), Python (AI/ML) and C++ (performance-critical components);
- **Smart Museum Integration:** Solution designed for integration into digital museum ecosystems;
- **Team Collaboration:** Collaborative development and coordination of teamwork.

Technologies used:
Java, Python, C++, Natural Language Processing, Sentiment Analysis, Machine Learning, Data Visualisation, AI

Link https://github.com/giumatt/Sentiment-Analysis-for-a-Smart-Museum

05/2025 – 06/2025

Winalyze

Developed an end-to-end Machine Learning Operations (MLOps) system for predicting wine quality. The project implements a complete pipeline that manages the entire ML model lifecycle, from data upload to production inference, with a modern user interface developed in Vue.js to facilitate interaction with the system.

Key features:

- **Data Upload & Management:** System for uploading and managing wine datasets;
- **Model Training:** Automated pipeline for training machine learning models;
- **Model Validation:** Validation framework to ensure model quality and accuracy;
- **Inference Engine:** Real-time prediction system to evaluate wine quality;
- **Modern Frontend:** Interactive user interface developed in Vue.js for a user-friendly experience;
- **Full-Stack MLOps:** Comprehensive architecture that integrates frontend and backend ML.

Technologies used:
Vue.js, Python, TypeScript, CSS, HTML, Machine Learning, MLOps, RESTful APIs, Data Pipeline, Model Deployment, Microsoft Azure

Link https://github.com/giumatt/Winalyze

DRIVING LICENCE

Driving Licence: AM

Driving Licence: B

CERTIFICATIONS

10/06/2016 – CURRENT

Trinity GESE Grade 5 English Language Certification

English language certificate at *level B1* and *GESE* (Graded Examination in Spoken English) issued by **Trinity College London**.

13/12/2016 – CURRENT

Base ECDL Certification

European Computer Driving License certification issued by **AICA** (Italian Association for Information Technology and Automatic Calculation).

01/02/2017 – CURRENT

Standard ECDL Certification

European Computer Driving Licence certification issued by **AICA** (Italian Association for Information Technology and Automatic Calculation).

01/02/2017 – 01/02/2020

ECDL Full Standard Certification

European Computer Driving License certification issued by b (Italian Association for Information Technology and Automatic Calculation) and accredited by **Accredia** (Italian accreditation body).

01/02/2017 – CURRENT

ECDL IT Security Certification

European Computer Driving Licence certification issued by **AICA** (Italian Association for Information Technology and Automatic Calculation) in the field of IT security.

19/04/2016 – CURRENT

CISCO IT Essentials Certification

COMMUNICATION AND INTERPERSONAL SKILLS

Communication and interpersonal skills

Good command of written and verbal communication, listening and understanding the needs of others.
I have a good aptitude for listening and interpersonal communication, which are useful for understanding the needs of others, as well as excellent writing skills. My communication and interpersonal skills were developed both at university and outside of it: my experience playing rugby allowed me to improve my ability to work within a team, collaborate towards a common goal, and respect roles and responsibilities.

ORGANIZATIONAL SKILLS

Organizational skills

Good problem-solving skills and ability to work well in a team or as part of a staff.

TRAINING EXPERIENCE

07/2025

UNIMED StartCUP 2025

Active participation in the preparatory training programme 'StartCUP Competition 2025' held at the University of Calabria on 8 July 2025, promoted by UNIMED, ETF, AUF and HOMERe, with the participation of international experts in the field of innovation and entrepreneurship.

I strengthened the following skills:

- In-depth study of key entrepreneurial skills through practical exercises and interaction with industry experts, including the European Training Foundation and the Lebanese University;
- Activities focusing on innovative technologies and artificial intelligence applied to entrepreneurship, with the participation of IT experts from the international network and skill experts;
- Collaboration and networking in a multicultural environment, preparation for the StartCUP 2025 competition and discussion with a community of educators and innovation professionals.

This experience strengthened cross-cutting skills such as problem solving, teamwork and understanding of startup dynamics in an international context.

I authorize the processing of my personal data contained in my CV pursuant to Article 13 of Legislative Decree No. 196 of 30 June 2003 - 'Personal Data Protection Code' and Article 13 of GDPR 679/16 - 'European Regulation on the protection of personal data'.

Rende (CS) , 30/10/2025