

Advanced Topics in Computer Architecture and Parallel Systems (IN0012, IN2106)

Preliminary Meeting

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et al.

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Who are you?

What's this about?

- ▶ Work on a topic of your interest
- ▶ Topics related to our chair,
i.e. computer architecture and/or parallel systems
- ▶ Get 10 ECTS credits 😊

How is it organized?

- ▶ Assignment of topic at kick-off meeting (2018-10-19)
 - ▶ Of course, you can start working earlier
 - ▶ Ideally a group of 2-3 people per project
- ▶ Intermediate talk in December/January
- ▶ Final talk in March 2019
- ▶ Project report (\sim 20 pages) due in March 2019
- ▶ In between: regular meetings with advisor

What do we expect?

- ▶ Engagement in the project
- ▶ Willingness to work during semester break
- ▶ Regular interactions with your team members and advisor(s)
- ▶ Grade mainly impacted by (weighted $\sim \frac{1}{3}$ each)
 - ▶ Actual work, Implementation
 - ▶ Project report
 - ▶ Final talk
- ▶ But also: intermediate talk, participation in discussions, timeliness of result, ...

Contents I

- ▶ HimMUC (Advisor: Alexis Engelke)
 - ▶ Tuning the LINPACK benchmark
 - ▶ Fan control for the ODroid partition
 - ▶ Improved monitoring daemon and UI
 - ▶ Installation and Testing of Open|SpeedShop
Advisor: Alexis Engelke, Martin Schulz

Contents II

- ▶ Machine Learning (Advisor: Amir Raoofy)
 - ▶ Machine Learning for time-series analysis using HPC
 - ▶ Performance analysis and optimization of Matrix Profile algorithms
- ▶ Miscellaneous
 - ▶ Machine Learning based Strategy making for League of Legends
Advisor: Dai Yang
- ▶ **Your personal topic!**

Your own topic

- ▶ If you are interested, propose your own topic
- ▶ Please get in touch early for the necessary arrangements
- ▶ Final definition of project in agreement with advisor

Questions?

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