

Reviewer Guidelines

Manuscript reviewers for *IEEE Potentials* are essential in helping to publish accurate, informative, and inventive articles geared toward the interests of undergraduate and graduate engineering students. The IEEE relies upon the knowledge and expertise of its reviewers to ultimately decide which manuscripts will be published in the magazine. Reviewing manuscripts is an important first step in the publication process.

Types of manuscripts:

IEEE Potentials publishes two types of manuscripts: essays and technical articles.

- 1) Essays — Articles that may be either an objective or an opinion piece focusing on a topic relevant to engineering students. Essays are generally less technical in nature but may contain figures and/or images. These articles may focus on technology, theories, trends, or topics of interest of students and should be between 800–1,000 words in length.
- 2) Technical articles — Approximately 2,000–4,000 words in length, these articles focus on technical aspects, innovations, and research in both academia and industry. Technical articles are not expected to contain novel research results, and each article should be accessible to graduate and undergraduate students. Articles should be self-contained without any embedded reference citations.

When presented with an invitation to review a manuscript:

- 1) Let the editor know if your expertise and/or fields of interest cover the topic of the manuscript.
- 2) Decline an invitation to review if there is a conflict of interest with one of the authors. Conflicts of interest may include relationships with academic advisors and/or advisees, anyone at your current institution, members of your family, or people with whom you have collaborated during the last ten years.
- 3) When declining a review, feel free to provide the contact information of a person who would be qualified to review the manuscript.
- 4) Upon accepting an invitation you will be provided three weeks to complete your review.

When writing your review:

- 1) Keep in mind that reviewers serve as mentors to authors, helping to revise an article until each is suitable for pub-

lication. Both complimentary and critical comments are vital to the process. The goal is to help authors to identify the strengths of their manuscripts as well as the weaknesses.

- 2) Start out by summarizing the article in your own words. Is this topic relevant to a student audience? Why or why not?
- 3) Provide your overall reaction as well as a list of specific comments. What aspects of the article were strong? What needs clarification or more detail? Is it well written?
- 4) List the manuscript's strengths and its weaknesses. Clearly state the objectives, contributions, and limitations of the manuscript.
- 5) Ensure that the article focuses on its stated objective.
- 6) Check that sufficient research and evidence to support the author's claims has been provided.
- 7) Confirm that the information provided in the article is current, accurate, and consistent.
- 8) Cite quotations, give page numbers, and make direct reference to the specific areas of the paper on which you are commenting.
- 9) Offer comments on tables, figures, and diagrams. Is the article too lengthy? Does it contain too many figures? Are the figures relevant to the discussion in the text?

Manuscript checklist—*IEEE Potentials* style:

- 1) Articles should not exceed 4,000 words in length.
- 2) Figures should be limited to ten or fewer.
- 3) All tables, figures, and diagrams require captions.
- 4) References should be limited to 12 or fewer.
- 5) Manuscripts should include a brief three- to six-sentence biography for each author including individual contact e-mail addresses.
- 6) Articles without equations are preferred; however, a minimum number of equations (six or fewer) are acceptable.
- 7) Sections within an article should be divided using sub-headlines.

When making your decision:

When making a final recommendation on a manuscript, please choose one of the following options (Manuscript Central examples of each recommendation are provided in the screenshots below):

- 1) **Publish As Is.** The article fulfills all of the requirements listed above and is ready for publication.
- 2) **Major Revision.** The article has significant deficiencies in content and grammar. The author's claims are not

backed up by facts or the information included is too broad. The article does not adhere to *IEEE Potentials* style.

- 3) **Minor Revision.** The article contains a small number of easily correctable errors including grammar, missing references, and minor content clarification.
- 4) **Not Suitable for Publication.** The article is not suitable for publication. It does not offer any value to the readers of *IEEE Potentials* or its subject is so thoroughly incoherent that it does not merit an opportunity for a revision. Reviewers should make every effort to provide comments that will allow authors the opportunity to revise their manuscripts. Only those manuscripts that offer no relevance or value should be rejected.
- 5) **Reject & Resubmit.** The article in its current form is not suitable for publication and requires significant rewrites for more than 50% of the manuscript. However, it does contain value and after taking into consideration the

reviewer's comments would be worthy of an evaluation for future publication upon the author's resubmission of the manuscript.

If you are recommending an article for publication, include why you feel it is appropriate for publication. Detailed reviewer input on articles that have been deemed "Publish As Is" are valuable in helping the editor identify which topics are particularly relevant to students.

Do not reject essays because you may disagree with the opinion expressed. Judge the article on the relevance of the topic and how well the author makes his/her case.

If you are recommending a revision, provide alternative solutions for how the author might revise his/her article.

Please submit your reviews on time. If a review is going to be late, please notify IEEE Potentials' managing editor.

Sample Reviews

Publish As Is

The screenshot shows a web browser window with the title "ScholarOne Manuscripts". The page contains a review form with the following sections:

- Recommendation:** A table with four rows: "Publish As Is" (checked), "Minor Revision", "Major Revision", and "Not Suitable for Publication".
- Would you be willing to review a revision of this manuscript?:** A table with two rows: "Yes" (checked) and "No".
- Comments:** A text area containing the following text:
 - Confidential Comments to the EIC
 - The article is a brief and concise introduction to some good advice/ways of thinking. This paper is shorter than I would like, but I understand it is probably intended as a short article. As this is mainly geared towards students and recent graduate the brevity of this piece is probably a plus.
 - The authors advice is sound, though a bit generic, but is presented in a some unique way (Phooey).
 - The paper is well written with good transitions, development and use of grammar.
 - Comments to the Author
 - I liked this paper (though found it a bit brief), but the paper is well written with good transitions, development and use of grammar.
 - I feel this is targeted more towards younger members/students, but is accessible to a wide audience.
 - Some more details within would be nice, but given size restrictions probably not necessary.
 - I would like to see some more about you (the author) at the end, perhaps mentioning a notable project you worked on (you imply that you worked for the space program during the Apollo era, you might want to put something about that in your information)?
 - Nice paper overall.
- Attach a File:** A button labeled "Choose File" and the text "no file selected".
- Files attached:** A bullet point indicating "No files have been uploaded."

Minor Revision

Safari File Edit View History Bookmarks Window Help ScholarOne Manuscripts Thu 9:41 AM Craig Causer

Recommendation	
<input type="checkbox"/>	Publish As Is
<input checked="" type="checkbox"/>	Minor Revision
<input type="checkbox"/>	Major Revision
<input type="checkbox"/>	Not Suitable for Publication

Would you be willing to review a revision of this manuscript?

<input checked="" type="checkbox"/>	Yes
<input type="checkbox"/>	No

Comments

Confidential Comments to the EIC

Comments to the Author

The topic of this article is of interest to a wide audience, and the article is mostly written at an appropriate technical level. There are many small grammatical errors, but the organization of the article is very good and the presentation is clear.

The article needs a roadmap at the end of the introduction to let the audience know what the rest of the article will be about. The introductory paragraph is written very well, but it gives no indication that the majority of the article will be devoted to the problem of NOx emissions.

What does "urea network" mean on page 3?

The final sentence of the paragraph on NOx reduction technologies quickly lists three obstacles to NOx reduction without explaining what these terms mean. A sentence or two explaining these terms could help develop this concept and conclude the article less hastily.

Attach a File	Files attached
<input type="button" value="Choose File"/> no file selected <input type="button" value="Attach"/>	<ul style="list-style-type: none">No files have been uploaded.

Major Revision

Safari File Edit View History Bookmarks Window Help ScholarOne Manuscripts Thu 9:40 AM Craig Causer

Recommendation	
<input type="checkbox"/>	Publish As Is
<input type="checkbox"/>	Minor Revision
<input checked="" type="checkbox"/>	Major Revision
<input type="checkbox"/>	Not Suitable for Publication

Would you be willing to review a revision of this manuscript?

<input checked="" type="checkbox"/>	Yes
<input type="checkbox"/>	No

Comments

Confidential Comments to the EIC

This is a very superficial treatment of the topic and would not accomplish the task they set out to do. It would need a major revision to address the syntax and semantics of security policy descriptions so that a formal model could be applied that would allow for automated analysis, etc. Also, they should recognize the other formal models out there for security policies.

Anyway, I do think it is an original article (though there are others that have gone deeper on the same topic). The grammar and spelling need work, too.

Comments to the Author

This paper needs to be expanded to leverage work done in other areas such as those related to SAML and RFC2828 where a taxonomy for security policy expressions have been developed. This paper does not leverage the syntax and semantics that have already been worked out to allow formal methods to be applied. Either that or the authors should develop their own complete formal syntax and semantics and show how that would be better than the existing alternatives. Another approach would be to leverage work done in formal specification where security requirements and policies have been included. A good reference in this space is from the IEEE Transactions on Software Engineering, Volume 21, Issue 2 (February 1995) table of contents, Pages: 63 - 68. Year of Publication: 1995, ISSN:0098-5589

Author Anthony Boswell Logica, Cambridge, UK

Attach a File	Files attached
<input type="button" value="Choose File"/> no file selected <input type="button" value="Attach"/>	<ul style="list-style-type: none">No files have been uploaded.

Not Suitable for Publication

Safari File Edit View History Bookmarks Window Help Thu 9:42 AM Craig Causer

ScholarOne Manuscripts

Recommendation	
<input type="checkbox"/>	Publish As Is
<input type="checkbox"/>	Minor Revision
<input type="checkbox"/>	Major Revision
<input type="checkbox"/>	Reject & Resubmit
<input checked="" type="checkbox"/>	Not Suitable for Publication

Would you be willing to review a revision of this manuscript?

<input type="checkbox"/>	Yes
<input checked="" type="checkbox"/>	No

Comments

Confidential Comments to the EIC

I do believe this paper is too technical to be of much interest to our audience. It does appear to be a good topic and well-written, but would require our readers to have a confluence of expertise in J2EE environments, Expert Systems, and system performance. I think there would be very few that would be interested in all three (and even if interested, able to absorb the article).

Comments to the Author

This is an interesting article, but I am concerned that our readership would not have the background to absorb or appreciate this paper. In particular, it would require readers to have an interest and some background in J2EE, expert systems, and in system performance/design. I really think that this article should be published elsewhere to get an appropriate audience.

It is well-written and does propose a novel approach of using expert system rulesets to help in determining J2ee performance problems. It really should be presented in a forum where J2EE performance is central.

Attach a File	Files attached
<input type="button" value="Choose File"/> no file selected <input type="button" value="Attach"/>	<ul style="list-style-type: none">No files have been uploaded.