

CS 5014

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## **Publishing a Technical Paper: Preparation, Submission, and the Editorial Process**



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### **Overview**

- **Types of Publication**
- **Preparation of a Technical Paper: Organization**
- **My Editorial Experience**
- **Submission of a Technical Paper for Publication**
- **Editorial Board Composition**
- **Peer Review Hierarchy**
- **Peer Review Type**
- **Letter to Referee**
- **Referee's Report**
- **Role of the Peer Review System**
- **Problems with the Peer Review System**
- **Conflicts of Interest of Reviewers**
- **Carrots and Sticks in the Peer Review System**

### Types of Publications

- Book
- Edited Book
- In an Edited Book
- Special Publication
- Edited Special Publication
- In an Edited Special Publication
- Journal
- Proceedings
- Technical Report
- Thesis
- Dissertation
- Newsletter
- Reviews

### Preparation of a Technical Paper: Organization

- ABSTRACT†
- INTRODUCTION
- BACKGROUND
- OVERVIEW
- FUNDAMENTAL CONCEPTS
- PURPOSE AND MOTIVATION
- MOTIVATION AND SCOPE
- DEFINITIONS AND TERMINOLOGY
- TERMINOLOGY
- NOTATION AND DEFINITIONS
- PROBLEM DEFINITION
- RELEVANT LITERATURE
- LITERATURE REVIEW

Note that the list suggests alternative names for some sections one of which may be selected.

† Unnumbered

### Preparation of a Technical Paper: Organization

- :
  - <body of the technical paper>
  - :
  - CONCLUSION(S)
  - CONCLUSIONS AND FUTURE DIRECTIONS
  - CONCLUSIONS AND FUTURE WORK
  - CONCLUSIONS AND OPEN PROBLEMS
  - CONCLUDING DISCUSSION(S)
  - CONCLUDING REMARKS
  - DISCUSSION
  - FUTURE DIRECTIONS
  - FUTURE RESEARCH
  - FUTURE RESEARCH TOPICS
- Note that the list suggests alternative names for some sections one of which may be selected.

### Preparation of a Technical Paper: Organization

- : (continued)
  - NEW DIRECTIONS
  - RESEARCH DIRECTIONS
  - SUMMARY
  - SUMMARY AND CONCLUSION(S)
  - SUMMARY AND RESEARCH DIRECTIONS
  - GLOSSARY †
  - GLOSSARY OF SELECTED TERMS †
  - APPENDIX †
  - ACKNOWLEDGMENT(S) †
  - REFERENCES †
  - BIBLIOGRAPHY †
  - ANNOTATED BIBLIOGRAPHY †
- Note that the list suggests alternative names for some sections one of which may be selected.
- † Unnumbered

## My Editorial Experience

### EDITORIAL BOARDS: Present

- 01/04 – Member of the Editorial Board of *International Journal of Simulation and Process Modeling*.
- 08/03 – Area Editor of *Simulation: Transactions of the Society for Modeling and Simulation International*.
- 01/96 – Member of the Editorial Board of *Mathematical and Computational Applications*, an international journal.
- 03/93 – Associate Editor of *Transactions on Operational Research*.
- 03/90 – Verification, Validation, and Accreditation Area Editor of *ACM Transactions on Modeling and Computer Simulation (TOMACS)*.
- 04/85 – Simulation and Modeling Category Editor of *ACM Computing Reviews*.

## My Editorial Experience

### EDITORIAL BOARDS: Past

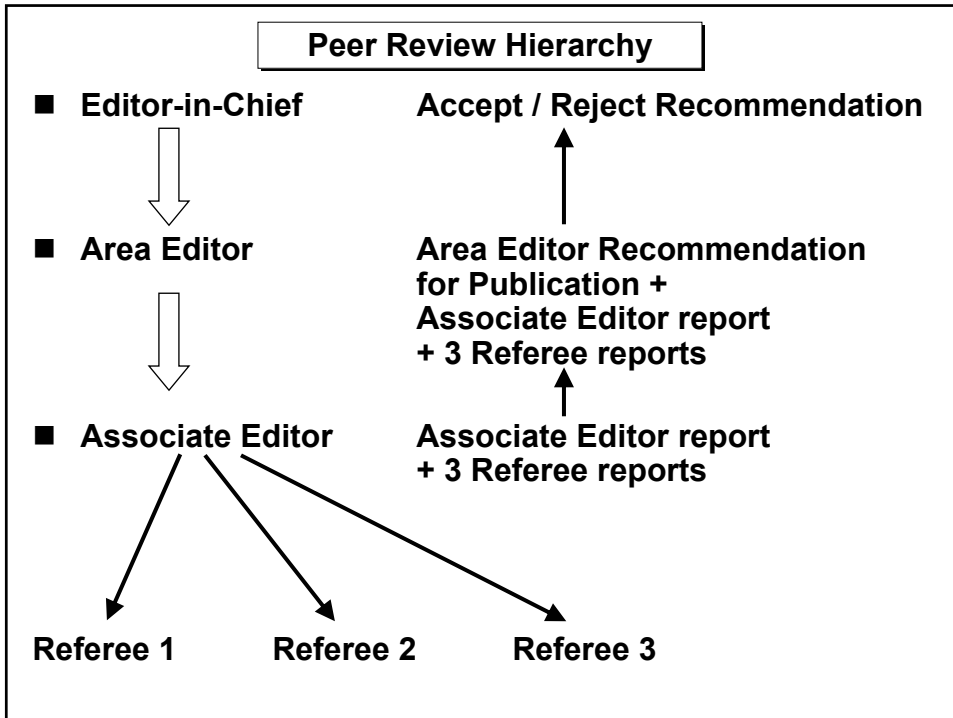
- 09/93 – 12/02 Editor-in-Chief of *Annals of Software Engineering*, an international journal published by Kluwer Academic Publishers, New York, NY.
- 08/96 – 12/00 Editor-in-Chief of *World Wide Web*, an international journal published by Baltzer Science Publishers, Amsterdam, The Netherlands.
- 08/95 – 12/03 Member of the Editorial Board of The Interactive Transactions of OR/MS (ITORMS) — an electronic journal of INFORMS.
- 05/95 – 07/97 Guest Editor of *ACM Transactions on Modeling and Computer Simulation* for a special issue on "Simulation for Training: Foundations and Techniques."
- 11/92 – 12/94 Editor of ORSA CSTS Newsletter, the newsletter of the ORSA Computer Science Technical Section.
- 06/92 – 11/93 Feature Article Editor of *ORSA Journal on Computing*.
- 04/92 – 12/00 Member of the Editorial Advisory Board of *Operations Research / Computer Science Interfaces – A book series* published by Kluwer Academic Publishers, Norwell, MA.
- 02/92 – 12/94 Guest Editor of a yearly volume of *Annals of Operations Research* journal on Simulation and Modeling.
- 05/91 – 06/92 Associate Editor of *INFORMS Journal on Computing*.
- 11/93 – 09/97
- 02/87 – 12/91 Member of the Editorial Board of *Advances in Computer Simulation and Modeling – A book series* published yearly by Ablex Publishing Corporation, Norwood, NJ

### Submission of a Technical Paper for Publication

- The submission cover letter should indicate that the paper:
  - ❖ has not been partially or completely published before;
    - if it is published earlier in a conference proceedings or elsewhere, indicate which publication and how much of the submitted paper is new.
  - ❖ Has not been presented before;
    - if presented indicate where.
  - ❖ Is not copyrighted and the copyright can be transferred to the publisher;
  - ❖ Is cleared for publication by the sponsor of work;
  - ❖ Is not and will not be submitted elsewhere for consideration for publication until the review process is completed.

### Editorial Board Composition

- Editorial Advisory Committee
  - Editor-in-Chief
    - ❖ Editorial Assistant
- ↓
- Area Editors
- ↓
- Associate Editors



**Peer Review Type**

- **Open Review**
  - ❖ The authors' identity is not hidden from the referee.
- **Blind Review**
  - ❖ The authors' identity is hidden from the referee by removing the authors' names and contact information.

In a recent blind review, a referee complained that we did not cite important work in our paper. Our work was the first of its kind. I asked the editor to ask the referee what references I failed to cite. The referee replied to the Editor that we did not cite Prof. Balci's work:

"I have seen material from Prof. Osman Balci of Virginia Tech on Web Services for RNG, but I do not know whether material on the work of his group has already been published."

## Letter to Referee

**World Wide Web**  
<http://manta.cs.vt.edu/www>  
An international, archival, peer-reviewed journal.

June 27, 2000

Professor Edward A. Fox  
Department of Computer Science  
Virginia Tech  
Blacksburg, VA 24061

Dear Professor Fox:

The attached paper, W991122, "Electronic Document Delivery on Internet: The IAC Prototype," (by M. Adamo and M. Bernaschi) has been submitted for publication in the *World Wide Web* journal.

It will be greatly appreciated if you act as a referee for the attached manuscript. Your detailed review and recommendation will play a significant role in the editorial process. If, for any reason, you are unable to referee the paper, please let me know immediately by replying to this e-mail message.

Following is a Referee's Report form to assist you in preparing your review. It is important that you send your detailed review to me within six weeks from the date of receipt so as to allow publication of papers in a timely fashion. I am looking forward to receiving your review before **September 27, 2000**.

Thanking you very much in advance, I am

Sincerely yours,

Osman Balci  
Editor-in-Chief

P.S.

No part of the attached manuscript may be reproduced, stored in a retrieval system, or transmitted, in any form or by any means, electronic, mechanical, photocopying, recording, or otherwise, without the prior written permission of the authors.

## Referee's Report

*Annals of Software Engineering*  
**REFeree's REPORT**

*Referee Number:*

*Paper Number:*

*Author(s):*

*Title of Paper:*

### Section I. Evaluation

1. Is the paper logically and technically correct?  
 Yes  Appears to be, but didn't check completely  
 Only partially (see Section III)  No (see Section III)
2. Does the paper make a sufficient contribution to the state-of-the-art in its field that warrants publication in the *Annals of Software Engineering* journal?  
 Yes  To a limited extent (see Section III)  No (see Section III)
3. Is the title appropriate?  
 Yes  No (see Section III)
4. Is the abstract an appropriate and adequate digest of the work presented?  
 Yes  No (see Section III)
5. Does the introduction clearly state the background and/or motivation in terms understandable to the non-specialist?  
 Yes  Probably (see Section III)  No (see Section III)

## Referee's Report

6. Are the references or bibliography appropriate?  
 Yes     Some additions and/or deletions required (see Section III)     No (see Section III)
7. How would you rate the overall organization of the paper?  
 Satisfactory     Could be improved (see Section III)     Poor (see Section III)
8. Relative to its technical content and scope, is the length of the paper appropriate?  
 Yes     No, too long (see Section III)     No, too short (see Section III)
9. Is the English satisfactory?  
 Yes     No, but can easily be polished     No, very poor
10. How readable is the paper for a reader who is a non-specialist in the field of this paper?  
 Readable with ordinary effort     Paper is self-contained, but a considerable effort is required  
 Difficult     Unreadable

### Section II. Recommendation

- Accept with no changes
- Accept if certain minor revisions are made (see Section III)
- Author(s) should prepare a major revision (see Section III) for a second review
- Reject (Please justify your decision in Section III)

### Section III. Summary of detailed comments

Please make detailed technical and editorial comments and suggestions directly on the manuscript or on a separate sheet. Your comments are an invaluable aid to the author(s) to help in improving the overall technical quality, utility, and readability of the paper.

## Role of the Peer Review System †

- **The main purpose of the peer review system is to serve the community of researchers—and ultimately to benefit society—by providing expert advice to**
  - ❖ **editors of archival journals who must make decisions on acceptance, rejection, or revision of papers submitted to their journals; and**
  - ❖ **program managers of funding agencies who must make funding decisions on the research proposals submitted to their programs.**
- **The peer review system performs an essential quality-control function in maintaining the self-correcting character of the research enterprise.**

† James R. Wilson (2002), "Responsible Authorship and Peer Review", *Science and Engineering Ethics*, Vol. 8, No. 2, pp. 155-174.

## Problems with the Peer Review System †

### ■ Nonperformance of Editors and Reviewers

- ❖ The main problem with the peer review system for archival journal articles is simple dereliction of duty—
  - by editors who refuse to take responsibility for “hard” editorial decisions, preferring to operate by majority vote of the referees; and
  - by referees who cannot be bothered to read and evaluate carefully the work of other researchers, leaving editors as referees of last resort.

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† James R. Wilson (2002), “Responsible Authorship and Peer Review”, *Science and Engineering Ethics*, Vol. 8, No. 2, pp. 155-174.

## Problems with the Peer Review System †

### ■ Nonperformance of Editors and Reviewers

- ❖ Nonperformance of editors and referees has reached epidemic proportions in some branches of science and engineering.
- ❖ Notorious initial paper on cold fusion by Fleischmann and Pons (1989a) was
  - published in *Journal of Electroanalytical Chemistry* in four weeks, and
  - soon followed by long list of errata (Fleischmann and Pons 1989b).

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† James R. Wilson (2002), “Responsible Authorship and Peer Review”, *Science and Engineering Ethics*, Vol. 8, No. 2, pp. 155-174.

### Conflicts of Interest of Reviewers †

- Referees may be tempted to engage in the following types of misconduct:
  - ❖ misappropriation of ideas—that is, stealing ideas from the papers and grant proposals that a referee is asked to evaluate; and
  - ❖ misappropriation of priority—that is, delaying or obstructing the publication or funding of a referee’s rivals so that the referee can be the first to publish a result or to receive funding for work in a particular area.
- If the solution to the referee’s own research problem is found in a paper or grant proposal sent to the referee for confidential review, then permission to use those ideas must be sought from the author and acknowledged in papers exploiting those ideas.

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† James R. Wilson (2002), “Responsible Authorship and Peer Review”, *Science and Engineering Ethics*, Vol. 8, No. 2, pp. 155-174.

### Carrots and Sticks in the Peer Review System †

- Rewards for good reviewing
  - ❖ Reviewing manuscripts and grant proposals is one of the most important ways in which individual researchers can contribute to the development of their discipline.
  - ❖ Since the best referees generally receive the best papers and proposals to review, those individuals enjoy the benefits of continual professional enrichment and renewal.
  - ❖ High-visibility editorial positions are usually filled from the ranks of prompt and insightful reviewers; and most universities and many other research organizations regard appointment to such positions as grounds for promotion and other forms of professional advancement.

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† James R. Wilson (2002), “Responsible Authorship and Peer Review”, *Science and Engineering Ethics*, Vol. 8, No. 2, pp. 155-174.

## **Carrots and Sticks in the Peer Review System †**

- **Rewards for bad reviewing**
  - ❖ **Bad refereeing can cause long-lasting damage to an individual's reputation in the eyes of editors and program managers, who increasingly maintain computerized records on the performance of reviewers (Abelson 1992).**
  - ❖ **Some editors maintain an "A" list of good referees and a "B" list of bad referees; and when authors from either list submit a paper for review, the editor selects referees for that paper from the author's list.**

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† James R. Wilson (2002), "Responsible Authorship and Peer Review", *Science and Engineering Ethics*, Vol. 8, No. 2, pp. 155-174.