2nd SPSC Symposium joint with 2nd VoicePrivacy Challenge Workshop
– Call for Papers –

Speech is becoming an increasingly important means for human-computer interaction with numerous deployments in biometrics, forensics and, most importantly, information access through virtual voice assistants. Alongside these developments, the need for robust, secure algorithms and applications which guard the user's security and privacy emerged at the forefront of speech-based research and development.

The second edition of the **Symposium on Security & Privacy in Speech Communication**, this year combined with the **2nd VoicePrivacy Challenge Workshop**, focuses on Speech and voice through which we express ourselves. As speech communication can be used to command virtual assistants to transport emotion or to identify oneself, the symposium tries to give answers to the question on how we can strengthen security and privacy for speech representation types in user-centric human/machine interaction? The symposium therefore sees that interdisciplinary exchange is in high demand and aims to bring together researchers and practitioners across multiple disciplines – more specifically: signal processing, cryptography, security, human-computer interaction, law and anthropology, for details see: **https://symposium2022.spsc-sig.org/**

The VoicePrivacy initiative is spearheading the effort to develop privacy preservation solutions for speech technology. It aims to consolidate the newly formed community to develop the task and metrics and to benchmark progress in anonymization solutions using common datasets, protocols and metrics. VoicePrivacy takes the form of a competitive challenge. Participants are required to develop anonymization algorithms which conceal speaker identity within speech signals. At the same time, they should preserve linguistic content and naturalness. **VoicePrivacy 2022 Challenge** participants are encouraged to submit to the SPSC Symposium papers related to their Challenge entry, as well as other scientific papers related to voice privacy and anonymization. More details can be found on the VoicePrivacy Challenge webpage: **https://www.voiceprivacychallenge.org/**.

To strengthen the efforts for both events, ease joined discussions, and extend the interdisciplinary exchange, we decided to combine our teams and organized a joined event. For the general symposium, we welcome contributions to related topics, as well as progress reports, project dissemination, or theoretical discussions and "work in progress".

In addition, guests from academia, industry and public institutions as well as interested students are welcome to attend the conference without having to make their own contribution. All accepted submissions will appear in the symposium proceedings published in the ISCA Archive.

SPSC Topics regarding the technical perspective include, but are not limited to:

- Privacy-preserving speech communication
  - Speech Recognition and Spoken Language Processing
  - Speech Perception, Production and Acquisition
  - Speech Synthesis and Spoken Language Generation
  - Speech Coding and Enhancement
  - Speaker and Language Identification
  - Phonetics, Phonology and Prosody
  - Paralinguistics in Speech and Language
- Cybersecurity
  - Privacy Engineering and Secure Computation
  - Network Security and Adversarial Robustness
  - Mobile Security
  - Cryptography
  - Biometrics
- Machine Learning
  - Federated Learning
  - Disentangled Representations
  - Differential Privacy
  - Distributed Learning
- Natural Language Processing
  - Web as Corpus, Resources and Evaluation
  - Tagging, Summarization, Syntax and Parsing
  - Question Answering, Discourse and Pragmatics
  - Machine Translation and Document Analysis
  - Linguistic Theories and Psycholinguistics
  - Inference of Semantics and Information Extraction

Topics regarding the humanities' view include but are not limited to:

- Human-Computer Interfaces (Speech as Medium)
  - Usable Security and Privacy
  - Ubiquitous Computing
  - Pervasive Computing and Communication
  - Cognitive Science
- Ethics & Law
  - Privacy and Data Protection

- - ○ Media and Communication
    - ○ Identity Management
    - ○ Electronic Mobile Commerce
    - ○ Data in Digital Media
  - Digital Humanities
    - ○ Acceptance and Trust Studies
    - ○ User Experience research on practice
    - ○ Co-development across disciplines
    - ○ Data-citizenship
    - ○ Future studies
    - ○ Situated Ethics
    - ○ STS perspectives

Submission:

Papers intended for the SPSC Symposium should be up to eight pages of text. The length should be chosen appropriately to present the topic to an interdisciplinary community. Paper submissions must conform to the format defined in the paper preparation guidelines and as detailed in the author's kit. Papers must be submitted via the online paper submission system. The working language of the conference is English, and papers must be written in English.

Reviews:

At least three single-blind reviews are provided, and we aim to obtain feedback from interdisciplinary experts for each submission. For VoicePrivacy Challenge contributions, the review will be focused on the systems' descriptions and results.

Important Dates:

June 15th	Long paper submission deadline (up to 8 pages excl. references)
	VoicePrivacy Challenge paper submission deadline (4 to 6 pages excl. references) Short papers submission deadline (up to 4 pages incl. references)
July 1st	Author notification
July 31st	VoicePrivacy Challenge results and system description update deadline
September 5th	Final paper submission
September 23-24	Symposium