







The following tutorials were delivered:

- "AI-managed Digitizers for Cognitive Radio" by José M. de la Rosa and Luis Camuñas-Mesa;
- "Fault Tolerant Techniques for Integrated Circuits" by Fernanda Lima Kastensmidt;
- "Systematic Design of Analog CMOS Circuits Using Lookup Tables" by Paul G. A. Jespers;
- "Wireless Power Transfer: From Fundamentals to Applications" by Pablo Pérez-Nicoli, Fernando Silveira, and Maysam Ghovanloo.

Regular LASCAS program included **13 sessions** with **68** presented papers. IBERCHIP program was present-

ed in **three sessions** with the total of **19** papers, while PRIME-LA had **one** session with the total of **4** papers.

Papers were presented in English, Spanish, and Portuguese.

Proceedings of LASCAS will be published by IEEE and will be available on the IEEE Xplore. As LASCAS is a CASS flagship event, best ranked papers from the conference will be invited to submit extended versions to IEEE Transactions on Circuits and Systems I: Regular papers.

The 13th LASCAS conference will be held in Puerto Varas, Chile, in February 2022.

2019–2020 Student Design Competition

he final competing projects in the 2019–2020 Student Design Competition were:

- 1) *Curupira: A Real-Time Fire Prediction and Detection System*, from Centro de Informática, Universidade Federal de Pernambuco (Brazil). This project created a wireless sensor node for environmental monitoring to address wildfires.
- 2) Application for Parkinson's Disease Detection, from Laboratory on Smart Integrated Systems (SIS-LAB), University of Engineering and Technology (UET)—Vietnam National University (VNU). The team designed and tested an actively controlled spoon to reduce the effects of Parkinsonian tremors during eating.

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- 3) Robotic Control of Tick Populations, from Virginia Military Institute, Department of Electrical & Computer Engineering (USA). The students developed a semi-autonomous robot to combat ticks while reducing the environmental impact of pesticides.
- 4) PCCR Based Wheelchair Control System, from Information Science and Engineering College of Southeast University and Chien-Shiung Wu College of Southeast University (China). The team innovated an assistive control system to enable streamlined operation of a wheelchair.
- 5) Smart Magnetic Biosensor for Malaria Detection, from University of Glasgow (UK). The project focused on a new portable technique for analyzing biological samples at the point of care.

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Source: CASS SDC organization committee