

2025 IEEE International Conference on Acoustics, Speech, and Signal Processing (ICASSP 2025)

April 06 – 11, 2025

Hyderabad, India



Call for Signal Processing Grand Challenge (SPGC) Proposals

Proposal Submission deadline – July 8, 2024

Proposal Acceptance Notification – July 19, 2024

2–page Papers Due (by invitation only) – December 9, 2024

2–page Paper Acceptance Notification – December 30, 2024

Camera–ready 2–page Papers Due – January 13, 2025

OJ–SP Papers Due (by invitation only) – June 11, 2025

General Chairs

K V S Hari (IISc, India)

V John Mathews (Oregon State Univ., USA)

Technical Program Chairs

Bhaskar D Rao (UCSD, USA)

Isabel Trancoso (Univ. of Lisbon, Portugal)

Gaurav Sharma, (Univ. of Rochester, USA)

Neelesh B Mehta (IISc, India)

Grand Challenge Chairs

Prasanta Ghosh (IISc, India)

Anubha Gupta (IIT Delhi, India)

Sundeep Chopuri (IISc, India)

Ajit Bopardikar (U of Houston, USA)

Grand Challenge Committee Member

Devrim Unay (Izmir Democracy Univ., Turkey)

IEEE SPS CDC Committee Members

Jun Du (Univ. of Science and Technology of

China, China)

Aladine Chetouani (Univ. of Orleans, France)

Signal Processing Grand Challenge (SPGC) Proposal Submission Guidelines

Prospective SPGC organizers should include the following items (please limit it to 4 pages):

1. One–page call for participation;
2. Signal Processing Grand Challenge description;
3. Description of the dataset provided for training and evaluation, evaluation criteria and methodology, guidelines for participants, and the full challenge schedule including the submission deadline;
4. List of potential participants (indicate confirmed participants if applicable).

➤ Participation: Grand Challenge organizers should facilitate participation, communication, and impact. Grand Challenge organizers or their PhD students are not allowed to participate in the challenge they are organizing.

➤ Dataset: If applicable to the challenge, organizers should make the competition datasets available to the participants. Organizers are encouraged to provide at least one training dataset with both input and ground truth and one test dataset without the ground truth—the latter to be used for final assessment.

A secondary test set for evaluation, which is not available to participants, is also encouraged to highlight the generalizability of their approach. It is encouraged to also include a standard algorithm/model to serve as a baseline and for illustrative purposes.

➤ Evaluation: How the results are evaluated and ranked should be announced along with the challenge description. During the competition, the participants and organizers have to follow the challenge's criteria carefully. The evaluation methods should be unbiased and transparent to all participants. Regular update of ranking is also encouraged via management platforms such as Kaggle or Piazza. The provision of baseline approaches and evaluation metrics is encouraged. Each SPGC would have around 2–3 months to run the competition and rank/select winning teams.

➤ SPGC Papers: The challenge organizers will present an overview of their SPGC at ICASSP 2025 during a dedicated session and submit a 2–page paper for the ICASSP proceedings. The organizers will also be invited to submit an extended challenge overview paper to the IEEE Open Journal of Signal Processing (OJ–SP). Both papers should describe the challenge context, data sets, and the challenge results. In addition, the challenge organizers will invite upto five top–ranked submissions of their SPGC to submit a 2–page and present it at ICASSP 2025 (accepted papers will be published in the ICASSP proceedings. The review process is coordinated by the challenge organizers and the SPGC chairs). All 2–page papers should be covered by an ICASSP registration and should be presented in person at the conference. The teams that present their work at ICASSP in person are also invited to submit a full paper about their work to OJ–SP.

All submitted OJ–SP papers will undergo peer review by the OJ–SP Editorial Board, in collaboration with the IEEE SPS CDC committee and ICASSP–2025 GC Chairs. OJ–SP is a fully open–access publication of the IEEE Signal Processing Society, with a scope encompassing the full range of technical activities of the Society.

➤ SPGC Sessions: SPGC organizers should organize an SPGC session in the ICASSP 2025 program. This session should include an overview presentation of the organisers (including the announcement of the winners), followed by the SPGC paper presentations (oral or poster) of the top–5 participants, typically followed by a panel or open discussion.

The ICASSP SPGCs are supported by the SPS Challenges and Data Collections Committee. For more information about the SPS CDC and examples of previous SPS Challenges, visit their [website](#).

Submission Instructions

All proposals should be submitted through this link



Questions regarding Challenge Sessions may be directed to:
challenges@2025.ieeeicassp.org