

Cloud and Edge Computing (Spring 2018)

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Course Goals

- Cloud computing and data centers
- Extensions of cloud towards the edge of the network, i.e., fog, edge, etc.
- Small project using containers
- After the course, you:
 - Can explain differences between different data center network topologies, can compare them, and evaluate their pros and cons
 - Can explain what edge computing is and devise mechanisms for distributing information and processing in an edge-cloud-environment
 - Have worked in practice with some of the key concepts of the course

Course Organization

- Meetings: Wed 10-12 (B120) and Fri 12-14 (C129)
- Discussions on articles and Q&A for project
- Beginning of course more towards articles
- Project details will be announced later

- Lecturer: Jussi Kangasharju
- Assistants: Otto Waltari and Aleksandr Zavodovski

Passing the Course

- No exam, only exercises to be returned
- **10 reports on scientific articles (max 2 points each)**
 - 1 point for summary of article
 - 1 point for exceptional additional insights
- Attendance in article discussion session (1 point each)
 - Only if you returned the corresponding report
- **Project (10 points); details to be announced later**
- **Bolded parts mandatory to return for passing**
- Total 40 points, need 20 points to pass

Article Discussions

- Discussion session during lecture after every deadline
- Various discussion/activation methods
- Goal: **We go over key points and lessons from article**
- Attendance is counted via an attendance sheet
 - 1 point for attendance (if article report also returned)
 - Sheet available in beginning, before discussion starts
 - If you are too late, you will not be able to sign in → No point for the session

Project Details

- Using Docker containers in CSC's computing environment
- You will need a Github account for the project
 - We will collect Github usernames later in January via Moodle
- Details will be announced later
- **Possible** demo sessions at the end of the projects on last week of the period
 - You demo your solution to us during last week's meetings
 - Keep the times free for now

Course Timeline

- Schedule for weeks 4-7:
 - Article report deadlines Tuesday and Thursday (23:00)
 - Discussion on the following day's lecture
- Week 8 and 9: Still open
 - Possible demo sessions of projects on week 9
 - Two article deadlines and discussions in any case

Practical Details

- See course page for info
- Announcements via Twitter, hashtag #UnivHelsinkiCS_CEC18
- All returns via Moodle, see home page for Moodle signup
- Moodle closes promptly at deadlines: **Do not leave your return to the last minutes or seconds!**
- Other appointments: Via email or ask in person after lectures

Questions?