



**Presents the in-person/online congress**

## **Speech technology for pathological speech processing**

**New insights and results from the European TAPAS training network**

Thursday, September 8th, 2022 – 9.00 am to XX pm \*

University of Antwerp, Campus Drie Eiken, Building Q

[Campus Drie Eiken | University of Antwerp](#)

\* Welcome with coffee from 8.30 am

### **Morning session**

#### **Overview of TAPAS project (max 15 minutes)**

*Dr. Mathew Magimai Doss*

**Juan Camillo Vasquez** (giving a holistic perspective development of Apkinson) 30 minutes with Q&A

*Towards the assessment of patients with neurological disorders using mobile devices. The experience from Apkinson.*

#### **Pathological speech assessment and treatment – part I (each 20 mins incl. Q&A)**

*Pronunciation software tool with gamification elements for children – Ir. Thomas Rolland*

*A new virtual Articulation Therapist – Ir. Viviana Mendoza*

*Efficacy of phonological error detection in speech therapy – Ir. Abdessalem Hammami*

#### **Pathological speech assessment and treatment – part II (each 20 mins incl. Q&A)**

*Acoustic analysis of speech dimensions in pathological speech – Dr. Timothy Pommée*

*Automatic distance scores for measuring speech intelligibility – Ir. Xue Wei*

*Measuring intelligibility in head and neck cancer patients – Ir. Sebastiao Quintas*

### **Afternoon session**

#### **Speech signal-based applications for specific health conditions (each 20 mins incl. Q&A)**

*Detecting cognitive decline related to dementia – Ir. Yilin Pan*

*What speech signals can learn us about respiratory conditions – Ir. Nallanthigal Venkata Srikanth*

*Predicting and synthesising plausible speech examples after oral cancer treatment – Ir. Bence Mark Halpern*

**Speech technologies for pathological speech processing (each 20 mins incl. Q&A)***Assessment of speech production in Cochlear implant patients - Tomas Arias**Advances in dysarthric speech recognition (Combined perspective of Zhengjun and Enno)**Learning representations for pathological speech processing (Combined perspective of Zhao Ren and Julian Fritsch)***Friday September 9th****TAPAS – future perspectives in speech technology based health applications****Morning Session (8.30 am – 12.00 pm) :****Session Chair : collects questions for afternoon session (through chats and end of session)****Presentation type : in person/recording or online presentation****ESRs perspective (1h)****Session chair: Julie**

We can coordinate this part with ESRs

	Person	Title
8:30 – 8:40	tbd	tbd
8:40 – 8:50	tbd	tbd
8:50 – 9:00	Wei Xue	Future perspectives on speech intelligibility in practice
9:00 – 9:10	Zhao Ren	Future perspective of computer audition in healthcare
9:10 – 9:20	tbd	tbd

9:30 – 9:45: Coffee break

**Clinical perspective (1h)****Session chair: Gwen/Antwerp colleague**

9:45 – 9:55	Gwen (UZA) on-site	Future perspectives on assessment and treatment of motor speech disorders
9:55 – 10:05	Maria (LMU) on-site/online	tbd

10:05 – 10:15	Virginie (UPS) – online?	tbd
10:15 – 10:25	Kurt (University of Vienna)	tbd
10:25 – 10:35	Michiel/Rob (NKI)	tbd
10:35 – 10:45	Dan (Sheffield) - online/in-person/recording	tbd

10:45 – 11:00: Coffee break

### **Technology perspective (1h)**

**Session chair: Mathew**

11:00 - 11:10	Rafa (PD) Zoom recording	Multimodal evaluation of Parkinson's disease: current and future perspectives
11:10 – 11:20	Heidi (AD)	Automatic assessment of cognitive impairment: current and future perspectives
11:20 – 11:30	Aki (Philips)	Speech as a sensing modality in remote patient monitoring and diagnostics
11:30 – 11:40	Finnian (Oxford Wave Research)	tbd
11:40 – 11:50	Swapnil (Therapy Box)	tbd
11:50 – 12:00	Alexander (KST)	tbd
12:00 – 12:10	Felix (Audeering) online	Aspects of detecting covid from voice: a practical approach

**Lunch break**

### **Afternoon Session (2-4pm)**

**Moderators from morning session organise collected questions from the morning**

**Panel discussion to merge these perspectives (1h)**

We will be using Zoom to webcast the presentations. So, we can also potentially invite external participants (incl. Advisory board members) as panel members to hold this part or invite a few of them in-person, if it is possible.

**Moderators:** Julie, Gwen and Alberto

**Panel:** tbd how to put the panel members (presenters (on-site and online)) – **input/suggestions needed**