# IEEE Signal Processing Society Student Services Committee

## **IEEE Signal Processing Cup (SP Cup)**

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After the success of past editions of the IEEE Signal Processing Cup (SP Cup), the IEEE Signal Processing Society (SPS) is launching its tenth edition of the IEEE SP Cup at ICASSP 2023. The goal of the IEEE SP Cup is to provide undergraduate students with an opportunity to form teams and work together to solve a challenging and interesting real-world problem in the field of signal processing.

Below are the proposed activities and schedule for the organization of the IEEE SP Cup, which will be held in conjunction with ICASSP 2023.

### 1. SP Cup Proposals from the SPS Technical Committees

Open proposal submission: 14 November 2022

Submission deadline (Proposals sent to TC for endorsement): 6 January 2023

Submission deadline (TC submits endorsed proposals): 13 January 2023

Each SPS Technical Committee (TC) can submit or endorse a proposal, which should include:

- Details of a challenging problem;
- Assessment criteria:
- Description of the required data to process;
- Organizers;
- Timeline;
- Other pertinent information.

#### 2. Selection of the successful SP Cup proposal

TC Chairs vote by 18-24 January 2023

Each TC Chair will be asked to evaluate and vote on each received proposal regarding the following criteria:

- A. Overall quality of the proposal:
- B. Originality of the topic:
- C. Feasibility of the challenge;
- D. Appropriateness for ICASSP;
- E. Quality of the proposing team;
- F. Technical Committee endorsement.

The vote will be coordinated by the Student Services Committee. Each TC Chair MUST vote for one proposal, but TC Chairs cannot vote for their own proposals. The proposal selection result

will be announced on **27 January 2023**. The selected proposal organizers will be required to review and sign the <u>IEEE Principles of Business Conduct Compliance Certificate and Conflict of Interest Disclosure Statement form.</u>

By **7 February 2023**, the selected organizing team will develop a webpage dedicated to the competition for the IEEE SP Cup held in conjunction with ICASSP 2023. All other details, including the data to be used in the challenge, a development platform, and evaluation criteria should also be available by **7 February 2023**.

### 3. Publicizing the Call for Participation of the SP Cup Competition

Dates of circulation: 13 February 2023

The Call for Participation will be publicized to the SPS Membership via email, SPS and ICASSP websites, and social media.

# **4. Submissions from Participating Teams** (tentative dates, will be finalized by TC organizers)

Submissions deadline: 17 March 2023 (suggested)

Each team must be composed of: (i) One faculty member (the Supervisor); (ii) At most one graduate student (the Tutor), and; (iii) At least 3 but no more than 10 undergraduates. At least three of the undergraduate team members must be SPS student members.

All the team submissions must be received by **17 March 2023**. Each submission should include a report, in the form of an IEEE conference paper, up to 6 pages, on the technical details of the methods used and the results, as well as the programs developed. The TC who wins the call-for-proposal will evaluate the submissions.

Announcement of the best 3 teams: **31 March 2023** (suggested)

Please Note: This deadline <u>cannot</u> be extended after **14 April 2023** as teams need a minimum of 7 weeks to obtain visas and arrange travel, but more time is ideal. Inability to obtain visas can result in a team presenting remotely and a hybrid-style event, which is highly discouraged unless it is the only option.

## 5. Final Competition at ICASSP 2023 in Greece

Conference dates: 4-9 June 2023

A maximum of three members from each of the three finalist teams will receive travel support to attend ICASSP 2023 for the final competition. Additional team members are also welcome to attend, but they will not be provided with any travel support. In addition, those team members who will not be presenting a paper at the conference will be offered a complimentary ICASSP registration. The teams are required to present the technical details regarding how they solve the challenging problem and demonstrate their results at the IEEE SP Cup session.

A Judging Panel (composed by the sponsoring TC) will be set up to select the final ranking of the teams at the conference. All judging panel members must review, acknowledge, and sign the IEEE Principles of Business Conduct Compliance Certificate and Conflict of Interest

<u>Disclosure Statement form</u>. Any conflict of interest concerns should be disclosed to the IEEE SP Cup organizer and SPS staff lead.

### **Budget:**

Each finalist team will receive one framed certificate and prize money for their final ranking, noted below. The awarded prize amount is typically divided equally among the team members. Each team may select three eligible undergraduate student team members to represent the team and present their work. Each team member will receive:

- Complimentary registration to ICASSP 2023
- Attendance to the Student Job Fair and Luncheon (registration required, based on available event capacity)
- In addition, the three undergraduate team members selected to present the team's work will receive:
  - Travel support to attend the conference and participate in the live competition of up to \$1,200 for continental travel and \$1,700 for intercontinental travel.
  - Invited to attend the Conference Banquet (based on availability)

The prizes offered to the three teams in the final competition are suggested to be as follows:

First place winner (Grand Prize): \$5,000

Second place winner (First Runner-up): \$2,500

Third place winner (Second Runner-up): \$1,500

#### **Contact point:**

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