PhD/Post-Doc positions in hearing-impaired sound processing.

This message is a pre-announcement for interested PhD/Post-Doc candidates wishing to start research in the fall of 2016 in the WAVES research group of the Department INTEC at UGent. http://www.waves.intec.ugent.be.

The positions are part of a 5-year project that takes an interdisciplinary approach (combining computational auditory models with EEG, psychoacoustics and machine-learning) to study sound processing in listeners with impaired hearing due to ageing or noise exposure. Both novel diagnostic methods as well as signal-processing strategies for hearing restoration are the focus.

Candidates should have a strong auditory signal processing background with coding skills (Matlab, Python), and an interest in hearing-impaired sound encoding. English skills (written/oral) are required, as well as independence, creativity and the curiosity to change things for the better. We are looking for the following members to join our team:

1 PhD student. Focus on computational auditory modeling as well as optimizing physiological (multichannel) EEG and otoacoustic emission methods. Patient contact required. Funding is available for the full duration of the project (3 years with possible 1 year extension). Auditory modeling experience is a plus, and experience with EEG recording (writing experiment code and analysis) is necessary. Msc in engineering, neuroscience, acoustics, physics, experimental psychology is required.

1 PhD student. Focus on psychoacoustics. Patient contact required. Funding is available for the full duration of the project (3 years with possible 1 year extension). Experience with conducting psychoacoustic experiments is required (writing experiment code and analysis). Msc in engineering, neuroscience, acoustics, physics, experimental psychology, audiology is required.

1 Post-Doc researcher. Strong focus on computational modeling,

signal processing, machine learning and optimization algorithms. Patient contact not required, but working in a team is necessary. Funding available for 3 years. Prior experience in auditory signal processing is required. PhD in mathematics, physics, machine learning, auditory signal processing.

The positions will be formally written out in a couple of weeks, but interested applicants may already contact Prof. Dr. ir. Dick Botteldooren for further information. dick.botteldooren@ugent.be