

Issues to be considered when you read/evaluate a paper

Research Methods

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1. What is/are the research questions and hypotheses? Do they have them?
2. How the research hypotheses are tested? (e.g., live user study, off-line evaluation, statistical hypothesis testing)
3. What “better” criteria does the paper use?
4. Is this “better” criteria sound and appropriate?
5. Is the “better” criteria correctly measured and compared (e.g., did they perform an A/B test)?
6. Is the “better” criteria correctly identified for the considered research hypothesis? E.g., is the research hypothesis proved if an improvement of the “better” criteria is measured?)
7. Is the research hypothesis really proved? According to the author and in your opinion.
8. Is the paper combining the empirical, mathematical and engineering paradigms?
9. What paradigm does the paper use?
10. Are users involved in the experimental evaluation?
11. Are the users a good sample of the real users of the system?
12. Have the users tried the system (task) in a realistic scenario?
13. Does the article describe the usage scenario?
14. Is the discussion also including weak point of the proposed approach (caveats)?
15. What artefacts are developed?
16. What is the role of the developed artefacts? (Proof of performance, proof of concept, proof of existence)
17. Which new technology is used?
18. Is the research motivated by new technologies?
19. Is the performed experiment motivated by a theory?
20. Is a new theory built/inspired by the experiment?
21. Is the research driven by the application problem or by exploitation of a technique?
22. Is the research instrumentalist?
23. Is the research empirical?
24. Is the research applied or basic?
25. Is the research method quantitative or qualitative?

26. What is new in the research?
27. Who are supposed to be the reader of the article?
28. Was a pleasure to read that article? Yes/No and why.
29. Is the title compliant with the rules that are stated in the lecture notes?
30. Is the abstract containing what should contain? What is missing?
31. Is the introduction structured according to the template illustrated in the lecture slides?
32. Is the Hourglass model respected?
33. What is the “niche” of the paper?
34. Is the method reproducible? Only partially?
35. Are the important results correctly identified?
36. Are minor results confusing the overall picture?
37. Have the article’s authors illustrated how their results are connected with results obtained by other researchers?
38. Is the “related work section” containing the elements described in the lecture slides?
39. Is the significance of the work correctly emphasized?
40. What do you think is or will be the impact of this work?
41. Estimate the impact of this work (see the slides)?
42. Is this works significant?
43. Is this work novel?
44. Is this work sound?
45. Is this work relevant?
46. How do you judge the readability and the presentation?