GIANMARCO BROILO

Academic Career

03.2022 - 09.2022	Master thesis preparation at TU Delft (NL) on the topic of analyzing stellar occultations combined with VLBI observations of the Jovian System to improve the ephemeris and dynamical characteristics of its Moons in support of the JUICE (ESA) mission, work completely done in Python.		
2020 - 10.2022	Master Degree (MSc) in Aerospace Engineering, Space curriculum - University of Bologna (ITA)		
2016 - 2020	Bachelor Degree (BSc) in Industrial and Mechanical Engineering, Energy curriculum - Free University of Bozen Bolzano (ITA) Thesis title: "Artificial neural network based structural health monitoring system for real time data analysis applied to an aerospace component"		
09.2018 - 02.2019	Erasmus+ at University of Ulster - Belfast (NI), faculty of Computing, Engineering and the built environment		
2014 - 2015	Intercultura, attended Delavan Darien High School - Delavan (WI) USA		
2011 - 2016	Liceo Linguistico, Italian, English, German, French, Spanish - "Gandhi" Merano (BZ)		

Working Experience

01.2024	Spacecraft Operations Engineer for the GEO mission EDRS and the LEO missions Grace Follow On and TerraSAR-X and TanDEM-X. Specialized in payload subsystem (EDRS), flight director (GFO) and attitude and orbit control system (TSTD)
11.2022 - 12.2023	Spacecraft controller for the EDRS mission. Working for Telespazio Germany GmbH at the German Space Operation Center. Level-I support to anomalies, spacecraft commanding, space and ground system architecture.
10.2021 - 01.2022	Internship Radio Science and Planetary Exploration Laboratory, radio occultation experiments and algorithms, goal is to analyze the lonosphere of Ganymede through Juno's dual-frequency (X/Ka) radio occultation experiment by developing a model in MATLAB.
04.2019 - 07.2019	Internship 4 EMME S.p.A., analysis of materials, seismic vulnerability and structural analysis of civil infrastructures

Languages

Technical Skills

Italian	Native speaker	MATLAB, Simulink	data analysis, algorithms, numerical analysis
English	C1 IELTS/CAE	Programming languages	MATLAB, Python, C++ (basics)
German	B2 GÖTHE	Space Ops	SCOS-2000, SatMon, ground system and spacecraft architecture
Patentino di Bilinguismo	B PROV-BZ		