PERSONAL INFORMATION Giorgio Guglieri



Enterprise	University	EPR
☐ Management Level		☐ Research Director and 1st level Technologist /
		First Researcher and 2nd level Technologist
☐ Mid-Management Level	☐ Associate Professor	☐ Level III Researcher and Technologist
☐ Employee / worker level	☐ Researcher and Technologist of IV, V, VI and VII	☐ Researcher and Technologist of IV, V, VI and VII
	level / Technical collaborator	level / Technical collaborator

WORK EXPERIENCE

From 2016 to present

Full Professor - Head of Department (2023-2027)

Politecnico di Torino (Department of Mechanical and Aerospace Engineering)

- Member of Academic Senate of Politecnico di Torino as Representative of the Department of Mechanical and Aerospace Engineering (mandate from 2019 to 2027)
- National Spoke Coordinator (Air Mobility) National Centre for Sustainable Mobility / Centro Nazionale Mobilità Sostenibile (PNRR)
- Representative for Politecnico di Torino within Clean Aviation Joint Undertaking (from 2021 to 2023)
- Representative for Politecnico di Torino within Pegasus Network (Partnership of a European Group of Aeronautics and Space Universities) from 2015 to 2023
- Representative for Politecnico di Torino within Fondazione ITS Aerospazio/Meccatronica Piemonte (steering board)
- Member of Executive Committee for Specializing Master Programmes and Lifelong Learning Unit of Politecnico di Torino - from 2020
- Member of the Steering Committee for the doctoral course in Aerospace Engineering (from 2005)
- Teaching at Politecnico di Torino (Courses: Helicopter Flight Mechanics (MS from 2012), Flight Simulation (MS - from 2012), Introduction to Flight Mechanics (BS – from 2012))
- Teaching at Politecnico di Milano (Courses: Flight Dynamics (MS from 2013 to 2018))
- Invited lecturer (technical and professional courses)
- BS/MS/PhD advisor (advisor for BS and MS final projects since 1990)
- Internal Quality Assurance (Quality manager department teaching activities (from 2016 to 2020))
- Advisor for inter-university projects (Alta Scuola Politecnica)
- Disciplinary expert for ANVUR (area 09 Industrial Engineering)
- Research (Flight Mechanics, Flight Simulation, Helicopter Dynamics, Handling Qualities, Uninhabited Aerial Vehicles, Spacecraft Dynamics, Applied Aerodynamics, Wind Tunnel Testing, Experimental Flight Testing, Software Development, Avionics, Human Machine Interface Design, Tele-operation of Robotic Systems, Guidance Navigation and Control, Flight Control System Design)
- Research: competitive funded projects (EU: H2020, Clean Sky Joint Undertaking, European Space Agency – ESA) (National: PRIN, ENAC, CLUSTER, ASI)
- Research: company funded projects (Leonardo, TIM, Telespazio, SITAEL, Thales Alenia Space Italia, ALTEC, ENI, CEFRIEL)
- Collaboration agreements (Responsible: Leonardo, Aeronautica Militare, City of Turin, EURAC Research, Aeroclub Torino)
- Reviewer for several editorial boards (technical and research journals: Acta Astronautica, Advances in Aircraft and Spacecraft Science, The Aeronautical Journal, Journal of Intelligent & Robotic Systems, IET Control Theory & Applications, International Journal of Advanced Robotic Systems, Proceedings of the Institution of Mechanical Engineers, Journal of Aerospace Engineering, Journal of Guidance, Control and Dynamics, Journal of Aerospace Engineering, Journal of Behavioral Robotics, Journal of Mechanical Engineering Science, Journal of Vibration and Control, Nonlinear Dynamics, International Journal of Systems Science)
- Co-founder of the student team DRAFT Drones Autonomous Flight Team (https://www.draftpolito.it/)
- Member of the Management Board of PIC4Ser PoliTO Interdepartmental Centre for Service

Robotics (https://pic4ser.polito.it/)

- Senior Member of AIAA (American Institute of Aeronautics and Astronautics) and AHS (American Helicopter Society)
- Member of the Steering Board of International Airport Torino Aeritalia I-LIMA (Aeroclub Torino)

University (Academia)

From 1994 to 2005

Associate Professor

Politecnico di Torino (Department of Aeronautical and Space Engineering)

University (Academia)

From 1994 to 2005

Assistant Professor

Politecnico di Torino (Department of Aeronautical and Space Engineering)

University (Academia)

From 1990 to 1994

Research Scientist (Junior)

CNR – Consiglio Nazionale delle Ricerche (Centro di Studio per la Dinamica dei Fluidi, Italy)

Position awarded (5 years research program) after national selection for high profile young researchers in applied sciences and engineering (1990) - Dedicated scientific education and training on the job program supported by senior researchers and academic staff (focus on flight physics, applied and experimental aerodynamics).

Public Research (Science and Technology)

EDUCATION AND TRAINING

From 1983 to 1989

MS Degree in Mechanical Engineering (final ranking 110/110)

Politecnico di Torino (Torino, Italy)

From 1978 to 1983

High school diploma / Maturità scientifica (final ranking 60/60)

Liceo Scientifico Sociale (Torino, Italy)

PERSONAL SKILLS

Mother tongue(s)

Italian

OTHER LANGUAGE(S)

English (C1), German (B2), French (A2)

Job-related skills

Organizational skills and competences were acquired during the years as an active participant to the organization of department activities of Politecnico di Torino, working on the preparation and management of research proposals, workshops, meetings and conferences.

Digital skills

Proficient user of several hardware/software systems and programming languages

Other skills

Board of Engineers of the Province of Milan (professional engineer since 1989), Glider Pilot Licence (Glider and Motorglider), Water Sports, Alpine Sports, Fly Fishing

ADDITIONAL INFORMATION

Publications

De Filippis, L., Guglieri, G., Quagliotti, F., Path planning strategies for UAVS in 3D environments, (2012) Journal of Intelligent and Robotic Systems: Theory and Applications, 65 (1-4), pp. 247-264. DOI: 10.1007/s10846-011-9568-2

Guglieri, G., A comprehensive analysis of wing rock dynamics for slender delta wing configurations, (2012) Nonlinear Dynamics, 69 (4), pp. 1559-1575. DOI: 10.1007/s11071-012-0369-3

Masarati, P., Quaranta, G., Bernardini, A., Guglieri, G., Voluntary pilot action through biodynamics for helicopter flight dynamics simulation, (2015) Journal of Guidance, Control, and Dynamics, 38 (3), pp. 431-441. DOI: 10.2514/1.G000837

Capello, E., Punta, E., Dabbene, F., Guglieri, G., Tempo, R., Sliding-mode control strategies for rendezvous and docking maneuvers, (2017) Journal of Guidance, Control, and Dynamics, 40 (6), pp. 1481-1488. DOI: 10.2514/1.G001882

Mammarella, M., Lorenzen, M., Capello, E., Park, H., Dabbene, F., Guglieri, G., Romano, M., Allgöwer, F., An Offline-Sampling SMPC Framework with Application to Autonomous Space Maneuvers, (2020) IEEE Transactions on Control Systems Technology, 28 (2), art. no. 8556086, pp. 388-402. DOI: 10.1109/TCST.2018.2879938