FUSION 2004

REVIEWING GUIDELINES

This text has been adapted from similar documents that have evolved in the database field. However, we believe it to be largely independent of the research field of the conference.

Quality objectives
The Program Committee wishes to ensure that Fusion 2004 will be a conference of highest quality, significance, clarity, and scientific soundness. Thus, this year the review process will be more thorough than in previous Fusion conferences. Each paper will be refereed by 3 researchers. Papers intended for special sessions will need to pass the review process like all submitted papers.

Deadline
Given that the CFP promises author's notification of acceptance by March 15, reviews need to be uploaded to the START system by March 1.

Theoretical vs. application-oriented research
From the CFP: "Authors are invited to submit theoretical, methodological, and application advances in information fusion and management of uncertainty, with submission of non-traditional topics being encouraged”. The Topics of Interest list in the CFP is subdivided into theoretical and technical advances, algorithms and systems, and applications.

All paper categories will receive scores on the same items (see below), and for both, identical scores should reflect the same quality. However, the criteria that should be applied to assess the paper are different. Papers on theoretical and/or technical advances should describe and analyze significant conceptual and theoretical advances in information fusion, papers on algorithms and/or systems should describe and analyze advances in the methodology of information fusion, whereas papers on applications should describe and analyze new and challenging practical uses of information fusion, with an emphasis on explaining how various concepts and methods were selected, combined, and/or adapted to achieve specified practical goals.

The program committee is free to change the category under which the paper has been submitted. So, if you as a reviewer believe that some paper should appear in the conference but in a different category, from the one in which its author put it, indicate that opinion in your review.

Summary Ranking

Scoring instructions – logical items

The length, relevance, and correctness of a paper are issues whose scoring is binary (yes/no), with a "no" score often implying rejection independent of any other aspect of the paper. Thus, they have been posed as separate questions in the review form. By and large, one hopes that you will answer "yes" to all three questions for most papers you review.

RELEVANCE
Does this paper belong in Fusion 2004, or is there another venue for which it is more suited? Will a significant fraction of Fusion 2004 attendees or proceedings readership be interested in this paper?

CORRECTNESS
Are the major results correct? Minor typos, arithmetic errors, or other easily fixable problems should not cause you to say "no” for correctness. Use “no” only if there is a fundamental flaw or if a central result does not hold.

LENGTH
Is this paper the right length for final publication in the proceedings, or at least does it give you a good feel for what the length of the final paper would be? Answer "no" if it is an abstract with insufficient material for you to judge the final paper, or if it is so long that you cannot estimate what kind of final paper would emerge once constrained to the required length of at most 8 double column proceedings pages.
A "no" answer to any of these questions is a potential veto against the paper. Please be selective in marking "no" for any of these questions. Whenever you answer "no" to any of the above questions, please do try to evaluate the paper without worrying any further about its relevance, length, and correctness. For example, say there is a paper you do not think is relevant to Fusion 2004. Answer "no" to the question on relevance, then go ahead and score the paper as if it were relevant. Do not drag down any of the numeric scores on account of relevance.

Scoring instructions – numerical items

The other categories are numeric from 1 (worst) to 6 (best). The precise meaning of each number is given below. It is helpful if everybody uses this interpretation of their numerical scores, so that the score averages are not skewed. Also, be as decisive as possible, i.e., try to avoid mid-range scores as much as possible.

ORIGINALITY
How novel is the idea behind this paper?
Is it refreshing or dull?
How different are the results, techniques, approaches, or questions raised from those published elsewhere in the open literature, whether by the same author(s) or someone else?

TECHNICAL QUALITY
How deep is the work in this paper?
Are the analysis and conclusions correct and well supported?
How proud would you be of yourself if you could think an issue through to the depth the authors have?

SIGNIFICANCE
Does the paper address an important problem?
What is the likelihood that anyone (other than the authors) would use the results or prototypes in the paper?
Is it likely to influence, directly or indirectly, real systems?

PRESENTATION
Is the prose understandable to the average attendee or proceedings reader?
Are any technical terms defined where needed?
Is there a logical flow of ideas?
Is the organization appropriate?

INSTRUCTIONS FOR AUTHORS
Does the paper abide by the instructions for authors?
Does the paper follow the style guide for references?

OVERALL RATING
This is the overall rating on the numeric categories ONLY.
Please do not factor in your evaluation of the logical categories (if there is a nice paper you think is irrelevant, and you have marked it so, you could give it a high score and it will still not get in without discussion).

REVIEWER CONFIDENCE
This is a weight between 1 (low) and 10 (high; 100%) based on your confidence in your review. By default, each reviewer is weighted equally, and is assumed to be confident (weight 10) about the score given. Give yourself a lower weight only if you feel uncertain about your evaluation. Hopefully, all weights will be above 5. If you feel like giving yourself a weight below 5, then perhaps you should try to use a more knowledgeable colleague as a reviewer.

BEST PAPER AWARD
Would you like to nominate this paper for the best paper award at Fusion 2004?

Detailed Comments
The comments to the author(s) are a very important component of your review. The lower your evaluation, the more details you should give in your comments. If a paper is rejected, the authors deserve an explanation of why. Suggestions on how to improve the paper, so that it might later be acceptable for another venue, are very helpful to the authors. For papers likely to be accepted, suggestions on the presentation and pointing out any technical problems are particularly useful. This year extra time has been allocated to the authors for making improvements to
their papers. Please take advantage of this opportunity to suggest improvements whenever necessary. The quality of your review will be reflected in these comments.

Confidential Comments for Committee
The more information is provided to the authors on the rationale for the PC decision, the greater confidence they have in the selections made by the committee. As such, reviewer comments confidential to the PC are discouraged. Put something under this heading only if you truly have something to say to the PC that would be totally inappropriate for the author(s) to know.

Ethical issues
Submitted papers are confidential. We are not supposed to distribute them or use them for our research. Please make sure that any external readers you seek assistance from are also aware of this. Similarly, all evaluations will be kept confidential.

Some PC members may have a personal bias on some papers. The reasons may be many – personal or professional ties to authors, your student is just working on the same problem, etc. Only you can judge such a bias, and decide if you don’t feel comfortable reviewing it. The recommendation is: even with a small bias on a paper, don’t promote it. You can perhaps still review it, but try to take your bias into consideration. If you feel uncomfortable reviewing a paper, inform the PC chair immediately.

External readers
They are part of the game and usually indispensable for any committee. However, please choose your external readers carefully and make sure that they understand this document in its entirety. Ask them for written reports, which you can then incorporate in your review. You are still supposed to become familiar with the paper and form an opinion. You will be submitting only one review for each paper, whose scores and confidence level should reflect the combined effort you and your external helper made. Please give the name of any secondary reviewer in the available field on the review form when uploading your review to the START system. They will be listed in the proceedings.

Advice
A few words of conventional wisdom on paper reading, developed by past “generations” of PC chairs of various conferences:

MAKE A SCHEDULE: Make a schedule and start reading now! Although the load is relatively light, with all the unexpected things and expected obligations we have, it is best to be on schedule. Reading everything in a rush at the end is quite useless!

READING: Many people find it helpful to skim through a paper first to get a quick overview and some idea of where the paper is heading. To mix metaphors: it is hard to see the forest for the trees when you are slogging through the technical details.

WRITE THE REVIEW IMMEDIATELY AFTER READING THE PAPER: Do not count on remembering for too long anything you thought about while reading. Completing the review immediately provides positive reinforcement.