



Clarity 2022 Virtual Workshop

The 2nd International Workshop on Machine Learning
Challenges for Hearing Aids

Welcome to the Clarity 2022 Virtual Workshop

Organising committee

- Michael Akeroyd Univ. of Nottingham
- Will Bailey Univ. of Sheffield
- Jon Barker Univ. of Sheffield
- Trevor Cox Univ. of Salford
- John Culling Univ. of Cardiff
- Lara Harris Univ. of Salford
- Graham Naylor Univ. of Nottingham
- Zuzana Podwinska Univ. of Salford
- Zehai Tu Univ. of Sheffield



- 5-year project funded by the UK Engineering and Physical Sciences Research Council (EPSRC)
- Started in October 2019 and will run until September 2024
- “Challenges to Revolutionise Hearing Device Processing”
- Purpose of funding is to allow us to run a series of open machine learning challenges targeting hearing aid speech-in-noise processing.

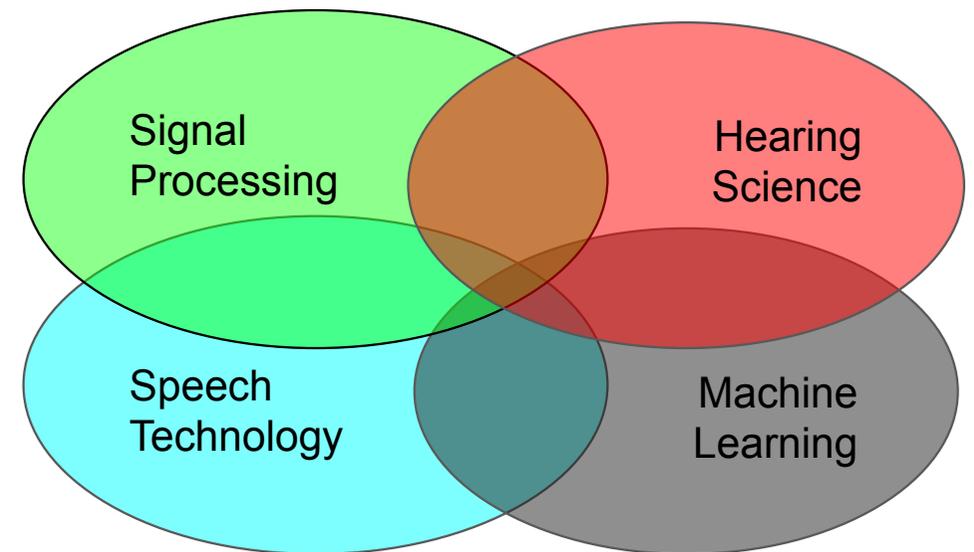


- Background

- By 2035, 15 M with hearing loss in UK; annual economic cost of £30bn, but
- Speech-in-noise remains major problem for hearing aid technology
- Advances in ML have transformed speech technology in last 10 years, e.g., ASR, end-to-end source separation

- Aims

- Bring communities and ideas together through organisation of open ‘challenges’
- Broaden base of researchers addressing hearing technology



Sponsors and Supporters



Interspeech 2022, Sept 18-22; Incheon, Korea
Special session on intelligibility prediction for hearing-impaired listeners.

INTERSPEECH 2022

HUMAN AND HUMANIZING SPEECH TECHNOLOGY

September 18 - 22, 2022
Incheon Songdo ConvensiA, Korea



Clarity-2022 Virtual Workshop Overview.

- **11 papers** and one invited talk with contributions from **53 authors**
- Over **117 registered attendees**
- Approx 60% academia and 40% industry / healthcare
- Participants joining from 4 continents and **14 countries**
- Spanning **19 time zones**, from GMT-7 to GMT+12

Overview of the programme

- 9:00 Welcome
- 9:10 The Clarity Prediction Overview / Results
- 9:40 Challenge Papers: Session I
- 10:40 Break
- 10:50 Challenge Papers: Session II
- 11:50 Break
- 12:00 Challenge Papers: Session III
- 13:00 Break
- 13:10 Invited Talk - Theo Goverts, Vrije Universiteit Amsterdam
- 14:00 Break
- 14:10 Prizes and conclusions
- 14:20 CPC discussion + Future Directions
- 15:00 Close

Hearing Industry Research Consortium Prize for Best Clarity Prediction Challenge System

Separate prizes available for overall system
performance and student contribution

| General prize | Student prize |
|--|--|
|  1st Place \$1000 |  1st Place \$1000 |
|  2nd Place \$500 |  2nd Place \$500 |
|  3rd Place \$250 |  3rd Place \$250 |



Student Prize Panel

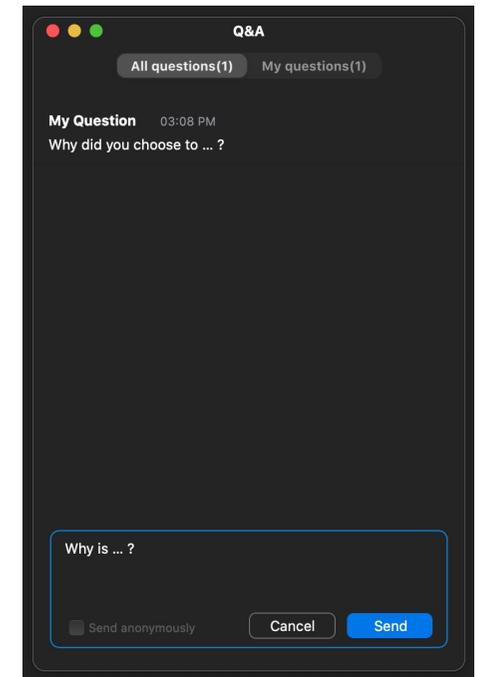
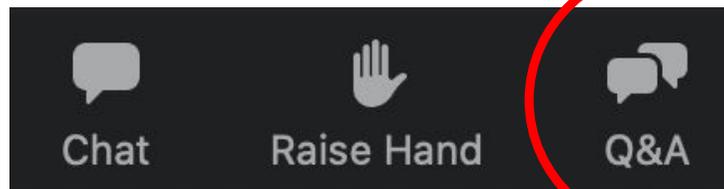
- Clarity Organizers +
- Jesper Boldt, GN Advanced Science
- Tobias Goehring, University of Cambridge
- Chas Pavlovic, BatAndCat Sound Labs
- Kateřina Žmolíková, Brno University of Technology (Winner of previous Clarity student prize)

Prizes will be awarded at the start of the final session, 14:10

Q & A sessions

Two ways to ask questions:

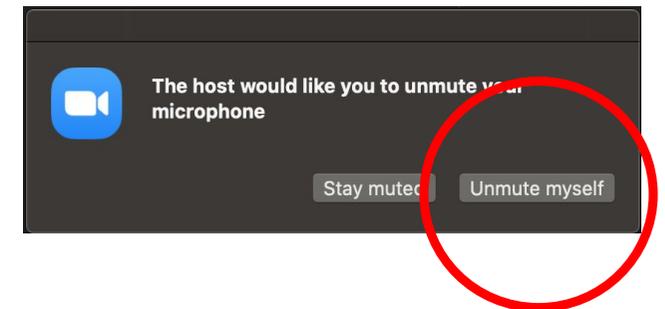
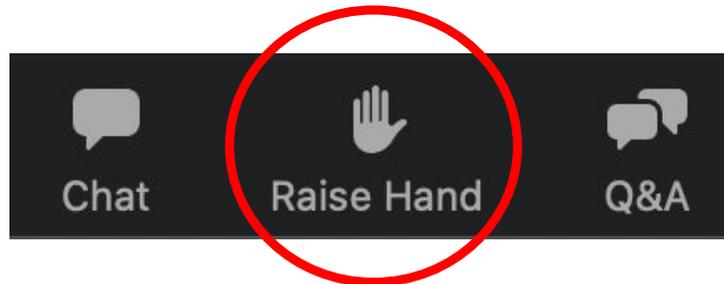
1. Use the Q&A tool to post questions during the talk.



Q & A sessions

Two ways to ask questions:

1. Use the Q&A tool to post questions during the talk.
2. Raise your hand to ask questions live during the discussion sessions.



We value your feedback. We have two feedback forms:

- The Clarity Prediction Challenge (CPC1)
- The Clarity-2022 Workshop

The links will be posted in the chat.

You can also scan the QR codes on the right.



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