Tahir AGALLIU
MSc Computer Science Student | Software Engineer

 Angera 21021 (VA), Italy   +39 346 620 6432   aga01tahir@icloud.com

 Tahir Agalliu   iTahirz   Portfolio

EDUCATION

University of Milan   Milan, Italy
MSc in Computer Science (LM-18)   **September 2025 – Present**
- **Major Focus:** Advanced Software Engineering, Cloud Computing, Intelligent Systems.

University of Insubria   Varese, Italy
BSc in Computer Science   **September 2022 – July 2025**
- **Grade:** 102/110.
- **Thesis:** *"Secure IoT Microservices Architecture"* (Hybrid Cryptography AES + ECC).
- **Key Achievement:** Designed a secure architecture with custom Certificate Authority for IoT.

EXPERIENCE

AVIS Arona   Arona, Italy
Healthcare Data Specialist & Volunteer   **December 2025 – Present**
- Orchestrating critical data flow between biomedical devices and National Health (ASL) systems.
- Ensuring integrity, privacy, and security of sensitive blood donation records.
- **Active blood donor**, combining technical responsibilities with deep civic commitment.

University of Insubria   Varese, Italy
University Tutor & Data Manager   **June 2025 – July 2025**
- Managed relational databases to support student orientation and optimize workflows.
- Provided technical mentoring to incoming students, facilitating academic integration.

Dinger Stone   Endingen, Germany
Precision CNC Operator   **June 2021 – September 2021**
- Operated high-precision CNC machinery in an international, German-speaking environment.
- Ensured rigorous manufacturing standards demonstrating adaptability in a foreign workplace.

French Foreign Legion   France
Legionnaire   **October 2020 – January 2021**
- Developed elite discipline, rapid problem-solving, and teamwork in high-stress environments.
- Demonstrated exceptional resilience and adaptability under extreme pressure.

OMSC   Angera, Italy
CNC Operator & Programmer   **December 2019 – September 2020**
- Optimized G-Code programming for CNC machinery to enhance production efficiency.
- Developed precision technical skills and understanding of complex manufacturing workflows.

SELECTED PROJECTS

ECG Signal Decomposition   AI / Bio-Engineering
Tech: TensorFlow, U-Net   **Academic Project**
- **Leveraged Deep Learning** to enhance signal processing implementing a 1D U-Net architecture.
- Effectively **resolved spectral overlap** in ECG waveforms, improving diagnostic clarity.

LLM Cultural Alignment   NLP / Research
Tech: PyTorch, Transformers   **Academic Project**
- **Conducted advanced research** on tokenization failures in Low-Resource languages (Yoruba).
- Performed **Shannon Entropy analysis** on Qwen/Phi models to improve interpretability.

Scientific Data Visualization   Scientific Computing
Tech: VTK, Python   **Academic Project**
- **Engineered rendering pipelines** for high-dimensional scientific data using VTK.
- Implemented algorithms like **Isosurface extraction and Volume Rendering** for data analysis.

LANGUAGES

Italian: Native   •   **Albanian:** Native   •   **English:** Proficient (B2)   •   **French:** Elementary (A2)

TECHNICAL SKILLS

- **Coding:** Python (AI/Data), Java, Kotlin, SQL, NoSQL.
- **DevOps & Cloud:** Microservices, Docker, Git.
- **Databases:** PostgreSQL, MongoDB.
- **AI & ML:** TensorFlow, PyTorch, Transformers.
- **Sci. Computing:** VTK, Data Analysis libs.
- **Web & Mobile:** Node.js, Android SDK, Firebase.