IVAN BRILLO

✉ brilloivan2@gmail.com | 📞 (+39) 3807411924
github.com/ivanbrillo | linkedin.com/in/ivan-brillo

Education

University of Pisa — Sep. 2024 – Current
MSc in Artificial Intelligence and Data Engineering, Pisa, Italy

- Current GPA: 30/30

Sant'Anna School of Advanced Studies — Sep. 2024 – Current
Master of Advanced Studies: Robotics, Pisa, Italy

- Awarded 2-Year Merit Full Scholarship (top 2% of applicants).
- Current GPA: 30/30

Budapest University of Technology and Economics — Dec. 2024
Seasonal School: Challenge-based human-inspired computer vision, Budapest, Hungary

University of Padua — Oct. 2021 – Jul. 2024
BSc in Computer Engineering, Padua, Italy

- DECAMP Course in Applied Web Application Security (Metropolia UAS, Finland).
- Final Grade: 110 Cum Laude. Supervisor: E. Menegatti.

Scientific High School G.B. Ferrari — Sep. 2016 – Jul. 2021
High School Diploma in Applied Sciences, Este, Italy

- Final Grade: 100 Cum Laude

Research Experience

École Polytechnique de Montréal — Mar. 2026 – Jun. 2026
Visiting Student (Department of Electrical Engineering), Montréal, Canada

- Awarded fully-funded Mitacs scholarship to develop CNN surrogates for replacing computationally expensive Gaussian Process updates in neurostimulation methods. Supervisor: M. Bonizzato.

University of Pisa and Research Center "E. Piaggio" — Oct. 2025 – Current
Student Researcher (Department of Information Engineering), Pisa, Italy

- Framing R-peak prediction from EEG as a segmentation problem via distance-to-peak estimation, evaluating multi-scale CNNs and autoregressive models with a focus on domain generalization. Supervisor: M. Cimino.

Sant'Anna School and Monasterio Foundation — Sep. 2025 – Jan. 2026
Student Researcher (TeCIP Institute), Pisa, Italy

- Cardiac amyloidosis classification from ECGs using Transformers, with interpretability via Grad-CAM and Attention Rollout (manuscript under review). Supervisor: C.A. Avizzano.

Sant'Anna School of Advanced Studies — Feb. 2025 – Oct. 2025
Student Researcher (BioRobotics and TeCIP Institutes), Pisa, Italy

- Explainable classification of tumor-mimicking materials from force/position data. Supervisor: C.M. Oddo.
- Efficient federated learning via dynamic training-precision adjustment. Supervisor: E. Paolini.

RFX Consortium and CNR — Nov. 2023 – Feb. 2024
Internship and Bachelor Thesis, Padua, Italy

- Investigated autoencoders and VAEs for temporal analysis of plant stress responses after irrigation with plasma-activated water (PAW). Supervisor: V. Antoni.

Work Experience

UP caeli via   Mar. 2024 – Jul. 2024
Computer Engineer – Part Time (24h/week), Padua, Italy

- Software integration for drones (QGC and ArduPilot) using C++ and Qt/QML (GeoFencing, RTK and RTSP).

Formula SAE Team Project   Oct. 2022 – Aug. 2024
Embedded Software Developer (+10h/week), Padua, Italy

- Member of a 50-person university racing team, developing embedded systems (ATmega32/64, TI F2837, Arduino) and C control algorithms for power management, torque vectoring, and regenerative braking.

Selected Honours and Awards

- **"Mille e una Lode" Merit Awards:** Scholarships awarded to the top 3% of students (UniPD)   2022–2024
- **INPS Scholarships:** National scholarships in recognition of academic excellence   2018–2024
- **National Bronze Medal, Physics Olympiad:** Association Teaching of Physics   May 2021
- **National First Place, Chemistry Olympiad:** Italian Chemistry Society   Jun. 2020
- **National Bronze Medal, EUSO:** European Olympiad of Experimental Science   Mar. 2019

Memberships

- **LeadTheFuture Mentee:** Acceptance $< 15\%$ for leading STEM mentorship   Oct. 2025 – Current
- **ISSNAF Mentee:** Selective mentorship for research opportunities in the US   Dec. 2025 – Current

Languages

- **Italian:** Native
- **English:** C1 (TOEFL iBT 104/120)