International Workshop on Smart Audio Analysis and Processing (SAAP 2024)

Audio, as a novel digital phenotype, is playing an increasingly important role in the smart world, such as speech recognition, healthcare monitoring, machinery fault diagnosis, scene localization and virtual reality, and more. However, compared to image and text based methods, the potential exploration of audio based methods is extremely limited. Therefore, the Workshop on Smart Audio Analysis and Processing (SAAP) aims to bring together researchers and industry professionals to share and discuss the latest advancements and challenges of audio digital phenotype based methods in smart world. SAAP refers to the utilization of cutting-edge signal processing techniques and high-performance computing capabilities to endow machines with the ability to perceive and process acoustic signals comparable to or surpassing human capabilities, thereby efficiently and precisely accomplishing a range of tasks based on sound signals.

We hope that relevant scientists and engineers can exchange ideas, discuss perspectives, and share the most advanced research and insights on different smart applications of audio digital phenotype through SAAP Workshop, in order to improve the convenience and efficiency of human-computer interaction and bring people a more intelligent and convenient life experience.

Possible areas and topics include but are not limited to:

- Acoustic signal acquisition and processing
- Voice of body
- Engineering and mechanical noise control
- Architectural and structural acoustics
- Underwater acoustics
- Acoustic scene classification
- Music and psychoacoustics
- Brain-inspired hearing modeling

Chairs:

Yi Chang, Imperial College London, UK Zhihua Wang, Beijing Institute of Technology, China Xinyuan Qian, University of Science and Technology Beijing, China Li Liu, The Hong Kong University of Science and Technology (Guangzhou), China Zhao Ren, University of Bremen, Germany