

The Hong Kong University of Science & Technology

Department of Mathematics

PhD Student Seminar

Multi-label learning with imbalanced data

By

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<u>Abstract</u>

Multi-label learning studies the problem where each example is represented by a single instance while associated with a set of labels simultaneously. One main challenge is class imbalance, that is, the number of positive labels is much smaller than the number of negative labels. Imbalanced data is ubiquitous in real world and could be divided into two types. One is that each instance is assigned with only a few positive labels while most other labels are negative. The other is that the proportions of positive instances of different classes may be significantly different. To alleviate the bad effect of class imbalance, one introduced two types of class imbalance bounds under a transductive model. While these two bounds are rough and not so accurate, we tried to put some structured class imbalance bounds and modify the former transductive model. Some issues and results will be showed.

Date: Wednesday, 9 May 2018 Time: 3:00 p.m.- 4:00 p.m. Venue: Room 4472 (near lift 25, 26) All are welcome!