



ANDREA NOVERO

PhD Student and developer in Telecommunications Engineering

PERSONAL PROFILE

My PhD is an industrial doctorate: the first year focused on the deployment of a network server product, then moved into research on advanced wireless communication systems and their practical deployment. Previous studies include a Master's degree in ICT and a Bachelor's degree in Electronic Engineering, both pursued alongside professional work experience. The PhD term ends in October, with the thesis to be finalized over a following months, in parallel with starting a new professional role. Until the end of November, I am at Duke University (USA), in Prof. Robert Calderbank's group, developing innovative wireless modulation techniques for drone/UAV applications.

CURRENT TOPICS

Drones, Wireless, Modulation, Tracking, Localization, Communication, Sensing, Polarization, IoT, Zadoff-Chu, OTFS, ISAC, LoRa, Synchronization, Delay-Doppler domain.

WORK EXPERIENCE

High School Teacher IIS J.F. Kennedy, Padova | 2021 - 2022

Computer science: basics of web developing and Databases

Junior developer Vexel s.p.a (Unox group) | 2020

Embedded Systems and communications. RaceUP Team | 2017 - 2019

Electronics and communications developer

Communications (CAN bus), Electronics, Control Systems, Power Unit.

Home automation A-Zeta | July 2015

Smart Agriculture

INTERNATIONAL EXPERIENCE

Duke University, USA June 2026 - November 2026

Research and development of innovative modulation techniques for UAVs.

IMDEA NETWORKS INSTITUTE, SPAIN April 2026 - May 2026

Characterizing an integrated sensing and communication system for drones.

EDUCATIONAL HISTORY

PhD in Telecommunications Engineering (Present)

Researching on innovative modulation techniques

MSc in ICT for Internet and Multimedia

University of Padova

BSc In Electronic Engineering

University of Padova

LIST OF PUBLICATIONS

- A. Novero, R. Tumiatì, F. Campagnaro, L. Vangelista, and M. Zorzi, "Seamless Integration of the LoRaWAN protocol in a LEO-Based mMTC Architecture", IEEE Communications Magazine, vol. 63, no. 4, pp. 114-120, Apr. 2025. doi:10.1109/MCOM.001.2400303.
- A. Novero, L. Santoro, D. Giustiniano, and M. Zorzi, "Low-Cost Doppler Sensing with Clock-Disciplined LoRa Hardware for Mobile Emitter Search," under review.
- A. Novero, M. Zorzi and L. Vangelista, "Study of Cross-Correlation for Discrete Zadoff-Chu Sequences of Different Prime Lengths", IEEE Communication Theory Workshop 4-7 May 2025 Venezia, Italy.
- A. Novero, L. Vangelista and M. Zorzi (University of Padova, Italy) "On the Correlation of Zadoff-Chu Sequences: Improved Bounds for the Partial-Period Scenario" 2026 IEEE Information Theory Workshop (ITW), accepted.
- A. Novero, F. Campagnaro, A. Pozzebon, L. Vangelista, and M. Zorzi, "Experimental Validation of a Multi-Hop Underwater LoRa Network," in Proc. IEEE Int. Workshop on Metrology for the Sea (MetroSea), Šibenik, Croatia, Oct. 5-7, 2026, accepted.

PERSONAL PROJECTS PORTFOLIO

<https://noveroandrea.github.io/portfolio/>

- Projects developed in telecoms, electronics, a bit of mechanics, and web.
- Complete version of publications and more info.

CONTACT ME AT



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<https://noveroandrea.github.io/portfolio/>
<https://github.com/noveroandrea>

SKILLS SUMMARY

- Telecommunications
- Firmware
- Electronics
- Drones/UAV (Telecom)
- Automotive

AWARDS RECEIVED



FSG Driverless Starters
Workshop at AID in Munich



Open Badge: Formula SAE
International Competition-
Executive Member

CERTIFICATIONS



PAV PES PEI Qualification 2019



EU Drone Pilot A1/A3 (ENAC)