Software-Engineering Seminar, Summer 2017

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AG Softech
FB Informatik
TU Kaiserslautern
Goals

- Learn an interesting topic in SE
- Read and understand scientific papers explaining the topic
- Learn how to present the topic
Your tasks

You get one topic based on an existing paper from a good conference or journal.

- Read and understand the paper
- Search for additional material on the topic
- Write a paper
  - Language: English
  - 10-15 pages, LNCS template
  - Easy to read for average master student
  - Present the problem and motivation of the work
  - Present the solution
  - You may add critique

- Presentation
  - 20-30 minutes presentation
  - about 10 minutes discussion and questions (know your topic!)
How to fail a seminar?

- Plagiarism
- Late submissions
- Not attending final presentations
- Poorly written paper
  - Fail to convey the concepts
  - Incomprehensible English
- Bad presentation
  - Fail to convey the concepts
  - Unable to answer any questions
- Never talk to your supervisor
- Do not use a spell checker
Schedule

- May 5th: Submit an extended abstract (3-5 pages)
- June 5th: Submit first draft of the paper (10-15 pages)
- 9 June, 23 June, 30 June, 7 July: Presentations
  - 3 presentations per day
- July 19th: Submit final version of paper (10-15 pages)

All deadlines: End of the day 23:59.
Submissions: As pdfs by email to your supervisor and coordinator
Presentation Schedule

Day 1 (June 9)
1. Paxos (Albert Schimpf)
2. Distributed Snapshots (Ala Harirchi)
3. Highly Available Transactions (Samkit Shah)

Day 2 (June 23)
1. Raft (Ivica Stanimirovic)
2. Practical Byzantine Fault Tolerance (Stafania Saju)
3. Chain reaction: Causal+consistent data store (Hossein Meraji)

Day 3 (June 30)
1. ZooKeeper: Wait-free coordination for Internet-scale systems (Hlib Babii)
2. Consistency Rationing in the Cloud (Nishith Rajyaguru)
3. The Potential Dangers of Causal Consistency and an Explicit Solution

Day 4 (July 7)
1. Spanner: Google’s Globally-Distributed Database
2. Quantifying eventual consistency with Probabilistic Bounded Staleness (Sina Kordestanchi)
3. Incremental Consistency Guarantees for Replicated Objects (Maximilian Kohl)
Additional Reading

Distributed Systems
- Distributed systems for fun and profit, Mikito Takada
- Replication: Theory and Practice, Charron-Bost et.al

Writing and Presentation
- See seminar website