

CURRICULUM VITAE · EUROPASS

Marco Martalò

Date of birth: · **Place of birth:** Galatina (LE), Italy · **Nationality:** Italian
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ABOUT ME

Associate Professor of Telecommunications at the University of Cagliari, IEEE Senior Member, with more than 15 years of experience in wireless communications, IoT, and network security, and a long record of applied research carried out with industrial partners. Current activities focus on: (i) trustworthy and secure networking, including low-latency secure IoT communications and encrypted traffic classification; (ii) robust indoor localization and location-based services; (iii) edge/cloud architectures and digital twins for smart environments, energy communities, and agriculture; (iv) audio signal processing. Co-inventor of two patents, one of which is licensed to an industrial company and extended to the US, Europe, and Australia.

WORK EXPERIENCE

12/2020 – CURRENT · Cagliari, Italy
Associate Professor
University of Cagliari – Department of Electrical and Electronic Engineering

06/2017 – 12/2020 · Parma, Italy
Post-Doctoral Researcher – "Efficient signal processing techniques"
University of Parma – Department of Engineering and Architecture

05/2012 – 04/2017 · Italy
Assistant Professor (RTD-A)
E-Campus University – School of Engineering
Concurrently Research Associate at the University of Parma.

01/2009 – 04/2012 · Parma, Italy
SPINNER Research Fellow and Post-Doctoral Researcher
University of Parma – Department of Information Engineering

10/2007 – 03/2008 · Lausanne, Switzerland
Research Intern – "Network coding complexity"
École Polytechnique Fédérale de Lausanne (EPFL)

EDUCATION AND TRAINING

2009 · Parma, Italy
Ph.D. in Information Technologies
University of Parma

2005 · Parma, Italy
M.Sc. in Telecommunications Engineering
University of Parma
Final grade: 110/110 summa cum laude

2003 · Parma, Italy
B.Sc. in Telecommunications Engineering
University of Parma

LANGUAGE SKILLS

Mother tongue: Italian **Other languages:**

	UNDERSTANDING		SPEAKING		WRITING
	Listening	Reading	Spoken production	Spoken interaction	
English	B2	B2	B2	B2	B2
French	A1	A1	A1	A1	A1
German	A1	A1	A1	A1	A1

Levels: A1 and A2: Basic user; B1 and B2: Independent user; C1 and C2: Proficient user

TECHNOLOGY TRANSFER

Patents

[P2] M. Martalò, G. Ferrari, G. Verdano, S. Perri, F. Monica, and F. De Mola, "Method for locating a mobile target in an automated warehouse," Italian patent n. 102019000004801, 2021. Assigned to Elettric 80 S.p.A. Extended to US (n. 17598722), Europe (n. 20706057), Australia (n. 2020250976), and PCT (n. PCT/IB2020/050184).

[P1] N. Iotti, G. Ferrari, G. Spigoni, S. Busanelli, and M. Martalò, "Procedimento per il trasferimento verticale di un terminale mobile," Italian patent n. 1408721, 2014. Assigned to Guglielmo S.r.l.

Research contracts and collaborations with companies

- **Elettric80 S.p.A.:** UWB-based localization and tracking in automated warehouses (2017–2019).
- **Huawei** (Shanghai, China, HIRP program): outdoor/indoor localization in 5G networks (2018–2020); **Huawei GmbH** (Munich, Germany): phase noise suppression algorithms (2012–2013).
- **ASK Industries S.p.A.:** active acoustic control in vehicle cabins and intelligent antennas for 5G vehicular communications (2018–2023).
- **Argo Tractors S.p.A.:** acoustic field control in a tractor cabin (2018–2021).
- **things2i S.r.l.:** prototype for hybrid radio/inertial navigation (2019–2020).
- **INAIL:** cyber-physical systems for safety in high-risk production plants (2020–2021).
- Further collaborations with MOVYM S.r.l., Guglielmo S.r.l., Elsag-Datamat, and ID-Solutions (audio processing, vertical handover, RFID supply chain).

PROJECTS

As Principal Investigator

- "Virtualization and Orchestration of Liquid multi-Tenant network Architectures (VOLTA)," cascade call of PNRR project RESTART (Spoke 6), NextGenerationEU, 2024–2025.
- "POSition Information with Digital twin Offloading in trustworthy Next-generation Internet Applications (POSIDONIA)," third cascade call of EU project NGI Sargasso, 2024–2025.
- "Artificial Intelligence System Against Fare Evasion in the public transport (AI-SAFE)," funded by Sardinia Region, Italy, 2023–2025.

As participant (selected)

- EU MSCA Doctoral Network FITNESS (2024–2027, ongoing, supervisor of one Ph.D. candidate); PNRR projects Safepath (START 4.0), SERICS-COVERT, and e.INS (2023–2025); PRIN SCORET (2023–2025).
- EU H2020-ECSEL projects NextPerception, ADACORSA, InSecTT, and AFarCloud (2018–2021).

HONOURS AND AWARDS

- National Scientific Qualification (ASN) as Associate Professor in Telecommunications (2018).
- IEEE Senior Member (2016).
- First prize at the Body Sensor Network (BSN) Contest, Dallas, TX, USA (2011, with the WASNLab team).
- Best student paper award at IEEE IWWAN (2006).

PUBLICATIONS

Author of 2 books (1 as editor), 10 book chapters, 43 international journal papers, 67 international conference papers, 5 national conference papers, and 2 patents. Google Scholar: 1373 citations, h-index 18; Scopus: 840 citations, h-index 16. Full list at marcomartalo.github.io.

Selected publications

[J41] G. Pettorru, V. Pilloni, and M. Martalò, "Robust range-based localization approaches leveraging multiple wireless interfaces," *IEEE Trans. on Wireless Commun.*, vol. 25, pp. 20544–20557, 2026.

[J40] G. Pettorru and M. Martalò, "A persistent and secure publish-subscriber architecture for low-latency IoT communications," *IEEE Trans. on Network and Service Management*, vol. 23, pp. 729–739, 2026.

[J37] M. Martalò, G. Pettorru, and L. Atzori, "A cross-layer survey on secure and low-latency communications in next-generation IoT," *IEEE Trans. on Network and Service Management*, vol. 21, no. 4, pp. 4669–4685, 2024.

[J33] M. Martalò, S. Perri, G. Verdano, F. De Mola, F. Monica, and G. Ferrari, "Hybrid UWB-inertial TDoA-based target tracking with concentrated anchors," *IEEE Internet of Things Journal*, vol. 10, no. 14, pp. 12676–12689, 2023.

[J29] M. Martalò, S. Perri, G. Verdano, F. De Mola, F. Monica, and G. Ferrari, "Improved UWB TDoA-based positioning using a single hotspot for industrial IoT applications," *IEEE Trans. on Industrial Informatics*, vol. 18, no. 6, pp. 3915–3925, 2022.

[C63] A. Mancosu, G. Pettorru, and M. Martalò, "FiSH: Feature-informed Similarity Hashing for Edge-based traffic fingerprinting," *Proc. IEEE Int. Conf. Commun. (ICC)*, Glasgow, Scotland, 2026.

TEACHING AND SUPERVISION

- Current courses at the University of Cagliari: "Network Security," "Network Security Laboratory," and "Quantum Security" (M.Sc. in Internet Engineering); "Communication Networks" (B.Sc. in Electrical, Electronic, and Computer Engineering).
- Previous courses at the University of Parma and E-Campus University (2009–2020).
- Supervision of 6 Ph.D. students (2 in progress), 24 M.Sc. theses, and 36 B.Sc. theses.

NETWORKS, MEMBERSHIPS AND PROFESSIONAL ACTIVITIES

- **Associate Editor:** IEEE Networking Letters (since 2026), IEEE Communications Letters (since 2025), IEEE Access (since 2018).
- **Conference organization:** General Chair of IEEE MeditCom 2026 (Cagliari, Italy); Track/Publicity Chair for IEEE ICC 2027, MECOM 2025, WF-IoT 2026, CNS 2025, and LatinIoT 2027; TPC member of IEEE ICC and Globecom.
- **Keynotes and tutorials:** Keynote at IEEE WF-IoT 2026 workshop on the Internet of Mirrors; tutorials on trustworthy edge-assisted green 6G at IEEE Globecom 2024–2025, PIMRC 2023, WF-IoT 2023, and ICIN 2023.
- **Institutional roles:** Secretary of the Italian Chapter of the IEEE Communications Society (2026–2027); University of Cagliari representative at the Datacom Industry Association (since 2025); Dean's delegate at the CNIT shareholders' assembly (since 2023).

DATA PROTECTION

I authorize the processing of my personal data in accordance with the EU Regulation 2016/679 (GDPR) and the Italian Legislative Decree 196/2003, as amended.

Cagliari, 15/10/2026 Prof. Marco Martalò