

Introduction to the Seminar Cyber-Physical Systems

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General information

- **Structure:** Block format with irregular meetings during the semester
- **Requirements:** General interest in computer science, control theory, energy systems, or robotics
- **Goal:** Evaluate the state of the art of one scientific topic
- **Information:** Information (e.g. on lecture dates) is available at the TUMonline course
- **Material:** All material will be uploaded at the Moodle course
- **Questions:** Please post question in the *Forum* of the Moodle course

Your tasks

- **Find** scientific papers in a specific area
- **Read** scientific papers
- **Review** the literature on a specific topic
- **Design** a prototype (e.g. implement an example)
- **Write** a scientific report
- **Present** your results

Timeline

- In today's lecture: Choose the advisor and topic, if not assigned yet
- In the following three months: Complete your tasks
- Along the way: Discuss your work with your advisor
- In the end of January: Give your presentation and get feedback
- In the beginning of February: Submit your final report

Specific dates

- 25.10.2017, 11:00 - 13:00: Literature Research Workshop (in the Branch Library Informatics, room MI 00.03.045)
- 18.12.2017, 15:00 - 16:00: Presentation Workshop
- 30.01.2017, afternoon: Session I for student presentations
- 31.01.2017, afternoon: Session II for student presentations
- 7 days after your presentation: Submission deadline of the final report
- Any concerns?

Presentation

- Each participant is required to give a presentation
- **Duration and Language:** 20 minutes in English
- **Content:** Results of your topic:
 - Motivation
 - State of the art
 - Discussion
 - Conclusion
- **Discussion:** After each presentation, 5 minutes of questions

Report

- Each participant is required to complete a report
- **Scope and Language:** 6 to 8 pages in English
(A short appendix can be included optionally.)
- **Content:** Scientific presentation of your seminar work
- **Submission:** To your supervisor at the latest 7 days after your scheduled presentation

Grading criteria

- The grading sheets for the presentation and the report will be provided on Moodle.
- The presentation weights 40% of the total grade and will be determined by all advisors in the presentation session.
- The report weights 60% of the the total grade and will be marked by the student's own and another randomly chosen advisor.

Concluding remarks

- All information and material for this seminar, including templates for the presentation and the report, are on the Moodle course.
- The library offers courses on finding and citing literature:
<https://www.ub.tum.de/en/taxonomy/term/666>
- The department of Informatics published a guideline on good scientific conduct: *Grundsätze guter studentischer Praxis* available only in German at http://www.in.tum.de/fileadmin/user_upload/Studienberatung/leitfaden-de_2016Jun22.pdf

Questions

- Any questions?
- **Then:** Assignment of the remaining topics