2023-2: Cloud Computing

Paper Discussions

Prof. Ítalo Cunha

Paper discussions

- We will read and discuss scientific papers to complement the book
- Goal is to get deeper understanding of some aspects of cloud computing
- We will not read “whitepapers”
- Geared towards classic/foundational papers
  - Papers may be old
  - Papers need not be the hottest technology *today*

How to read papers

- Please check *Papers* → *How to read papers* on the shared folder
- Three short articles with general guidance on reading papers critically

Diverse backgrounds and technical details

- Scientific papers sometimes get very technical
  - We will try to stick with papers that are more widely accessible
  - But some technical sections will exist
- If you do not understand some technical details, do not get worried or bogged down in the details
- Focus on the high-level message, main contributions, and limitations of the solutions/studies in the papers
- Feel free to ask about technical details during class

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Paper Discussion Dynamics

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Guided discussion

- Two phases: discussion of general topics and then free-form discussion of positive and negative points
- General topics
  - A student will be allocated a topic on each paper
  - Students will provide a short summary (~600 characters)
- Free-form

Discussion Topics

- Problem/motivation
  - What is the problem addressed in the paper?
  - Why is it important?
  - Why is it challenging?
  - Was it relevant at the time and is it still relevant today?

Discussion topics

- How
  - How does the solution/analysis work?
  - What are its components/steps?
  - What are the challenges? How are challenges overcome?
  - What alternate designs were discarded or could be used?

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Students will only be allocated to discuss how a paper/solution/analysis for less technical papers.

Discussion topics

- Measurements
  - What measurements were used in the paper?
  - Are they satisfactory to support the claims in the paper?
  - What are the limitations or sources of error?

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Not all papers may include measurements, in which case no students will be allocated.

Discussion topics

- Results
  - What are the main conclusions from the paper?
  - How is the solution’s performance evaluated?
  - Do results cover all relevant scenarios?
  - Are results convincing?

Discussion topics

- Open problems, ideas, and future work
  - Is the solution definitive or does it have limitations?
  - What are the limitations?
  - What can be improved, how, how much?
  - Think outside the box; let your imagination fly

Positive and negative points

- Students will also need to mention *one* positive or negative aspect of the papers; no specific requirements or expectations
- Goals is just to have a conversation around topics of the paper
- Ideas:
  - Was there any aspect of the solution that impressed you?
  - Some idea that you liked our found neat?
  - Some aspect of the contributions you find especially important?
  - Were you unconvinced by some argument or supporting data in the paper?
  - Do you think the authors should have covered different variables/parameters/context/data in their analysis/discussion?

Submission before class

- Students should submit their summaries on Moodle before class