Issues to be considered when you read/evaluate a paper

- 1. What is/are the research hypotheses?
- 2. How the research hypothesis are tested? (e.g., live user study, off-line evaluation, statistical hypothesis testing)
- 3. What is the "better" criteria that the paper uses?
- 4. Is this "better" criteria sound?
- 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. Is there any prevalence of importance of one of these paradigms?
- 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. Are possible caveats discussed?
- 15. What artefacts are developed?
- 16. What is the role of the developed artefacts? (Proof of performance, proof of concept, proof of existence)
- 17. What new technologies are used? Is the research motivated by new technologies?
- 18. Is the performed experiment motivated by a theory?
- 19. Is a new theory built/inspired by the experiment?
- 20. Is the research driven by the application problem or by the technique?
- 21. Is the research instrumentalist?
- 22. Is the research empirical?
- 23. Is the research applied or basic?
- 24. Is the research method quantitative or qualitative?
- 25. What is new in the research?
- 26. Who are supposed to be the reader of the article?
- 27. Was a pleasure to read that article? Yes/No and why.
- 28. Is the title compliant with the rules that are stated in the lecture notes?
- 29. Is the abstract containing what should contain? What is missing?
- 30. Is the introduction structured according to the template that the teacher provided?
- 31. Is the Hourglass model respected?
- 32. What is the "niche" of the paper?
- 33. Is the method reproducible? Only partially?
- 34. Are the important results correctly identified? Are minor results confusing the overall picture?
- 35. Is the discussion also including weak point of the proposed approach (caveats)?

- 36. Have the article's authors illustrated how their results are connected with results obtained by other researchers?
- 37. Is the "related work section" containing the elements described in the slides?
- 38. Is the significance of the work correctly emphasized?
- 39. What do you think is or will be the impact of this work?
- 40. Estimate the impact of this work (see the slides)?
- 41. Is this works significant?
- 42. Is this work novel?
- 43. Is this work sound?
- 44. Is this work relevant?
- 45. How do you judge the readability and the presentation?