

# Enhancing Conference Papers for Submission to *IEEE Transactions on Consumer Electronics*

Participating in any of the IEEE Consumer Electronics (CE) Society conferences is an extremely rewarding experience—you can learn the latest research ideas and increase your networking. Many of the CE Society conferences are formed when researchers present their latest research, which is detailed in their accepted paper. All of the conference papers are collated into a conference digest (or proceedings), possibly in CD or print form, but always uploaded to IEEE Xplore for prosperity enabling future researchers to take the next step. Often the discussions that occur after a paper has been presented are very useful for creating peer feedback to improve future papers.

Many authors wish to convert their conference paper to a full journal article in *IEEE Transactions on Consumer Electronics (T-CE)*, and I am often asked about this process. I have decided to write this article with the aim of elaborating on the process of enhancing conference papers and to offer some guidance to authors. Prospective authors might like to know that a further article is planned for *IEEE Consumer Electronics Magazine* on the topic of writing good journal papers.

## INITIAL CONSIDERATIONS

### PRESENT NEW INFORMATION

*T-CE* considers papers that are either new contributions (termed “contributed” papers) or significantly enhanced papers

derived from any IEEE CE Society-owned conference (termed “enhanced” papers). While the May issue of *T-CE* is reserved for enhanced papers derived from presented papers at the previous IEEE International Conference on Consumer Electronics (ICCE), enhanced papers derived from all of the other IEEE CE Society-owned conferences can also be submitted as normal contribution papers to any of the other three issues per year.

### WRITE TO THE STANDARD EXPECTED OF A FULL JOURNAL ARTICLE

Please consider that the purpose of submitting an enhanced paper to *T-CE* is not to get two publications out of one. Submitting enhanced conference papers is not a back door that enables easy publication. However, authors often find it useful to test out ideas in a conference paper environment before compiling a full journal paper. Enhanced papers are, well, enhanced. They need to present significantly enhanced information to the conference paper at the level of a normal contributed archival journal paper. The enhancement may be in the form of more significant results, further proven applications, significant background detail, or deeper derivations resulting in new knowledge. Often the enhancement is in the form of a deeper literature search, deeper rigorous analysis section, and/or significantly wider reaching results. The key to understanding the requirements is to realize that the enhanced paper must add new knowledge; otherwise, it's the same paper and

will be rejected for lacking state-of-the-art information.

## SPECIFIC CONSIDERATIONS

### READ THE INSTRUCTIONS AND USE THE CORRECT TEMPLATE

All of the CE Society conferences are different in the nature of their topics and also in the nature of the paper. The enhanced paper must meet the publication requirements of *T-CE*, whichever conference from which the enhanced paper is derived. Authors are advised to read the *T-CE* instructions for authors before writing their enhanced paper. Authors are advised against modifying their conference paper's word processing file as it is probably not the correct template for *T-CE*. Instead, authors should start writing their enhanced paper from the beginning using the *T-CE* template file. It sounds really obvious to say “read the instructions,” but far too many papers are rejected because authors have not followed simple instructions. When the enhanced paper is written, reread the instructions and cross-check to make sure that your paper is compliant.

### AVOID SELF-PLAGIARISM BY REWRITING SECTIONS, PARAPHRASING, AND CITING

Authors should be wary of unintended plagiarism. Generally plagiarism is understood as the presentation of others' work as your own, but self-plagiarism can inadvertently creep in. All *T-CE* papers are checked for plagiarism using IEEE-approved professional tools, and if

a significant proportion of a paper has been published before, the paper will be rejected. It is not in the scope of this document to discuss the wrongs of deliberate plagiarism, but unintended self-plagiarism needs to be avoided. This can be achieved by paraphrasing and citing the original conference paper. My advice in writing an enhanced paper is to rewrite the paper significantly rather than rehashing the actual conference paper document, use new text and phrases, and make sure to cite the previous work rather than replicating the previous text. Remember, an enhanced paper is a different paper than the previous conference paper and should stand on its own merits.

#### **DEVOTE ENOUGH TIME TO WRITE THE ENHANCED PAPER**

Some CE Society conferences, primarily ICCE, require a small two-page digest paper; you cannot fit much into two

pages! In this case, it is significantly easier to present enhancement (ideas and text) to a full journal paper compared to papers from the conferences that have perhaps six or even more pages. I would advise authors of full conference papers to devote just as much time to developing their enhanced paper as it would take to write the full paper from a two-page digest paper. In that time, the authors must keep up to date with the literature and add modern references as appropriate.

The title of the enhanced paper should remain the same as the conference paper. The authors should also remain the same; at least include all the authors of the conference paper in the enhanced paper. Remember to submit a new copyright transfer form.

#### **CONCLUSIONS**

*T-CE* wants excellent papers. It is precisely for this reason that the enhanced

ICCE papers have been delayed from the February *T-CE* issue to the May issue, allowing authors time to reflect and improve their papers. Papers from other conferences do not have this time pressure, but the papers can still be enhanced as long as they meet the *T-CE* requirements and scope. Read the instructions and follow the advice above. Read past *T-CE* issues to understand the scope and expectations of papers. Devote enough time to enhancing your conference paper to the expected level of a normal contributed journal article.

Keep an eye out for my next article on writing good papers for *T-CE*.

—R. Simon Sherratt  
Editor-in-Chief  
*IEEE Transactions on  
Consumer Electronics*

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## Distinguished Lecturer Talk in Hong Kong and Taipei

One of our Distinguished Lecturers (DLs), Joe Decuir, gave two very well-received talks 10 June in Hong Kong and 11 June in Taipei. The title of the talks was “Getting to Low Energy in Consumer Devices: Bluetooth (BT) 4.0 Low Energy Standard and Its Applications.” This was an update of the very successful DL Talk Joe gave in Bangalore on 21 March 2013.

The talk supported the assertion that Bluetooth has been reinvented. BT 4.0, also known as “Bluetooth Smart,” enables many new applications that require a radio that is simple, secure,

and everywhere. Joe showed how it can be simple—much simpler than traditional BT, ZigBee, or Wi-Fi. He also highlighted the AES-128 encryption and went on to discuss how it is already “everywhere”: last year, 370 million smartphones were sold “Smart Ready.” This year, the majority of smartphones will include BT 4.0. The worldwide market for peripherals is at the tipping point, with maybe 100 million units this year. Joe demonstrated devices that use BT 4.0 for home health, for example. Next year, the number of BT 4.0 devices should reach one billion.

The talks ran overtime, with many questions from the floor, which Joe answered patiently and concisely. The Society will be uploading a video of



Joe Decuir receives a souvenir from Robin Bradbeer, chair, Hong Kong Chapter.

the Hong Kong talk as well as the corresponding PowerPoint presentation to the Web site.

The IEEE Consumer Electronics Society DL Program has seven DLs. They are available to give talks to any