Avviso di Seminario

Corso di Digital Adaptive Circuits and Learning Systems
Corso di Laurea Magistrale in Ingegneria Elettronica

Corso di Computer Vision & Deep Learning
Corso di Laurea Magistrale in Ingegneria Informatica e dell'Automazione

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Robust Speech Processing for Meeting Transcription

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Abstract, Speech-enabled applications have become increasingly common. The rise of virtual assistants and remote hands-free telecommunications are two prominent examples. Technologies once belonging to the real of science fiction, such as speech to speech translation are starting to be adopted nowadays. Such rapid advancement has been largely driven by the adoption of deep learning techniques and the availability of large amounts of data. Yet, current state-of-the-art techniques often fail spectacularly in challenging acoustical conditions especially if there are competing speakers. Tackling "in-the-wild" conversations in a reliable way is still a major issue. This seminar serves as an introduction to robust speech processing techniques which can aid in such difficult scenarios, and which often conjugate deep learning with more established digital signal processing techniques, to enhance robustness by constraining the solution.

Bio, Samuele Cornell is a postdoctoral research associate at Carnegie Mellon University at the Language Technologies Institute within Prof. Shinji Watanabe research group (WAVLab). He got a Master degree in electronic engineering at Università Politecnica delle Marche in 2019 and, in 2023, at the same institution, a doctoral degree in Information Engineering. His research interests are mainly in robust speech processing (speech enhancement, speech separation, diarization, automatic speech recognition) for distant meeting scenarios. He has been the main organizer of the renowned CHiME-7 and 8 DASR meeting transcription challenges.

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