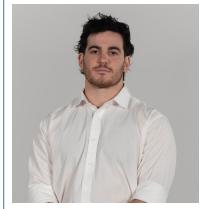# Carlos GRUSS

Curriculum Vitae

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🖱 My Webpage
○ Github   in Linkedin

Education

2023–2025	**MEng, Signal and Image Processing for AI (Diplôme d'ingénieur)**, *Télécom Paris - Institut Polytechnique de Paris*, Palaiseau, France.
2024–2025	**MSc, Computer Vision (Master M2)**, *Sorbonne Université*, Paris, France.
2019–2025	**BEng, Electrical Engineering**, *University of the Republic*, Montevideo, Uruguay.
2017–2018	**International Baccalaureate Diploma (IB)**, *The British Schools*, Montevideo, Uruguay.

Work Experience

Feb. 2025 – present	***Algorithm and Modeling AI Engineer***, *Greenerwave*, Paris, France. Developed deep learning inverse models for real-time metasurface-based SATCOM antenna control. Generated large-scale synthetic datasets from physics-based simulations and evaluated multiple architectures (MLPs, UNets, ResNets) in PyTorch, with focus on hardware deployment constraints including memory footprint and inference time.
Feb. 2022 – Jul. 2022	***Undergraduate teaching assistant***, *University of the Republic*, Montevideo, Uruguay. Delivered an introductory university course on robotics using Arduino and micro:bit.
Dec. 2020 – Jul. 2022	***Robotics engineering assistant*** , *GENBA Robotics*, Montevideo, Uruguay. Development of robotics and automation projects, from planning to comissioning. Roles included: PLC and industrial robot programming, mechanical design and electrical installation.

Academic Achievements & Recognitions

2023	**Excellence Scholarship for Master's Studies:** Scholarship granted by the National Agency for Research and Innovation (ANII) and Campus France through the French Embassy in Uruguay.
2017	**Finalist in the Uruguayan National Physics Olympics** (High School).

Personal projects

AI-Powered Daily Weather Bot, Developed an automated social media (X) bot in Python that posts daily weather predictions each morning. The bot integrates OpenAI's GPT for generating natural language summaries, OpenMeteo's API for retrieving accurate weather forecasts, and X's API for automated posting.

Real-Time Monitoring System for Autonomous Warehouse Robot, Implemented monitoring script tracking the performance of an autonomous mobile robot which delivered parts across a warehouse. Using the robot's REST API, developed alert mechanisms to notify the engineering team of potential issues such as operational anomalies and unaccounted downtime.

Extra-curricular activities

Rugby	**Played at international level until 2019 for the Uruguayan junior national team**.
Weightlifting	**Currently compete for Sporting Club de Neuilly in Paris since 2023**.
Associations	**Vice-president of student union (Bureau des Internationaux) at Télécom Paris in 2024/25**.
Theatre	**Member of the English theatre troupe of Télécom Paris in 2023**.