Michele Vincenzo Gentile

🛿 (+39) 389 91 900 63 📔 💌 michele.gentile2604@gmail.com 📔 🖸 mivige 📔 🖬 mivige

Education

Sapienza Università di Roma

BACHELOR'S DEGREE IN COMPUTER SCIENCE

• Cumulative GPA 3.87/4.0

- Teaching Area Council Student Representative, Faculty Student Representative, Monitoring Commission Student Representative
- Coursework: Python, Digital Systems Design, Computer Architecture, Algorithms, Java, Databases I and II, Computer Networks

Work Experience

Sapienza Fast Charge Racing Team

Software Engineer

- Developed firmware for autonomous vehicle control using model-based design techniques with Simulink and Speedgoat, achieving zero communication errors and reducing latency by 75%, from 2 to under 0.5 seconds.
- Implemented real-time communication solutions for autonomous vehicles, managing 200Hz data flow between processing platforms, sensors, and actuators to enhance responsiveness and safety.
- Designed and integrated HMIs for Formula SAE vehicles, using Arduino and Nextion, reducing dashboard interaction time by 40%.

Italian Ministry of Justice

IT SUPPORT

- Managed data for 491 social inclusion projects, enhancing resource allocation and strategic planning by 70%.
- Developed a nationwide questionnaire for home detainees, streamlining the Inclusion Allowance request process and improving application speed by 84%.
- Helped establish a telematic Help Desk for a critical system, reducing technical support requests by 40%.

Projects

PlantinoCare

PYTHON, PHP, JAVASCRIPT, SQL, C++, HTML

- Created a data collection system using a micro-controller and four sensors to monitor plant and environmental conditions, processing and displaying data via a web application accessible from both smartphones and computers.
- Optimized plant conditions and reduced water consumption by up to 30% through actionable insights provided by the application.
- Showcased the project at the 2023 Rome Maker Faire, selected from top European applicants, highlighting innovation and impact.

File Integrity Monitor

PowerShell

• Accurately detected 100% of changes in a monitored folder, including modifications, deletions, and additions, using SHA256 hashing to ensure comprehensive file integrity and security.

Folder Organizer

Рутном

- Engineered a Python-based GUI tool that reduced file sorting time by approximately 99.8% (compared to a person manually organizing a folder with 500 elements) through automation based on file type, date, or size.
- Designed and integrated features for customizable folder naming and organization criteria, achieving an 80% reduction in user setup time compared to other programs and enhancing overall organization precision.

Extracurricular Activity

- 2024 **Erasmus+**, Universitat de les Illes Balears
- 2023 **Exhibitor**, Maker Faire Rome European Edition
- 2022 243th Place, Italian IT Olympics
- 2022 1st Place, Regional IT Olympics

Skills_

TechnologiesC++, Python, Java, SQL, PHP, HTML, CSS, JavaScript, Next.js, Simulink, PowerShellLanguagesItalian (Native), English (C1), Spanish (A2), French (A2), Catalan (A1)CertificationsCCNA 1, Linux Essentials, CyberSecurity Essentials (Cisco); Relational Databases (Stanford); Data Science Foundations (Google)

Dec. 2023 - Present

Dec. 2023 - Sep. 2024

Cisterna di Latina

Sep. 2023 - Oct. 2026 ative
