



SPSC Symposium

Call for Papers

Speech is becoming an increasingly important means for human-computer interaction with numerous deployments in biometry, 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.

From the humanities' perspective, speech and voice characteristics are media through which we express our identity as members of communities, while also holding deeply intimate and embodied meanings within our relationships to self and to those we are close to. We may define speech and voice literally, such as the sounds generated in the vocal tract which are patterned in ways that enable others to interpret what we mean. But we may also define them metaphorically, such as "giving voice" to our demands as citizens, in legal constructions such as "free speech", or as semiotic placeholders for deep emotional ties, such as my "mother's voice", evoking emotions and sensory experiences.

With voice and speech regarded as deeply personal and communal identity bearers on the one hand, and on the other hand, viewed as digital resources that may be reimagined and reengineered as products and tools, how might researchers and practitioners bridge the gap between social perceptions and their technical counterparts with respect to what it might mean for our voices and speech to be secure and private?

The first edition of the [Symposium on Security & Privacy in Speech Communication](#) aims at laying the first building blocks required to address this question and brings together researchers and practitioners across multiple disciplines – more specifically: signal processing, cryptography, security, human-computer interaction, law and anthropology. By integrating different disciplinary perspectives on speech-enabled technology and applications, the SPSC Symposium opens opportunities to collect and merge input regarding technical and social practices, as well as a deeper understanding of the situated ethics at play. As a result, we also seek to identify "the kind of labor that goes into interdisciplinary collaboration".

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

- **Speech Communication**
 - Spoken Language Processing
 - Speech Recognition
 - 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
 - Analysis of Speech and Audio Signals
- **Cyber security**
 - Secure Computation
 - Privacy Engineering
 - Network Security and Adversarial Robustness
 - Mobile Security
 - Cryptography
 - Biometrics
- **Machine Learning**
 - Federated Learning
 - Disentangled Representations
 - Differential Privacy
 - Collaborative/centralized 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
 - Quality
 - 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

We welcome contributions on related topics, as well as progress reports, project disseminations, or theoretical discussions and “work in progress”. There also is a dedicated PhD track. 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 conference proceedings published in ISCA Archive.

Submission:

Papers intended for the SPSC Symposium should be up to four pages of text. An optional fifth page can be used for references only. 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:

All submissions share the same registration deadline (with one week of submission updates afterwards). At least three single-blind reviews are provided, we aim to get feedback from interdisciplinary experts for each submission.

Important Dates:

June 30, 2021 paper submission deadline
September 5, 2021 author notification
October 5, 2021 final paper submission
November 10-12, 2021 SPSC Symposium