

Summary

1. What is the research problem the paper attempts to address? Consider What is the motivation of the research work? What problem does it attempt to resolve? Is it addressing weaknesses in existing approaches? Does it challenge an existing research paradigm?

2. What are the claimed contributions of the paper? What is new/original in this paper? A new question or research area? A new understanding of a research problem? A new algorithm/experimental method/proof technique/methodology for solving problems? A new breed of software tools or systems? A new formalism or notation? New evidence to substantiate or disprove a previously published claim?

3. How do the authors substantiate their claims? What makes the claims scientific? What is the methodology adopted to substantiate the claims? What is the argument of the paper? What are the major theorems? What experiments are conducted? Look at: data analyses/simulations/benchmarks/ user studies/cases studies/examples

4. What are the conclusions? What is to be learnt from the paper? Will standard practice in the field be changed as result of the findings? Are the results generalizable? Can the results be applied to other areas of the field? What are the open problems?

Evaluation / Critique

1. Is the research problem significant? Does the work only address a minor problem? Or an artificial problem? Does the work enable practical applications? Does it deepen understanding? 8 Does it explore new design ideas?

2. Are the contributions significant? Is the paper worth reading? Are the authors simply repeating the state of the art? Are there real surprises? Are the authors aware of the relation of their work to the existing literature? Is the paper addressing a well-known open problem?

3. Are the claims valid (and modest enough)? Have the authors (intentionally or unintentionally) cut corners? Has the right theorem been proven? Is/are there: ▪ errors in the proof/problematic experimental set-up/ confounding factors/unrealistic or artificial benchmarks/methodological misunderstanding Are the authors comparing apples and oranges? Are the generalisations valid?

Synthesis

1. What is the crux of the research problem?
2. What are some alternative approaches to address the problem?
3. What is a better way to substantiate the claim of the authors?
4. What is a good argument against the case made by the authors?

5. How can the research results be improved?
6. Can the research results be applied to another context?
7. What are the open problems raised by this work?
8. Can we do better than the authors?