

Course Information

Welcome to Cloud Computing!

This course introduces basic concepts and principles of cloud computing and mainstream cloud applications. We will explore cloud service models, virtualization techniques, resource management, and big data and machine learning systems. This course covers the following topics:

- Basic concepts of cloud services
- Cloud technology in computing, storage, networking, resource management, etc.
- State-of-the-art big data systems, e.g., Spark
- GPUs in the cloud

Teaching Team

Instructor: Prof. Minchen Yu

TA: Zhiqing Zhong

USTF: Juan Albert Wibowo

Prerequisites

The required background of this course includes:

- Comfortable with Python
- Comfortable with Unix/Linux

References

No official textbook. Optional references:

- Armbrust et al., “Above the clouds: A berkeley view of cloud computing,” Technical report, UC Berkeley, 2009.
- Chambers et al., “Spark: The Definitive Guide,” O’Reilly, 2018.
- Relevant materials and research papers (posted online)

Grading

- Assignments: 25%
- Open-ended course project: 30%
- Final exam: 45%

No late submission is accepted.

Schedule

Lecture: 10:30-11:50 AM on Monday and Wednesday, Teaching D 103

Tutorial: 6-6:50 PM on Monday, Teaching C 208

Office hour: 2-3 PM on Wednesday, Daoyuan 420c