Seminar Wissenschaftliches Arbeiten

(Dr. M. Schiffers)

Wintersemester 2018/19

Work Sheet I

Upload your solutions (via UniWorX only – unless otherwise stated) latest by 29.10.2018, 12:00.

Exercise 1

You need to participate in an SPWAL Research Project (SRP).[1] The purpose of an SRP is to do some methodologically sound research in a supervised and controlled hands-on training environment.

However, it is not intended to execute the projects as a „one person show". Consequently, teamworking is not only strongly recommended, it is definitely essential. In other words, you need to join a team. Be aware that the teams will not change during the semester.

It is very important to understand that hiding yourself behind the team's „firewall" without contributing to the team's success will be disadvantageous for both the groups's „hygiene" and your personal grading.

Consequently, this exercise consists of the following tasks:

1. Join a team

2. Give your team a name

3. The team agrees on the SPWAL Research Area (SRA).[2]

4. Determine your team's spokesperson.[3]

5. Have the spokesperson send an email to spwal@nm.ifi.lmu.de to communicate the team's name, the member list, and the selected SRA[4].

[1] see the student's handout in the Seminar-Repository

[2] see the student's handout in the Seminar-Repository

[3] no panic, this role is relevant only for this exercise

[4] You may decide to change the SRA while working on the SRP proposal. But be aware that the final proposal is due on November 13th (see the student's handout in the Seminar-Repository).

Exercise 2

This exercise consists of a „paper statement", a type of exercise you will encounter sometimes. Whenever you are requested to prepare a paper statement, you need to fulfill the following objectives – unless otherwise stated:

1. to read the paper
2. to analyze the paper according to given criteria
3. to summarize your analysis[5]
4. to upload your summary to UniWorX
5. to be prepared to present your analysis[6]

Now, given these objectives, prepare a paper statement (preferably in German, but English is also ok) for the paper „MapReduce: simplified data processing on large clusters" [Dean and Ghemawat, 2004] which you can find in the Seminar-Repository.[7]

Please use the following criteria for your analysis.[8]

1. Is the paper understandable?

2. Does the paper mention a clear problem statement? Which is it?

3. Do the authors present a solution to the problem? Which one?

4. Is there an explicit and sufficiently elaborated state-of-the-art from where you could determine the gaps the other approaches exhibit?

5. Are you able to identify the methodology the authors apply to solve their problem? If so, explain it. If not, elaborate what you think is missing?

6. What are the main differences between their „Abstract", their „Introduction", and their „Conclusions"?

Upload your statement to UniWorX and be prepared to present your analysis.

[5] maximum 250 to 300 words

[6] no formal presentation, maximum three minutes

[7] The paper is here.

[8] The important point here is that you should look at the paper from your personal (and therefore subjective) perspective!

Exercise 3

Using the same criteria as before, write a paper statement for the paper „Web Enabled Tool for Parallel Application Development and Performance Analysis". You can find the paper in the Seminar-Repository.[9]

[9] The paper is here.

Upload your statement to UniWorX and be prepared to present your analysis.

References

Anonymous. Web Enabled Tool for Parallel Application Development and Performance Analysis. Submitted to 20th Euromicro International Conference on Parallel, Distributed and Network-Based Processing (PDP), 2012.

Jeffrey Dean and Sanjay Ghemawat. Mapreduce: Simplified data processing on large clusters. In *Proceedings of the 6th Conference on Symposium on Opearting Systems Design & Implementation - Volume 6*, OSDI'04, pages 10–10, Berkeley, CA, USA, 2004. USENIX Association. URL http://dl.acm.org/citation.cfm?id=1251254.1251264.