

COURSE DETAIL

ADVANCED NETWORK MANAGEMENT

Country

China

Host Institution

Tsinghua University

Program(s)

Tsinghua University

UCEAP Course Level

Upper Division

UCEAP Subject Area(s)

Computer Science

UCEAP Course Number

127

UCEAP Course Suffix**UCEAP Official Title**

ADVANCED NETWORK MANAGEMENT

UCEAP Transcript Title

ADV NETWORK MGMT

UCEAP Quarter Units

4.50

UCEAP Semester Units

3.00

Course Description

This course is a graduate course and is primarily project-oriented. It aims to teach students how to build REAL systems that measure the REAL data from the networks and services, process the using Big Data techniques such as Machine Learning, and solve their REAL performance and security problems. through case studies based on recent research papers in top network conferences, this course will cover the latest research progress in network management in these areas: measurement, anomaly detection, diagnosis, and mitigation. Along the way, we will also briefly review techniques that have broader applications more than just network management, such as time series analysis, association rule mining, and machine learning. This course focuses on how to improve the performance of Mobile Internet: Targeted Services: Web-based Services such as search engine, online shopping and social networking; Video Streaming Services. Targeted Networks: Enterprise WiFi Network, Residential WiFi & Broadband Networks, Cellular Networks, and Data Center Networks. Targeted Devices: Smart Phones.

Language(s) of Instruction

English

Host Institution Course Number

80240663

Host Institution Course Title

ADVANCED NETWORK MANAGEMENT

Host Institution Campus

Tsinghua university

Host Institution Faculty

Host Institution Degree

Host Institution Department

Computer Science and Technology

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