







Politecnico di Torino - Maxwell Room 9th October 2024 - 6.00 PM

Strategies For Assessing and Reducing Stress: Challenges and Future Directions



Mr. Matteo Raggi PhD Candidate, DET.

Chronic stress can lead to cardiovascular and metabolic disorders. Despite advancements in wearable devices and algorithms, accurately estimating stress remains challenging due to the non-specific nature of human responses. This talk will cover devices and physiological signals used for stress detection, along with new non-invasive strategies for its mitigation.

EarthLoc: Astronaut Photography Localization by Indexing Earth from Space

Mr. Gabriele Berton, PhD Candidate, DAUIN.

Astronaut photography offers valuable Earth observations, but localizing these images is challenging. We propose EarthLoc, a highperformance model using image retrieval, innovative training techniques, and comprehensive benchmarks. EarthLoc significantly improves accuracy and efficiency in automating image localization, aiding scientific research and disaster response.



Dive into deep back-off region: High-efficiency Power amplifier in 5G base station scenario



Ms. Zhifan Zhang, PhD Candidate, DET.

The growing demand for wireless data challenges power amplifiers (PAs) in 5G base stations. This talk provides an overview of the critical role of PAs in 5G network and highlights an advanced circuit structure that enhances efficiency of PA in deep back-off region, with the related circuit example presented.



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