

# 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

**Papers assignment table:**

Click on the "Paper Title" hyperlink to view the paper (or download it).  
Click on the "Bid" link beside each paper to bid for that paper.

ID	Paper Title (Full Paper)	Paper Topics	Current Assignment?	Bid This Paper?
1	<a href="#">A formalism of ontology to support a software maintenance knowledge-based system</a>	Formal Methods; Knowledge-Based and Expert Systems; Software Process Modeling;	1	<a href="#">Bid</a>
2	<a href="#">A Measure and Prediction Strategy for QoS of Distributed Security Policy Server</a>	Artificial Intelligence Approaches to Software Engineering; Software Engineering Decision Support; Software Quality;	0	<a href="#">Bid</a>
3	<a href="#">The Expressive Language ALCNHR+K (D) For Knowledge Reasoning</a>	3.Automated Reasoning;	0	<a href="#">Bid</a>
6	<a href="#">Two-Dimensional Process Model for Aspect-Oriented Software Development</a>	43.Software Process Modeling;	0	<a href="#">Bid</a>

# Expectations Towards a Reviewer

- Decision in the form of a recommendation
  - accept
  - (accept with minor revision)
  - (accept with major revision)
  - 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

# 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
  
- Can you use material from a paper under review?
- Conflict of interest

# Schedule

Termin	Veranstaltung / Abgabetermin
24.10.17	Vorstellung und Themenvergabe
21.11.17	Abgabe: Ausarbeitung 1. Fassung
24.11.17	Abgabe: Folie 60-Sekunden-Vortrag
28.11.17	60-Sekunden-Vorträge (Beginn s.t.!) / Wie schreibt man Reviews?
03.12.17	Abgabe: Ausarbeitung 2. Fassung (für Review) <b>2x über Uniworx abgeben</b>
15.12.17	Abgabe: Reviews ( <b>über Uniworx als Korrektoren</b> )
19.12.17	Fragen & Feedback ( <b>optional</b> )
30.01.18	Abgabe: Ausarbeitung 3. Fassung (final)
06.02.18	Abgabe: vorläufige Folien
07-14.02.18	Probenvorträge
15.02.18	Abgabe: finale Version der Vortragsfolien
<b>22.02.18</b>	Präsentationstag 1 (muss noch bestätigt werden)
<b>23.02.18</b>	Präsentationstag 2 (muss noch bestätigt werden)

Abgabetermine

Termine mit  
Anwesenheitspflicht