PRESIDENT'S MESSAGE

The Scoop on Plagiarism

The topic of plagiarism and related issues have received increasing visibility and significance recently. Within the past year, it has been reported that very significant percentages of students have admitted they have plagiarized the work of others, graduate students have been expelled, and university faculty fired. This is thus a topic of great importance to all researchers. The IEEE has recently updated and clarified its policies with respect to plagiarism and the related issue of multiple submissions. The 27 March issue of *The Institute* contained a nice article describing the problem and introducing the IEEE penalties for violations. The IEEE Web site, under publications, contains an article giving a guideline to the handling allegations of plagiarism and related violations. Less has been said, however, about how referencing of the work of one's self and others should be handled. In this note, I want to address this latter matter, reuse of previously published material, especially reuse of material from an author's previously published papers. These issues are often misunderstood not only by authors, but reviewers as well.

One of the most common questions that arises is the republication of one's conference paper in a journal. Researchers' views vary on the propriety of this, and the customs vary from field to field. I have seen reviewers automatically reject such papers on the grounds that the paper has already been published. However, this is not necessarily valid. The IEEE gives the editors–in–chief (EICs) discretion regarding republication. As stated in Section 8.1.7 of the *Publication, Services and Products Board* (PSPB) *Operations Manual*: "The publication of a conference paper or papers in an IEEE periodical is permitted at the discretion of the editor provided that all the papers have undergone the standard peer review for the specific periodical in question." Thus, it is important the EICs ensure that they have a clearly stated policy regarding republication of conference papers and that the policy is promulgated to both reviewers and authors. Authors should be sure they understand the policy before submitting conference papers to IEEE journals.

The PSPB Ops Manual also states "When such a republication occurs, the papers must be annotated as being republished, and their original publication venue cited. As necessary, appropriate permission shall be obtained." This implies that if the conference paper was copyrighted, copyright permission must be obtained. If the conference papers were copyrighted through the IEEE and the journal to which the paper is submitted is an IEEE journal, the copyright permission is automatically granted. However, if the conference paper was copyrighted by some other entity, the author(s) must obtain the copyright from the owner. While copyright owners usually automatically grant authors permission make copies of their papers for their own use, this does not extend to permission to republish the work; explicit permission must obtained if the IEEE is not the owner and/or the journal in which it is to be published is not an IEEE periodical. What is important to realize is that the paper cannot just be resubmitted to the journal with no indication of

the prior publication; to do so would be a violation of IEEE policy and could (should) incur a penalty if detected.

The more common case is for an author to modify and extend a conference paper and then submit it to a journal. The easiest way to handle this, if the journal EIC is willing, is to simply modify the annotation required for verbatim reprint of a conference paper to indicate that the paper is an extended version of the conference paper. This change in annotation, however, does not remove the requirement for obtaining copyright permission from the copyright owner, if not IEEE. Alternatively, the procedures for referencing previously published work, described below, could be followed. Here it becomes fuzzy, because obtaining copyright permission assumes some of the paper is direct copy, and the EICs may have some discretion. For example, for a single phrase or sentence in quotes, obtaining a copyright may not be required. At the level of a paragraph it less clear and there may be differences whether the item is from one of your own papers or someone else's. In any event, quotes and a reference are certainly required. Check with your EIC regarding copyright and, in general, when in doubt.

Another common case is for an author to reuse portions of an earlier paper in the preparation of a new one, in particular, such things as graphs, figures, or background material. The PSPB Ops Manual also covers this case. It states: "When an author reuses text, charts, photographs, or other graphics from his/her own previously published material, the author shall:

- ◆ "Clearly indicate all reused material and provide a full reference to the original publication of the material and
- ◆ "If the previously published or submitted material is used as a basis for a new submission, clearly indicate how the new submission differs from the previously published work(s)."

This is very similar to the process that must be used when using material from another person's work. A subtlety arises when the prior work that is being reused was coauthored by someone not a coauthor of the current paper, e.g., if authors X and Y are writing paper B reusing material from paper A written by authors X and Z. In this case, the second author's permission, i.e., Z, must be obtained.

These policies have been widely misunderstood and ignored in the past. However, in view of the increasing occurrences of violations (see *The Institute* article cited earlier) and proper professional behavior, these policies should be observed more carefully in the future. It is thus important for both authors and reviewers to understand and observe the policies. Most of the policies are written from the perspective of telling authors what they must do. However, it should be realized that reviewers are under an obligation to follow the policy of the journal for which they are reviewing with respect to reuse and republication of prior material, regardless of their personal feelings about the reuse prior material, i.e., they must not reject papers published in conferences if the journal policy is to allow them. Moreover, senior researchers have a responsibility to help students and new researchers understand the policies and proper procedures.

Tools are becoming available to help both researchers and editors. Tools like "turnitin" (commercially available) and "crosscheck" (to be released in about a year) will compare a document against a large database of other papers and reports, will highlight areas of duplication, and calculate a percentage of overlap between the subject document and others having identical material. It seems quite possible that performing these checks will become a standard part of the review process in the future.

I urge all authors and reviewers to carefully read and understand the *PSPB Operations Manual* statements on the matter and become familiar with related tools as they become available. The relevant material is contained in Section 8 of the manual. The manual can be obtained on-line at: http://www.ieee.org/portal/cms_docs_iportals/iportals/publications/PSPB/opsmanual.pdf.

Richard A. Volz