Giulia Arwen Sabina Scuderi

CONTACTS

 Turin, Italy

 +39 347 041 7203

 giulia.scuderi.contacts@gmail.com

PROFESSIONAL PROFILE

Motivated and detail-oriented undergraduate in Computer Engineering with a strong foundation in programming and hands-on experience in firmware and software developing. Passionate about leveraging technology to solve real-world problems and eager to contribute to innovative projects. Proven ability to work both independently and collaboratively, with excellent analytical and problem-solving skills. Currently seeking opportunities to apply technical knowledge and gain industry experience.

HARD SKILLS

Programming languages
- C/C++
- Python
- MATLAB
- Javascript
- HTML/CSS
- MIPS Assembly
- SQL (DBMS)

Operating systems
- Windows
- Linux

Office package
- Microsoft word
- Microsoft Excel
- Microsoft Powerpoint

WORK AND PROFESSIONAL EXPERIENCE

PoliTOcean   2023 – PRESENT
Firmware and Software Developer

- Collaborated within a multidisciplinary team of engineers to design and develop a Remotely Operated Vehicle (**ROV**) for international competitions.

- Programmed and integrated an Inertial Measurement Unit (**IMU**) sensor (gyroscope and accelerometer) in **C/C++**, enabling precise underwater stabilization of the vehicle.

- Partnered with mechatronic engineers to implement a robust control system on a Raspberry Pi 4, derived from a Simulink model in **MATLAB**, ensuring reliable system performance.

- Enhanced the vehicle's Graphic User Interface (**GUI**) by introducing new features to optimize user experience and streamline monitoring via multiple camera streams. Developed skills in **HTML** and **CSS** (frontend) and **JavaScript** and **Python** (backend).

- Served as Chief Safety Officer (**CSO**) and firmware representative during the MATE ROV **World Championship** in the United States.

- Designed a competition **strategy**, achieving record-breaking performance and setting a new benchmark for the past seven years.

- Represented the organization at **scientific conventions**, fostering connections with industry partners, promoting its mission, and gaining insights to drive innovation.

EDUCATION

Bachelor degree in Computer Engineering   2022 – PRESENT
Politecnico di Torino

- Joined the Firmware & Software division of the **PoliTOcean** student team, contributing to innovative projects in **underwater robotics**.

- Selected for the prestigious **Samsung Innovation Campus**, completing an intensive program focused on **Machine Learning**, **IoT** and **Cybersecurity**. The program included hands-on learning, a collaborative group project, and culminated in a final pitch presentation at Samsung's headquarters in Milan.

Scientific diploma   2017 – 2022
Liceo A. Avogadro Biella
Score: 100/100

LANGUAGES

- **Italian** (C2 Native language)
- **English** (C2 Cambridge CPE)
- **French** (Intermediate proficiency)