

CS PhD Seminar Series

October 23th

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14:30-15:00

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Room 214

Domain Shift in Unsupervised Anomalous Sound Detection: Evidence from Two-Channel Machine Recordings

A detector for machine faults has to be trained on healthy sound alone, because failures are rare and expensive to record. It therefore flags not only faults, but also healthy machines running under conditions it has never heard, a problem known as domain shift. This seminar reports a first-year study of that problem on the DCASE 2026 Challenge benchmark, whose latest edition introduced two-channel recordings: an assumption about the second microphone that was tested and refuted, a simple classical method that outperforms the deep baseline in the source domain, and evidence that domain shift does not take the geometric form that most mitigation strategies assume.



Speaker: [Armin Sargolzaei](#)

Armin Sargolzaei is a first-year PhD student in Computer Science and Systems Engineering at DIBRIS, Università di Genova, supervised by Prof. Stefano Rovetta. He holds a master's degree from the STRATEGOS (Engineering in technology for strategy and security) programme at the Università di Genova. His research concerns unsupervised anomalous sound detection for machine condition monitoring, and in particular why detectors trained under one operating condition fail under another. He also works part-time as an engineer at VoiceHeart (VEGA Research Laboratories), on speech and health-data voice systems.