

專題演講

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題目：SMORE: Modularize Graph Embedding for Recommendation

摘要：

Respectively, graph facilitates fusing complex systems of interactions into a unified structure and distributed embedding enables efficient retrieval of entities. When combined, graph embedding captures relational information beyond entity interaction and towards a problem's underlying structure. This talk will start by brushing up on the basics about graphs and embedding methods and discussing their merits. We then dive into using the mathematical formulation of graph embedding to derive the modular framework: Sampler-Mapper-Optimizer for Recommendation (SMORE). We demonstrate existing models used for recommendation, such as MF and BPR, can all be assembled using three basic components. We will show how graph embedding can model complex systems through the multi-task learning and the cross-platform data sparsity alleviation tasks. The talk targets audiences who are interested in an overview of graph embedding for recommendation.

簡歷：

Ming-Feng Tsai is currently an Associate Professor in the Department of Computer Science at National Chengchi University. In 2006, he was at Microsoft Research Asia as an intern with the Web Search & Mining Group, and was awarded by the research institution the Best Intern of the Year, and invited to visit the headquarters of Microsoft and Bill Gates' house in Redmond. He received his Ph.D. degree from National Taiwan University in 2009. 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 Taiwan National Science Council, he joined University of Illinois at Urbana-Champaign as a visiting scientist, working on the projects associated with advanced Web search and mining. His research interests span the areas of information retrieval, recommender systems, natural language processing, machine learning, artificial intelligence.