

## IEEE International “Sensors and Measurement” Student Contest

### IEEE IS&M-SC

*Third Edition - 2019-2020*



## Announcement and Call for Participation

Welcome to the **third edition** of the **IEEE International Sensors and Measurement Systems Student Contest!**

This international competition addresses teams of Ph.D., Master and advanced undergraduates (particularly those in fast-track, dual BS/MS, Master programs) students and aims to stimulate innovative ideas for applications in the area of sensors and measurement systems.

The 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** who will provide one **SensorTile.box®** ([https://www.st.com/content/st\\_com/en/products/evaluation-tools/product-evaluation-tools/mems-motion-sensor-eval-boards/steval-mksbox1v1.html#overview](https://www.st.com/content/st_com/en/products/evaluation-tools/product-evaluation-tools/mems-motion-sensor-eval-boards/steval-mksbox1v1.html#overview)) to each team admitted to the competition. This multisensory device will be the common technology platform of the contest.

Those willing to participate will have to submit a proposal, will have to develop their application at their University laboratories and attend one of the scheduled live demonstration sessions co-located with international conferences in the areas of sensors and instrumentation and measurement. For each demonstration event, two awards will be assigned (1<sup>st</sup> and 2<sup>nd</sup> place) for the best “Sensors and Measurement Systems” application.

The IEEE IS&M-SC participants will have to autonomously

secure funding for travel and living expenses to attend the demo session. Students participating in the live demonstration session of the IEEE IS&M-SC will receive a free one-day pass for the conference while for those interested in attending the whole conference student registration rate applies.

### Venues for Live Demo Sessions

- **IEEE SENSORS Conference 2019**, Oct. 27-30 2019, Montreal, Canada
- **IEEE International Instrumentation and Measurement Technology Conference (I<sup>2</sup>MTC) 2020**, May 25-28 2020, Dubrovnik, Croatia

### Proposal Preparation and Submission

Technical proposal (maximum three pages) must include:

- the technical description of the project
- the significance of the application proposed
- the measurement methodology that will be implemented
- the use planned for the STMicroelectronics SensorTile.box® kit and how the proposal exploits its potentials
- the demo planned with a detailed list of goals

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

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

- one-page short resume of the team members (one page for the whole team)
- one-page presentation letter, signed by the mentor, to also confirm the availability of the University laboratories for the development of the project (including the address and contact info of the mentor, this is the address where the SensorTile.box® will be shipped if the team is selected)
- a letter of commitment of the team members to attend the live demo session at the chosen venue on their own funds.

### How to Submit

Submission package, one single pdf file including:

- technical project proposal (max three pages)
- names, short CVs and affiliation of the team members (one page in total)
- 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 acting as mentor.

The submission package should be addressed to Ms Brooke Johnson ([bjohnson@conferencecatalysts.com](mailto:bjohnson@conferencecatalysts.com)).

### Proposals Selection Criteria

The organizing committee will evaluate the proposals submitted based on the following criteria:

- scientific excellence - novelty
- potential impact - quality of the planned demo

Teams will be notified about the evaluation outcome shortly after the proposal submission deadline.

### Demonstration Evaluation Criteria

An ad-hoc commission will review the live demos and will provide evaluation based on:

- Adherence to the proposal submitted
- Technical excellence of demo
- Quality of demo presentation

Only those demos that will successfully demonstrate at least a large part of the goals stated in the proposal will be eligible for the award.

**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: 2,000.00 USD      2nd Prize: 1,000.00 USD**

### Organizing IEEE Bodies

- IEEE Instrumentation and Measurement Society
- IEEE Sensors Council

### Industry Sponsor

- STMicroelectronics

### Organizing and Proposal Selection Committee

#### General co-chairs

Prof. Salvatore Baglio, University of Catania, Catania, Italy,  
([salvatore.baglio@unict.it](mailto:salvatore.baglio@unict.it))

Prof. Mike McShane, Texas A&M University, College Station, TX,  
USA, ([mcshane@tamu.edu](mailto:mcshane@tamu.edu))

### Submission Deadlines

#### June 21<sup>th</sup> 2019

For live demonstration at **IEEE SENSORS Conference**, Oct. 27-30 2019, Montreal, Canada

#### December 20<sup>th</sup> 2019

For live demonstration at **IEEE International Instrumentation and Measurement Technology Conference (I2MTC) 2020**, May 25-28 2020, Dubrovnik, Croatia

