Mohamad Yaacoub, Ph.D. Candidate

About

Mohamad Yaacoub received his MS degree in SignaI, Telecommunication, Image, and speech processing at the Faculty of Sciences of the Lebanese University, in 2022. Currently, he is a Ph.D. student in the Intelligent Electronic Systems branch in the Department of Naval, Electrical, Electronic, and Telecommunications Engineering (DITEN) at the University of Genoa, COSMIC Laboratory. His research interests involve signal processing, embedded electronic systems, embedded machine learning, data processing for tactile sensing systems.

Education

2022 – 2025 **Ph.D, University of Genoa**, in "Electronics and Telecommunication Engineering".
Thesis title: *Tactile Signals Analysis Through AI Techniques.*

2021 – 2022 **Master's, Lebanese University**, in "Signal, Telecommunications, Image and Speech processing".
Thesis title: *Acoustic Drone Detection Based on Transfer Learning and Frequency Domain Features.*

2020 – 2021 **Master's, Lebanese University**, in "Electronics and Telecommunication".
Thesis title: *Study and implementation of digital modulation model (FSK, ASK, PSK).*

2017 – 2020 **Bachelor, Lebanese University**, in "Electronics".
Thesis title: *Robot avoid obstacles with arduino.*

2016 – 2017 **Baccalaureate, Marjaayoun High school**, in "Life Sciences".

Research Publications

Conference Proceedings

1. **M. Yaacoub**, Y. Abbass, C. Gianoglio, L. Seminara, and M. Valle, "Pilot study: Response of a piezoelectric polymer based sensing system to indentation," in *2023 IEEE SENSORS*, IEEE, 2023, pp. 1–4.
2. **M. Yaacoub**, H. Younes, and M. Rizk, "Acoustic drone detection based on transfer learning and frequency domain features," in *2022 International Conference on Smart Systems and Power Management (IC2SPM)*, IEEE, 2022, pp. 47–51.

Attended Conferences

2024 **LV Annual Meeting of the Italian Society of Electronics, Genoa, Italy**.

2023 **IEEE Sensors international Conference, Vienna, Austria**.

Skills

Languages	**Arabic:** Native or bilingual proficiency, **English:** Full professional proficiency, **French:** Full professional proficiency, **Italian:** Good under commands.
Coding	C, C++, Python, LaTeX.
Data Science	Matlab.
ML Frameworks	PyTorch, TensorFlow.
Circuit Simulation	LTSpice.

Miscellaneous Experience

Certification

2024 **Supervised Machine Learning: Regression and Classification**. Awarded by DeepLearning.AI and Stanford University.

2023 **Introduction to TensorFlow for Artificial Intelligence, Machine Learning, and Deep Learning**. Awarded by DeepLearning.AI.

Linear Algebra for Machine Learning and Data Science. Awarded byDeepLearning.AI.

Introduction to Embedded Machine Learning. Awarded by Edge Impulse.

2021 **Delf B2**. Awarded by institue français de Liban.