



IEEE SoutheastCon 2014 Technical Program Overview

IEEE region conferences generally are about IEEE region business and student-oriented functions. However, IEEE SoutheastCon 2014 incorporates a peer-reviewed technical research paper program that draws paper submissions and attendees not only from the USA Southeast region, but also from other regions and even other countries. That technical program is fully integrated so that, for example, students primarily involved in other parts of the conference are welcome, and encouraged, to also attend technical paper sessions.

Most conferences accept papers only within a very narrow technical field. In contrast, IEEE SoutheastCon welcomes submissions in any field relevant to any aspect of electrical engineering. This is a venue in which quality research can be seen by, and discussed with, people spanning an exceptionally diverse range of interests and backgrounds. Many of the accepted papers represent work that either could be useful in various fields or simply did not seem to be a good fit for any conference with a narrow technical focus.

Research could be submitted as a short paper for informal presentation during the poster session, a regular paper for formal 20-minute oral presentation, or a regular paper to be given both types of presentation. The expectations about completeness and significance of the work were explicitly lower for a short paper than for a regular paper, as short papers and poster presentations were encouraged for preliminary findings and work in progress.

The reviewing process included extensive plagiarism checks on all submissions using CrossCheck and other tools, but the primary issue in reviewing for IEEE SoutheastCon 2014 was the diversity of topics and the problem of finding qualified reviewers for every paper – over 260 people participated in the reviewing process. Our stated goal was to have 3 reviews for each paper, but our actual goal was to

have a set of reviews providing high confidence that each paper had (or did not have) content worthy of publication. It took as many as 5 reviews to reach that level of confidence for some papers. 101 regular and 26 short papers were accepted and listed in the conference technical program.

Four awards were presented at the conference banquet. Based on paper review scores, the best regular paper was *Segmentation of Cracks in X-ray CT Images of Tested Macroporous Plaster Specimens*, by Ujjal Bhowmik, Nick Hudyma, Patrick Kreidl, and Alan Harris; the best short paper was *Downlink “feedback” Channel Design for LTE Femtocell Inter-cell Interference Mitigation*, by Xin Zheng, and Yinchao Chen. Based on attendee voting at the conference, the best 20-minute formal oral presentation was *Measurement and Characterization of Fluid Flow Profile using Electrical Capacitance Tomography*, by Brook Abegaz, Satish Mahajan, and Nathan Dick; the best poster presentation was *Design and Implementation of an Open-Source Wireless Sensor Network Development Platform*, by Sam Shue.

In sum, IEEE SoutheastCon 2014’s technical program tried to fill Lexington, KY with a very diverse set of good-quality technical papers and highly interactive attendees – I think it worked.

*Professor Henry G. Dietz
(University of Kentucky, Lexington, KY),
Technical Program Chair,
IEEE SoutheastCon 2014*

