Call for Proposals

2027 Video and Image Processing Cup

Official document of the 2027 Video and Image Processing Cup (VIP Cup) Call for Proposals

1. Introduction

After the success of past editions of the IEEE Video and Image Processing Cup (VIP Cup) (https://signalprocessingsociety.org/community-involvement/video-image-processing-cup), the Signal Processing Society is launching another edition. The goal of the VIP 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 video and image processing and compete for the US$5,000 grand prize.

2. Timeline for the Organization of the VIP Cup

A high-level overview of the competition timeline and tasks:

- **Call for Proposal Submission**
- **Selection of successful VIP Cup Proposal**
- **Meeting held between Organizers and SPS Staff**
- **Publicizing the Call for Participation**
- **Team Registration**
- **Team Submission**
- **Selection of 3 Finalist Teams**
- **Final Competition at ICIP**
- **Invitation to write a column paper in the Signal Processing Magazine about the competition**

3. VIP Cup Proposal Submission

➢ **Submission Date: 18 December 2026** ***(Submit via proposal to the SPS Competitions - Proposals Submission Form here)***

SP Technical Committee Endorsement

Any Signal Processing Society member can submit a proposal, which should include some details of a challenging problem, the assessment criteria, a description of the required data to process, etc.

All proposals must be endorsed by a Technical Committee upon submitting the proposal. You can find the Technical Committees and their contacts at the following link: https://signalprocessingsociety.org/community-involvement/technical-committees

How To Submit A Proposal

All proposals must be submitted to the SPS Competitions - Proposals Submission Form by the deadline. To do so, complete the short proposal submission form here: **SPS Competitions - Proposals Submission Form**

4. Selection of the successful VIP Cup proposal

The proposals must be evaluated during the voting period, and each Technical Committee Chair and Technical Working Group Chair MUST vote for one proposal. TC/TWG Chairs cannot vote for their own proposals. The vote will be coordinated by the Student Services Committee. Following the voting period, the selection result will be announced.

➢ **Voting Period: 4-15 January 2027**

➢ **Proposal Selection Announcement: 18 January 2027**

5. Publicizing the Competition's Call for Participation

➢ **Webpage Development Deadline: 25 January 2027**

➢ **Official Document Completion Deadline: 1 February 2027**

➢ **Call for Participation Period: 15 February - 12 March 2027**

Organizers must develop a webpage dedicated to the competition

By the deadline, the organizers whose proposal is selected will develop a webpage dedicated to the competition. All details, including the data to be used in the challenge and a development platform, should be available by the Webpage Development Deadline listed above. The website should also function as a challenge organizing platform which allows for questions from the participants to the organizers and open general conversations about the competition, similar to (but not limited to) Kaggle/Piazza/Codalab/etc. The Call-for-Participation should be publicized to all relevant parties in universities to set up teams and participate in the VIP Cup.

Organizers must work with SPS Staff to create an Official Document

By the deadline, an Official Document must be finalized so the competition can be publicized. The official document includes all details of the competition including the initial problem, judging criteria, team eligibility, and all aspects of the competition. The competition organizers will work with the SPS Staff to create a finalized version of the Official Document.

Publicizing the Competition

The Society will publicize the competition on the respective competition page of the SPS website (SP Cup / VIP Cup) as well as the respective conference website. The organizers should also work to distribute the competition information and encourage participation at a local level.

6. Team Registration and Submission of Work

- **Team Registration Deadline: 12 March 2027**
- **Team Work Submission Deadline: 09 July 2027***
- **Selection of 3 Finalist Teams: 12 July - 23 July 2027**
- **Announcement of the 3 Finalist Teams: 23 July 2027**

All teams must register through the Society's official competition platform in order to participate in the competition. The registration link will be available on the SPS website and in the Official Document. The organizers may require additional registration through the website they build; however, a team will not be able to participate in the competition or receive prizes and travel support if they are not registered to the official competition platform. Teams must also submit their official work to the official competition platform.

**This deadline is meant for the submission of the last phase before the in-person final. If additional phases are required, they should be scheduled before this deadline.*

Team Registration

All teams must be registered through the official team registration platform by the Team Registration Deadline in order to participate in the competition. Teams will not be able to change team composition after the deadline.

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 either IEEE Signal Processing Society (SPS) members or SPS student members. Full details on team formation and eligibility can be located on the SP Cup / VIP Cup website, respectively.

Team Work Submission

All work that is being submitted for evaluation in the competition must be submitted to the official registration system. 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.

Announcement of 3 finalist teams

The organizers of the selected proposal will evaluate the team submissions. By the Announcement of 3 Finalist Teams deadline, the best 3 teams will be identified to participate in a session for the final competition, to be held at ICASSP (SP Cup) or ICIP (VIP Cup).

Please note: SPS Staff must verify the eligibility of the final three teams before they can be announced as finalists. The organizers are to share the classifications of all participating teams, ranked in order, with the SPS staff so that eligibility can be verified prior to the teams being notified and any announcements.

7. Final Round at ICIP

It is required that the finalist teams participate in-person at the conference for the final round and present their work. However, the organizers are encouraged to ask the teams to create a

short video to promote their solution that should be evaluated at the final round if the team is unable to participate in-person for visa reasons.

The judging for the final phase of the competition held live at the conference will be based on six equally weighted criteria. Each of the three finalist teams will be scored on the six criteria and the team with the highest score will place 1st, the team with the second highest score will place 2nd, and the team with the third highest score will place 3rd in the competition. The six criteria are:

1. Innovation of the proposed approach & thoroughness of experiments
2. Performance on the validation set
3. Performance on the test set
4. Model and time complexity
5. Quality and clarity of the final report
6. Quality and clarity of the presentation

The final winning rankings will be based on the weighted points awarded from the six criteria during judge deliberations at the end of the competition. Final rankings are ultimately decided by the judges, at their discretion.

Judges & Conflict of Interest

The organizing committee must select the judges who will evaluate the teams' work. Any judge or team supervisor participating in the competition must sign a Conflict-of-Interest Form agreeing to the following key points. Full information is on the Conflict-of-Interest Form.

Conflict of Interest concerns shall be disclosed and addressed in accordance with IEEE Policies 9.9 A, B. and C and IEEE Policy 4.4.H. - Eligibility and Process Limitations. Judges involved at any stage of the team rankings/scoring process for an SP competition shall be ineligible to judge/vote on the outcome of team rankings for the competition in which the conflict exists. Any real and perceived conflict of interest shall be avoided. Conflict of interest shall be defined as any relationships, professional or otherwise, that can affect impartiality and objectivity. Such relationships include, but are not limited to the below list. This list also applies

a. faculty supervisor/student,

b. faculty supervisor/post-doc,

c. manager/employee,

d. shared institutional affiliations,

e. recent (less than five years) research collaborations or joint authorship,

f. judge/team supervisor

g. In the case of a conflict of interest, the judge should neither listen to nor speak in the discussion and should not vote on the team scoring/ranking process.

In our SPS Policies and Procedures, **the IEEE Conflict of Interest form must be completed before participating in the competition**. The Conflict of Interest form can be completed at the following link: https://www.ieee.org/about/compliance/conflict-ofinterest/coiandpob.html

8. Important Dates

- ➢ **Call for Proposal Submission Deadline: 18 December 2026 (Submit proposal here)**
- ➢ Voting Period: 4-15 January 2027
- ➢ Selection of successful SP Cup Proposal: 18 January 2027
- ➢ Webpage Development Deadline: 25 January 2027
- ➢ Official Document Completion Deadline: 1 February 2027
- ➢ Publicizing Competition /Call for Participation: 15 February - 12 March 2027
- ➢ Call for Participation Period: 15 February - 12 March 2027
- ➢ Team Registration Deadline: 12 March 2027
- ➢ Team Work Submission Period: 15 March 2027 - 09 July 2027
- ➢ Team Work Submission Deadline: 09 July 2027
- ➢ Selection of 3 Finalist Teams: 12 July - 23 July 2027
- ➢ Announcement of 3 Finalist Teams: 23 July 2027
- ➢ Presentation Soft Skills Training for Finalists: TBD
- ➢ Final Competition at ICIP: 29 November–3 December 2027

9. Reporting Requirements

After completion of the competition, the organizers must create a report detailing the overall competition. At minimum, it should include information such as the general description of the competition process, the management of the competition steps, number of participants, relevant issues, notes regarding the students participation, and eventual feedback. Additional information if welcomed.

10. Contacts and Resources

- Submit proposals via email to sp-competitions@listserv.ieee.org

- Forms and templates related to the SPS Competitions can be found in the SPS Competition Resources for Organizers DropBox folder
- Having trouble obtaining endorsement from a Technical Committee? Reach out to the Director-Student Services, Lucas Thomaz at lucas.thomaz@ieee.org
- You can view past competitions here SP Cup / VIP Cup