



IEEE International “Sensors and Measurement” Student Contest

IEEE IS&M-SC



Announcement and Call for participation

About IEEE IS&M-SC

Welcome to the IEEE International Sensors and Measurement Systems Student Contest (IEEE IS&M-SC)!

This international competition addresses Master’s and Ph.D. students and aims to stimulate submissions of innovative ideas for applications in the area of sensors and measurement systems.

The 2017-2018 IEEE International Contest of Sensors and Measurement Systems is jointly promoted and organized by IEEE Instrumentation and Measurement Society (IMS) and IEEE Sensors Council (SC) and is sponsored by STMicroelectronics. STMicroelectronics will provide to each team selected one SensorTile® kit plus two SensorTile “Core System” (www.st.com/sensortile), which will be the common platform to be used to develop the proposed project.

Participating members of teams selected will develop their application in their University laboratories and will have to attend one of the live demonstration sessions that are planned in three different venues co-located with international conferences in the areas of sensors and measurement systems.

For each demonstration event, two awards will be assigned (1st and 2nd place) for the best “Sensors and Measurement Systems” application.

Venues for Live Demo Sessions

Three venues have been selected for the demonstration phase of this first edition of the IEEE S&M- SC:

- IEEE SENSORS Conference, Oct. 29 – Nov. 01 2017, Glasgow, UK
- IEEE Sensor Application Symposium, March 12-14 2018, Seoul, South Korea
- IEEE International Instrumentation and Measurement Technology Conference (I²MTC), May 12-15 2018, Houston, TX, USA

Preparation and submission of proposals

Project technical proposal (maximum three pages) must include the following:

- the significance of the specific application that the team is aiming to address
- the technical description of the “Sensors and Measurement Systems” project that is intended to be developed
- the measurement methodology that is intended to be implemented
- the intended use of the STMicroelectronics Sensor Tile® (www.st.com/sensortile) platform and how the proposed project exploits the potentials of the sensor platform
- the demo that is intended to be performed at the selected conference venue

Participating teams will include a maximum of four student members and must identify a faculty member at their University who will act as tutor and point of contact with respect to the organizing committee.

In addition to the three-page technical proposal, the submission package must include:

- a one-page short resume of all the team members
- a one-page presentation letter, signed by the tutor, in which it is confirmed that the University laboratories will be available for the development of the project
- the address and contact info of the tutor who will be the point of contact with the contest organization committee (this is the address where the SensorTile® platform will be shipped if the team is selected)
- a letter in which the team members state the selected venue (among those proposed in this call for participation) for the live demonstration of the sensors and measurement systems project and declare that they will attend the event. At least one team member must attend the event.

The IEEE IS&M-SC organization committee is unable to cover the travel and subsistence expenses for the contest participants; therefore members of the teams will have to independently secure funding for this.

Students participating in the live demonstration session of the IEEE IS&M-SC will receive a free one-day pass for the conference; a reduced student registration fee will be available for those participants interested in attending the whole conference but not presenting papers.

Participation instructions

1. Master’s and Ph.D. students are welcome to participate to IEEE IS&M-SC.
2. Students must participate in teams; each team being formed by 2-4 members (maximum of 4).

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3. Each participating team will identify a professor who will write a letter of endorsement and will act as tutor and point of contact with respect to the **IEEE IS&M-SC** organizing committee.
4. Three venues have been selected for this first year of the IEEE International Sensor and Measurement Systems Student Contest. Participating teams must indicate which is their preferred venue and will have to commit to attend the demonstration session at the selected venue.
5. Each team must submit a proposal of the Sensors or Measurement System project that is intended to be developed and that will be demonstrated at the selected venue.
6. The project must be based on a platform made by using one STMicroelectronics Sensor Tile® kit plus two SensorTile “Core System” (www.st.com/sensortile). Additional components or boards developed for the specific project may be also used.
7. Proposals must be submitted before one of the three deadlines given below.
8. After each submission deadline, a maximum of 20 proposals will be selected for the live demonstration at each conference venue.
9. Teams selected to participate will receive the STMicroelectronics SensorTile® platform (including two Core boards), and these items will be shipped to the professor who is acting as the tutor.
10. Team members will develop their project at their home University laboratories and will participate in the live demonstration session at the conference which they have selected to attend.
11. At each live demonstration event, the two best projects (selected by an ad-hoc jury) will receive an IEEE Award. All participating teams will receive a Participation Certificate signed by the Presidents of the I&M Society and the Sensors Council
12. Each team can participate in only one of the three live demonstration events.

How to submit

Submission package (one single pdf file including the following):

- technical project proposal
- names, short CVs and affiliation of the team members
- signed letter of commitment to attend the live demo session at the selected venue
- letter of endorsement for the project signed by one Faculty member, which must include a statement that the team will have access to the University laboratory facilities to develop the project and the address to where the Sensor Tile platform must be shipped)

The submission package should be addressed to Prof. Salvatore Baglio, chair of the organization committee of **IEEE IS&M-SC** (salvatore.baglio@unict.it) with cc to Judy Scharmann (j.scharmann@conferencecatalysts.com).

IEEE Awards

Two IEEE Awards will be given to the two best Sensor and Measurement Systems applications at each one of the planned Demo Sessions.

1st Prize: 2,500.00 USD

2nd Prize: 1,500.00 USD

Organizing IEEE Bodies

- IEEE Instrumentation and Measurement Society
- IEEE Sensors Council

Industry Sponsor

- STMicroelectronics

Organizing and Proposal Selection Committee

Chair

Prof. Salvatore Baglio, University of Catania, Catania, Italy

salvatore.baglio@unict.it

Co-chairs IEEE Sensor Council

Prof. Deepak Uttamchandani, University of Strathclyde, Glasgow, UK

d.uttamchandani@strath.ac.uk

Prof. Yu-Cheng Lin, National Cheng Kung University, Tainan City, Taiwan

yuclin@mail.ncku.edu.tw

Co-chairs IEEE Instrumentation and Measurement Society

Prof. Sergio Rapuano, Università del Sannio, Benevento, Italy

rapuano@unisannio.it

Dr. Chi Hung Hwang, Instrument Technology Research Centre, NARLabs, Hsinchu, Taiwan

chhwang@itrc.narl.org.tw

Deadlines and important dates

Submission of proposals is now open with the following deadlines:

- **May 30th 2017**
 - Proposals submission deadline for those who intend to participate in the live demonstration session at IEEE Sensors in Glasgow, October 30th - November 2nd 2017.
 - Teams invited to participate will be notified by June 10th 2017.
- **October 5th 2017**
 - Proposals submission deadline for those who intend to participate in the live demonstration session at IEEE SAS 2018 in Seoul, Korea, March 12-14, 2018.
 - Teams invited to participate will be notified by October 15th 2017.
- **November 10th 2017**
 - Proposals submission deadline for those who intend to participate in the live demonstration session at IEEE I²MTC 2018 in Houston, TX, USA, May 12-15 2018.
 - Teams invited to participate will be notified by November 20th 2017.

