



Virtualization and Cloud Computing

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Schedule

Week 12	Week 13
Introduction to Cloud Computing	Fundamentals of Cloud
Week 14	Week 15
IaaS: VM / Container	PaaS: Hadoop / Spark
Week 16	Week 17
Experiment 1	Experiment 2
Week 18	Week 19
Cloud Networking: Inter/intra Datacenters	Group Report

Exercises

- Programming assignments
 - Part I: 30%
 - Part II: 30%
- Group report: 40%.

- Homepage: <http://clouduv.cn/gcloud>
- Office: 55-A-214
- Email: laiping@tju.edu.cn

Experiment report

- 2 experiments \rightarrow 1 experiment report. In your report, you should describe:
 - Setup of your experiments, including:
 - Experimental environment;
 - Applications you used;
 - Their configurations;
 - How you run your experiments.
 - Show your experiment results with figures/tables, describe your analysis on these results.
- Deadline: 2019/12/25, to laiping@tju.edu.cn.

Group Report

- Groups: 4 students per group
 - 66 students → around 16 groups
 - Send me your groupname and namelist of your members before 2019/11/30 to laiping@tju.edu.cn.
- Report: 1 report per group, a full description of your group work
 - Introduction + Motivation + Design/Idea + Results + Conclusion + Tasks assignment among group members.
 - Better with no less than 6 pages, not a hard constraint.
 - No later than: 2020/1/1 to laiping@tju.edu.cn.
- Presentation: 1 presentation per group
 - 10 minutes = 8 minutes slides + 2 minutes Q/A

Group Report Topics

- **Topics including but not limited to:**
 - **Cloud Applications development:** any applications that related with cloud computing.
 - Data processing/Security/Artificial intelligence/public transportation, etc.
 - Spark, Flink, etc
 - **Papers describing your idea on:**
 - How to reduce the tail latency of online cloud services.
 - How to improve the resource utilization of cloud platform.
 - Performance evaluation of cloud services.
 - Scheduling in datacenters/across multi-datacenters.
 - etc.