Seminar und Praktikum, SoSe 2014

# "Wissenschaftliches Arbeiten und Lehren"

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# How to Review a Paper

### Elements of a Review

- Short summary of the text
- Contribution statement
- Classification within the scientific context
- Typical questions to ask
  - what is new about this work
  - which problem is this work trying to solve
  - which other work does it extend
  - what is the argumentation of the authors

### Critical Review

- A review is NOT about personal interests or personal criticism of the author
- The review should focus on content and presentation
- Typical questions
  - which questions are not answered?
  - what are the limitations of the work?
  - where are contradictions?
  - is the argumentation sound and easy to follow?
  - does the work really provide a contribution?

#### **Ethics in Scientific Communication**

- It is ok to consider a contribution to be superfluous or of no need for the scientific community.
- It is not ok to personally judge or insult the author.

### Tasks of a Reviewer

- Analyse for
  - correctness
  - originality
  - significance
  - quality
  - improvements
- How to
  - judge whether something is worth to be published?
  - determine which improvements are required prior to publication?

# Important Questions

- What is a paper that "merits publication"?
- What is expected from a reviewer?
- How does a typical report for a review look like?
- What questions should be covered?
- What is the overall verdict?

# When does a paper merit publication?

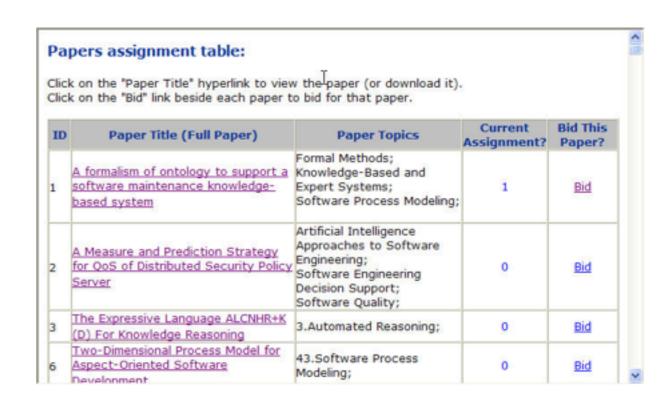
- A paper merits publication if there is a scientific contribution
- Examples:
  - new and significant results
  - new knowledge through synthesis of known results
  - helpful surveys and tutorials
  - combinations of these categories
- Worth to publish: small, surprising results that stimulate a new direction for future research
- Not worth to publish: repetition of results from other papers
- Only worth to publish after improvement: good ideas that are badly presented

### Role of the Reviewer

- Subjective opinion whether or not a paper provides a scientific contribution
- Usually more than one reviewer

How to find / chose reviewers?

- paper bidding
- keywords
- experts from the field



## Expectations Towards a Reviewer

- Decision in the form of a recommendation
  - accept
  - reject
- Justification for the recommendation
- Ways for improvement (particularly in case of rejection)
- How critical should a reviewer be?

# Typical Review Report

- Overall judgement (usually scale from 1-5)
- Summary (1-5 sentences)
- Originality and significance
- Quality (methodology, precision, errors, presentation)
- Justification for the rating
- Optional hints for the editors
- Authors receive "cleaned" version / meta-review
- Deadlines

### **Examples for Review Forms**



Review of Submission 567

reviewingHome myHome logOff

Reviewer Florian Alt

Submission Towards a privacy threat model for interactive public displays

Review type External

Please direct any questions to the submission's primary: bulling@mpi-inf.mpg.de .

#### Confidence

How confident are you about your assessment of the work?

- 4 Highly confident I consider myself an expert in the area
- 3 Very confident I am knowledgeable in the area.
- 2 Somewhat confident I have passing knowledge
- 1 Not very confident I have no knowledge in the area

#### Contribution to UbiComp

Please briefly summarise this submission's contribution to Pervasive and Ubiquitous Computing. Think broadly and positively in terms of the types of contribution a paper can make, referring to the <u>call for</u> papers if necessary.



#### Overall Rating

Provide your overall rating of the paper. Your written review should support your overall rating.

- 6 Definite accept: I would argue strongly for accepting this paper.
- 5 Probably accept: I would argue for accepting this paper.
- 4 Maybe accept: I would agree with accepting this paper.
- 3 Maybe reject: I would agree with rejecting this paper.
- 2 Probably reject: I would argue for rejecting this paper.
- 1 Definite reject: I would argue strongly for rejecting this paper.

#### R&R Suitability (Hidden from authors)

Revise and Resubmit Suitability: In case the submission does not get directly accepted at the PC meeting, please rate its potential to be resubmitted in a second round, after the authors have had 5 weeks to do additional work. This might include additional experiments and/or implementation work (the necessary improvements should be made clear in your review). Note that such a resubmission does not guarantee acceptance in the second round.

- No need to resubmit only minor revisions needed on the current version
- High potential for significant improvement in 5 weeks
- It would be possible to improve within 5 weeks, but difficult
- Reject without offering revise/resubmit 5 weeks is too short to improve submission sufficiently

#### The Review

Please describe both what you like about the submission, and what problems you see with it. If possible, identify opportunities for improvement and provide concrete suggestions - in particular in light of a potential "revise and resubmit" decision, where the authors would have additional 5 weeks of time. As always: please be objective and try to maintain a courteous and friendly tone throughout your review.



#### Confidential Comments (Optional) (Hidden from authors)

Optional comments for the reviewers and program committee that will NOT be sent to the authors:

# Possible Verdicts (Smith, 1989)

- Major results very significant
- Good, solid, interesting work; a definite contribution
- Minor, but positive, contribution to knowledge
- Elegant and technically correct but useless
- Neither elegant nor useful, but not actually wrong
- Wrong and misleading
- The paper is so badly written that a technical evaluation is impossible

### Some Final Issues

- Multiple submissions
- Plagiarism
- Anonymity
- Acknowledgements
- Reputation of the authors
- Can you use material from a paper under review?
- Conflict of interest