



統計科學研究所

INSTITUTE OF
STATISTICAL SCIENCE



S.E.M.I.N.A.R.

S.T.A.T.I.S.

Seminar

Title : Do we need new machine learning methods?

Speaker : Prof. Chih-Jen Lin (Department of Computer Science &
Information Engineering, National Taiwan University)

Time : 10:30 AM~12:00 PM, Monday, March 21, 2022

Place : Auditorium, B1F, Institute of Statistical Science,
Academia Sinica



Abstract

If we ask about the need of developing new machine learning methods, usually the answer is yes. But in this talk I will argue that sometimes the answer is no. The reason is that good methods may be already there but people did not apply them. I will use a real example as an illustration. In the area of graph-representation learning, to evaluate the quality of the obtained representations, the multi-label problem of node classification is often considered. We found that an unrealistic setting was used in hundreds, if not thousands of papers by assuming that the number of labels of each test instance is known in the prediction stage. In practice such ground truth information is rarely available, but unfortunately this inappropriate setting is now ubiquitous in the area of graph-representation learning. The issue roots from that only rudimentary multi-label training methods were used even though advanced ones have long been available. The discussion shows that besides developing new methods, we should also pay attention to other aspects on the use of machine learning techniques.

※ Tea reception starts at 10:10 AM.

※ Lecture in English, Online live streaming through Microsoft Teams will be available.