## **COURSE DETAIL**

## **CLOUD COMPUTING FOR HIGH DIMENSIONAL DATA**

Country

Taiwan

**Host Institution** National Taiwan University

**Program(s)** National Taiwan University

UCEAP Course Level Upper Division

UCEAP Subject Area(s) Computer Science

UCEAP Course Number 123

**UCEAP Course Suffix** 

UCEAP Official Title CLOUD COMPUTING FOR HIGH DIMENSIONAL DATA

UCEAP Transcript Title CLOUD COMP HDD

**UCEAP Quarter Units** 4.50

UCEAP Semester Units 3.00

## **Course Description**

This course offers practical training in data science, focusing on highdimensional data computing and dimension reduction algorithms. The characteristics of this course are the hands-on experience with highperformance computers and the observation of real data from a statistical perspective. Practical exercises will be conducted on high performance GPU servers on the cloud, possibly utilizing resources such as the NVIDIA V100 from our NTU or Google Colab. In addition to the hands-on exercises, statistical theories related to dimension reduction algorithms, data visualization, and data interpretation are introduced. The Python programming skills are taught during the first month as part of a combined and quick recap course. The course is taught in English, but bilingual Q&A sessions are acceptable.

## Language(s) of Instruction

English

Host Institution Course Number IMPS5010

Host Institution Course Title CLOUD COMPUTING FOR HIGH DIMENSIONAL DATA

**Host Institution Campus** 

**Host Institution Faculty** 

Host Institution Degree

**Host Institution Department** Statistics

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