Dimitrios E. Mylonas, PhD

☑ dimimyl579@mail.ntua.gr

in LinkedIn

users.ntua.gr/dimimyl579

☎ Google Scholar

Education

2019 – 2024 Ph.D., School of Mechanical Engineering, NTUA.

Thesis title: Local and Global Active Noise Control Systems in Vehicle Cabins.

DOI: 10.12681/eadd/57305

2017 – 2019 M.Sc. Automation Systems, NTUA.

Thesis title: Active Control of Low Frequency Acoustic Disturbances in Vehicles.

DOI: 10.26240/heal.ntua.17397

Thesis title: CO-Sensing Properties of CuxO-Based Nanostructured Thin Films Grown by

Reactive Pulsed Laser Deposition.

Career Summary

2019 - · · · Researcher in Laboratory of Dynamics and Acoustics, NTUA.

2017 – 2020 **Educator of Educational Robotics,** Municipality of Nea Smyrni, Athens.

2015 – 2017 **Educator in Greek Vocational High School.**

2013 – 2014 TT Assistant and Network Administrator (During Military Service), Greek Army.

2012 – 2013 **Electromechanical Installations,** Freelancer.

Research Experience

2023 - · · · | Green Intelligence,

An AI Based framework for unsupervised monitoring of large swarms of identical objects.

2019 – 2021 PIANO (Path Identification for Active Noise Control),

Horizon 2020- Clean Sky 2 undertaking project. https://cordis.europa.eu/project/id/885976

TRANVIC (Distributed smart material arrays for low frequency broadband active noise and vibration suppression in vehicles and light structures),

NSRF 2014-2020.

2018 – 2019 TAVAC (Technologies of Active Vibration and Acoustic Comfort,

Horizon 2020- Clean Sky undertaking project.

https://cordis.europa.eu/project/id/717089

Research Publications

Journal Articles

- D. Mylonas, A. Erspamer, C. Yiakopoulos, and I. Antoniadis, "A virtual sensing active noise control system based on a functional link neural network for an aircraft seat headrest," *Journal of Vibration Engineering and Technologies*, vol. 12, pp. 3857–3872, 2024. DOI: 10.1007/s42417-023-01090-5.
- D. Mylonas, A. Erspamer, C. Yiakopoulos, and I. Antoniadis, "Global control of propeller-induced aircraft cabin noise using active sound absorbers," *Journal of Sound and Vibration*, vol. 573, p. 118 213, 2024, ISSN: 0022-460X. ODI: https://doi.org/10.1016/j.jsv.2023.118213.
- D. Mylonas, A. Erspamer, C. Yiakopoulos, and I. Antoniadis, "An extrapolation-based virtual sensing technique of improving the control performance of the fxlms algorithm in a maritime environment," *Applied Acoustics*, vol. 193, p. 108 756, 2022, ISSN: 0003-682X. ODOI: https://doi.org/10.1016/j.apacoust.2022.108756.

Conference Proceedings

- D. Mylonas, A. Erspamer, C. Yiakopoulos, and I. Antoniadis, "A reservoir computing approach in active noise control for vehicle applications," in *Proceedings of INTER-NOISE24*, Nantes, Greece, Aug. 2024, pp. 8923–8929. ODI: 10.3397/IN_2024_4160.
- D. Mylonas, A. Erspamer, C. Yiakopoulos, and I. Antoniadis, "Experimental evaluation of an active noise cancellation system for low frequency acoustic disturbances," in *Proceedings of the Acoustics* 2024, Rethymno, Greece, Oct. 2024.
- D. Mylonas, A. Erspamer, C. Yiakopoulos, and I. Antoniadis, "A low computational complexity local active noise control system for adjacent aircraft seats," in *Proceedings of the Forum Acusticum 2023* (FA2023) Conference, Torino, Italy, Sep. 2023. **9** DOI: 10.61782/fa.2023.0022.
- D. Mylonas, A. Erspamer, C. Yiakopoulos, and I. Antoniadis, "Global active noise attenuation by combining local active noise control systems for noise attenuation in an aircraft cabin," in *Proceedings of the* 29th Internation Congress on Sound and Vibration (ICSV29), Prague, Czech Republic, Jul. 2023.
- D. Mylonas, A. Erspamer, C. Yiakopoulos, and I. Antoniadis, "A non-linear anc system for an aircraft's seat headrest," in *Proceedings of the Acoustics 2022*, Thessaloniki, Greece, Oct. 2022, pp. 486–493.
- A. Erspamer, D. Mylonas, C. Yiakopoulos, and I. Antoniadis, "A narrowband virtual sensing active noise control system using esprit for an aircraft interior," in *Proceedings of the Euronoise 2021*, Madeira, Portugal (online), Oct. 2021.
- D. Mylonas, A. Erspamer, A. Paradisiotis, C. Yiakopoulos, and I. Antoniadis, "A local active noise control system based on a nonlinear sensing technique for yacht applications," in *Proceedings of the EURODYN 2020*, Athens, Greece (online), Jun. 2020.

Skills

Languages	
Greek:	• • • • •
English, Spanish:	• • • • 0
French, Russian:	• • 0 0 0
Coding	
Python, Matlab:	• • • • 0
C, Labview:	• • • • •
ML Frameworks	
Tensorflow, Keras:	• • • • 0
Pytorch:	• • • • •
Acoustic Simulations	
Comsol Acquistics:	

Professional Memberships

- **▼ Technical Chamber of Greece**, Member
- **European Acoustics Association**, Member
- **Hellenic Institute of Acoustics**, Member