

Seminar Distributed Graph Processing

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Information

- Block seminar
- ECTS: 4
- Language: English/German

Content

- Many of parallel graph processing systems have been developed to scale-out to a high number of computing nodes to accommodate very large graphs and high computation costs.
- Although most of the systems are based on the distributed file system such as **HDFS** (Hadoop Distributed File System), the design philosophy and the performance are different.
- The systems are listed as follows (but not limited to): **Hadoop/HaLoop, Pregel/Giraph, GraphLab, Spark/GraphX, Giraph++, Blogel, Vertica.**
- Each member is supposed to select one system and find the related papers/tutorials for it.

Assessment

Written report: 25%

Presentation & participation in questions: 75%

Attendance during the presentation sessions is mandatory!

Scientific Writing

- Gain experience in writing scientific papers
- Learn how to choose related work properly
- Improve writing skills

Writing steps

- Choose one topic
- Discuss a paper with your supervisor!
- Download LaTeX template or Word ACM SIG (alternate style)
- Write the report
 - Mandatory: Abstract, Introduction, Problem Statement, Related work, Conclusions
 - Tailored: Implementation, Experiments, Evaluation, etc.

Requirement on report

- Style: write as if you were writing a survey
 - Avoid writing in first person
- Number of pages: 5-10
- Copy/Paste is **plagiarism**
 - Always write in your own words

Presentation goals

- Simulate a presentation in a scientific conference
- Learn to summarize the work in a few minutes
- Improve time management
- Prepare for questions

Presentation steps

- Download PPT template
- Plan the structure of your presentation
- What is the problem you will talk about? Why this is important?
- Reach fast the problem statement
- it should not reflect 1 to 1 the written report

Presentation requirements

- 30 Min. presentation
- 10 Min. discussion
- Questions from the audience(staff and students)
- Assume an IT audience, not necessarily specialists in your topic

Assessment report

- Structure of report
- Storyline
- Initiative
- Building connections - comparisons
- Writing style

Assessment presentation

- Structure of presentation
- Storyline
- Initiative
- Presentation style
- Ideas of the original paper are reflected
- Time management