

## 講題：Financial Report Analysis for Risk Prediction

### 演講簡介：

This work attempts to utilize soft information in financial reports to analyze financial risk among companies. In specific, by using the text information in financial reports, which is so-called the soft information, we apply analytical techniques to study relations between texts and financial risk. Furthermore, we conduct a study on financial sentiment analysis by using a finance-specific sentiment lexicon to examine the relations between financial sentiment words and financial risk. A large collection of financial reports, which are annually published by publicly-traded companies, is employed to conduct the experiments; moreover, two analytical techniques, regression and ranking methods, are applied to conduct the analyses. The experimental results show that, based on the bag-of-the-word model, using only financial sentiment words results in comparable performance to using the whole texts, which confirms the importance of financial sentiment words on risk prediction. In addition to the performance comparison, via the learned models, we identify some strong and interesting correlations between texts and financial risk. As a result, these findings are of great value for providing us more insights and understanding into the impact of soft information in financial reports.

### 講者簡介

Ming-Feng Tsai is currently an Assistant Professor in the Department of Computer Science at National Chengchi University. He received his Ph.D. degree from National Taiwan University in 2009. During his Ph.D. study, he was at Microsoft Research Asia as a visiting student with the Web Search & Mining Group, and was awarded by the research center the “Best Intern of the Year.” After receiving his Ph.D. degree, he worked at National University of Singapore as a Research Fellow, participating in a research project related to machine translation. In 2010, sponsored by National Science Council, he joined University of Illinois at Urbana-Champaign as a postdoctoral visitor, working on a project associated with advanced Web search and mining. His research interests span the area of information retrieval, machine learning, web search and mining, social network analysis, and natural language processing, big data analysis.

講者研究領域：資訊檢索、機器學習、自然語言處理、巨量資料分析