This project has received funding from the European Union's Horizon 2020 research and innovation programme under Marie Skłodowska-Curie grant agreement No 766287

PhD position – Speech & Audio Processing

IDLab (www.ugent.be/ea/idlab) is looking for a junior researcher who will investigate the robust data-driven methods for analyzing pathological speech in the framework of the TAPAS project (www.tapas-etn-eu.org). TAPAS is a Horizon 2020 Marie Skłodowska-Curie Actions Innovative Training Network (MSCA-ITN-ETN) that aims to transform the wellbeing of people across Europe with debilitating speech pathologies, caused by stroke, Parkinson's, etc.

Automatic speech analysis is the core component of the ASISTO e-health tool (asisto.elis.ugent.be). This tool provides feedback both to the patients (e.g., evaluating the exercises and the speaking skills) as well as to the speech therapist (assisting in the root cause analysis of the problem and measuring the effectiveness of exercises). Since speech pathologies are diverse in nature and since annotated data is scarce, the focus of the work is on robust models such as modern deep learning techniques as well as transfer learning. Cross-pathology, cross-exercise and cross-language training are also beneficial.

IDLab

IDLab is a core research group of Ghent University and imec (a world-leading research and innovation hub). While headquartered in Belgium, imec has distributed R&D groups around the world (the Netherlands, Taiwan, USA, China, India and Japan). IDLab has more than 300 researchers and performs fundamental and applied research on data science and internet technology. Speech & audio processing has been one of our research fields for over 40 years, covering a wide range of topics including speech recognition, speaker diarization, extraction of para-linguistic features, automatic assessment of pathological speech, music analysis and classification, and generic audio processing.

Eligibility Criteria

- You have a degree in Master of Science/Engineering, preferably in Computer Science, Electronics-ICT or (Mathematical) Informatics with a solid academic track record (e.g., graduation cum laude or ranked in the top 30%).
- You must not have resided or carried out your main activity (work, studies, etc.) in Belgium for more than 12 months in the 3 years immediately prior to the recruitment.
- You are interested in and motivated by the research topic, as well as in obtaining a PhD degree.
- You speak and write English fluently (C1 CEFR level) and you have good communication skills.
- You have an excellent analytical skills, open mind and a multi-disciplinary attitude.
- You are proficient in programming (Python and/or C).
- You have a strong interest in the above-mentioned domains (prior experience is a plus).
- You are willing to travel. The researchers are required to collaborate with researchers and partners across Europe. Moreover, at least 9 months of your work will be executed in outside Belgium.

We offer

We offer a fully funded PhD position in a challenging, stimulating and pleasant research environment, where you can contribute to our research on speech and audio processing. The PhD research is innovative with clear practical applications and is done in close collaboration with national and international industry partners. You will join a young and enthusiastic team of researchers, post-docs and professors. This PhD position is available immediately. The duration of the recruitment is 2 years on the TAPAS project and 2 years on a subsequent project.

Interested?

Send your application package (motivation letter, scientific resume, academic results, English proficiency scores, relevant publications, and two reference contacts) to prof. dr. ir. Kris Demuynck (Kris.Demuynck@UGent.be) and dr. ir. Azarakhsh Jalalvand (Azarakhsh.Jalalvand@UGent.be).

Pre-selected candidates will be invited for an interview (possible via Skype).