



# 4<sup>th</sup> SPSC Symposium with 3<sup>rd</sup> 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 fourth edition of the Symposium on Security & Privacy in Speech Communication, this year combined with the [3rd VoicePrivacy Challenge](#), 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.

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. In keeping with the previous VoicePrivacy Challenge editions, the current edition focuses on voice anonymization. Participants are required to develop anonymization systems to suppress speaker identity while keeping the content and paralinguistic attributes intact. This edition focuses on preserving the emotional state, which is the key paralinguistic attribute in many real-world applications of voice anonymization. All the participants are encouraged to submit to the SPSC Symposium papers related to their challenge entry, as well as other scientific papers related to speaker anonymization and voice privacy. 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	
<p>Technical perspective include (but are not limited to):</p> <ul style="list-style-type: none"> <li>➤ <b>Privacy-preserving speech communication</b> <ul style="list-style-type: none"> <li>○ Speech Recognition and Processing</li> <li>○ Speech Perception, Production, and Acquisition</li> <li>○ Speech Synthesis</li> <li>○ Speech Coding and Enhancement</li> <li>○ Speaker and Language Identification</li> <li>○ Phonetics, Phonology, and Prosody</li> <li>○ Paralinguistics</li> </ul> </li> <li>➤ <b>Cybersecurity</b> <ul style="list-style-type: none"> <li>○ Privacy Engineering and Secure Computation</li> <li>○ Network Security and Adversarial Robustness</li> <li>○ Mobile Security</li> <li>○ Cryptography</li> <li>○ Biometrics</li> </ul> </li> <li>➤ <b>Machine Learning</b> <ul style="list-style-type: none"> <li>○ Federated Learning</li> <li>○ Disentangled Representations</li> <li>○ Differential Privacy</li> <li>○ Distributed Learning</li> </ul> </li> <li>➤ <b>Natural Language Processing</b> <ul style="list-style-type: none"> <li>○ Web as Corpus and Resources</li> <li>○ Tagging, Parsing and Document Analysis</li> <li>○ Discourse and Pragmatics</li> <li>○ Machine Translation</li> <li>○ Linguistic Theories and Psycholinguistics</li> <li>○ Inference of Semantics and Information Extraction</li> </ul> </li> </ul>	<p>Humanities and social perspective include (but are not limited to):</p> <ul style="list-style-type: none"> <li>➤ <b>Human-Computer Interfaces (Speech as Medium)</b> <ul style="list-style-type: none"> <li>○ Usable Security and Privacy</li> <li>○ Ubiquitous Computing</li> <li>○ Pervasive Computing and Communication</li> <li>○ Cognitive Science</li> </ul> </li> <li>➤ <b>Ethics &amp; Law</b> <ul style="list-style-type: none"> <li>○ Privacy and Data Protection</li> <li>○ Media and Communication</li> <li>○ Identity Management</li> <li>○ Electronic Mobile Commerce</li> <li>○ Data in Digital Media</li> </ul> </li> <li>➤ <b>Digital Humanities</b> <ul style="list-style-type: none"> <li>○ Acceptance and Trust Studies</li> <li>○ User Experience research on practice</li> <li>○ Co-development across disciplines</li> <li>○ Data-citizenship</li> <li>○ Future studies</li> <li>○ Situated Ethics</li> <li>○ STS perspectives</li> </ul> </li> </ul>

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 via the Link on the [SPSC Website](#). The working language of the conference is English, and papers must be written in English. All accepted papers will be published in the ISCA archive alongside Interspeech papers and related ISCA workshops.

#### Reviews:

At least three double-blind reviews will be 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:

IMPORTANT DATES AND DEADLINES	
Long paper (up to 8 pages, excl. references) submission deadline	<b>June 15, 2024</b>
Short papers (up to 4 pages incl. references) submission deadline	<b>June 15, 2024</b>
VoicePrivacy Challenge paper submission deadline (4 to 6 pages excl. references)	<b>June 15, 2024</b>
VoicePrivacy Challenge results and system description	<b>June 15, 2024</b>
Author notification (challenge paper)	July 5, 2024
Author notification (long and short)	July 30, 2024
Final (camera-ready) paper submission	<b>August 15, 2024</b>
Symposium	September 6, 2024

#### Venue:

The venue of the Symposium will be published soon, we are planning to have it co-located with Interspeech. Hybrid participation is possible

#### Sponsors:



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