DASFAA 2019 Timetable

Date	Time	Room 1	Room 2	Room 3	Room 4	Room 5	Poster Area
Monday April 22, 2019	08:00-09:00	Registration					
	09:00-10:15			Workshop BDMS 1			
	10:15-10:30	Coffee break					
	10:30-12:10			Workshop BDMS 2			
	12:10-13:30	Lunch					
	13:30-14:45			Workshop GDMA			
	14:45-15:00	Coffee break					
	15:00-16:40			Workshop BDQM			
	18:00-20:00	Reception					
Tuesday April 23, 2019	08:00-09:00	Registration					
	09:00-09:30	Opening					
	09:30-10:30	Keynote 1: Knowledge Base Refinement and Enhancement by Lei Chen *Session chairs: Xue Li, Qing Li and Xiaofang Zhou*					
	10:30-11:00	Coffee break					
	11:00-12:00	Panel: Big Data Analytics in AI era					
	12:00-13:30	Lunch					
	13:30-15:30		Session 2: Graphs *Session chair: Qun Chen*	Session 1: Big Data *Session chair: Weiwei Sun*	Tutorial 1: Deep learning for Healthcare Data Processing *by Guodong Long, and Weitong Chen*		Poster 1
	15:30-16:00	Coffee break					
	16:00-18:00		Session 4: Clustering & Classification *Session chair: Yu Gu*	Session 3: Crowdsourcing *SC: Xiangfu Meng*	Tutorial 2: Knowledge Graph Data Management *by Xin Wang*		Poster 2

(Continued on next page)

Date	Time	Room 1	Room 2	Room 3	Room 4	Room 5	Poster Area
Wednesday, April 24, 2019	08:30-09:30			Keynote 2: Databases on the Cloud -- Architectural Implications by Ashraf Aboulnaga *Session chairs: Xue Li, Qing Li and Xiaofang Zhou*			
	09:30-10:00	Coffee break					
	10:00-12:00	Session 6: Embedding *Session chair: Lei Duan*	Session 5: Data Integration *Session chair: Yi Cai*	Tutorial 3: Cohesive Subgraphs with Hierarchical Decomposition on Big Graphs *by Wenjie Zhang*			Poster 2
	12:00-13:30	Lunch					
	13:30-15:30	Demo	Session 8: Machine learning 1 *Session chair: Chengfei Liu*	Session 7: Knowledge Graph 1 *Session chair: Dingming Wu*	Tutorial 4: Enterprise Knowledge Graph from Specific Business Task to Enterprise Knowledge Management *by Rong Duan and Yanghua Xiao*		
	15:30-16:00	Coffee break					
	16:00-18:00		Session 10: Machine learning 2 *SC: Jeerayut Chaijaruwanich*	Session 9: Knowledge Graph 2 *Session chair: Xin Wang*	Tutorial 5: Tracking User Behaviours: Laboratory-Based and In-The-Wild User Studies *by Gianluca Demartini*		Poster 1
	18:30-20:00	Banquet					
Thursday, April 25, 2019	08:30-09:30			Keynote 3 - Information-on-the-Go: Applications and Foundation by Anthony K. H. Tung *Session chairs: Xue Li, Qing Li and Xiaofang Zhou*			
	09:30-10:00	Coffee break					
	10:00-12:00	Session 13: Social network *Session chair: Pruet Boonma*	Session 12: Recommendation 1 *Session chair: Tieyun Qian*	Session 11: Spatial *Session chair: Wei Wang*	Tutorial 6: Mining Knowledge Graphs for Vision Tasks *by Xiaojun Chang*		
	12:00-13:30	Lunch					
	13:30-15:30	Session 16: Privacy & Graph *Session chairs: Chih-Ya Shen and Keng-Pei Lin*	Session 15: Recommendation 2 *SC: Pree Thiengburanathum*	Session 14: Spatio-temporal *Session chair: Yong Zhang*	Demo		
	15:30-16:00	Coffee break					

* <u>Full research papers</u> will be given 24 minutes for oral presentation including Q&A.

** <u>Short research</u> and <u>demo papers</u> will be given slots for poster presentation, the presenter needs to be there for the whole timeslot. The size of poster should be A1 (594 x 841 mm or 23.4 x 33.1 in).

Keynote 1

Title: Knowledge Base Refinement and Enhancement
Speaker: Prof. Lei Chen, Hong Kong University of Science and Technology

Abstract

Nowadays knowledge bases has been serving as promising and effective tools for people to explore knowledge in different areas, such as DBPedia, Yago, Freebase and Knowledge Vault from Google. Therefore, enhancing the knowledge bases and making a good trade-off between completeness and correctness has been raised up as an important task. In order to further increase the utility of knowledge bases, various refinement methods have been proposed. These methods either try to add or infer missing knowledge to the original knowledge bases or aim at identifying incorrect information contained.

In this talk, I will provide an overview of the knowledge base refinement and enhancement approaches. Then, I will discuss knowledge base enhancement via data facts and crowdsourcing, knowledge truth discovery from conflicting sources and knowledge bases canonicalization from source texts. Finally, I will present some interesting work on subjective knowledge base construction and enhancement.

Bio

Lei Chen received the BS degree in computer science and engineering from Tianjin University, Tianjin, China, in 1994, the MA degree from Asian Institute of Technology, Bangkok, Thailand, in 1997, and the PhD degree in computer science from the University of Waterloo, Canada, in 2005. He is currently a full professor in the Department of Computer Science and Engineering, Hong Kong University of Science and Technology. His research interests include crowdsourcing over social media, social media analysis, probabilistic and uncertain databases, and privacy-preserved data publishing. The system developed by his team won the excellent demonstration award in VLDB 2014. He got the SIGMOD Test-of-Time Award in 2015. He is PC Track chairs for SIGMOD 2014, VLDB 2014, ICDE 2012, CIKM 2012, SIGMM 2011. He has served as PC members for SIGMOD, VLDB, ICDE, SIGMM, and WWW. Currently, he serves as PC co-chair for VLDB 2019, Editor-in-Chief of VLDB Journal and an associate editor-in-chief of IEEE Transaction on Data and Knowledge Engineering. He is a member of the VLDB endowment and ACM Distinguished Scientist.

Session chairs

Xue Li, Qing Li and Xiaofang Zhou

Keynote 2

Title: Databases on the Cloud -- Architectural Implications
Speaker: Dr. Ashraf Aboulnaga, Qatar Computing Research Institute

Abstract

We are in the midst of a mass migration of databases to the cloud. This represents a fundamental shift in the computing and storage platforms underlying database systems, with implications for users and system designers. In this talk, we discuss some of these implications, touching on elastic provisioning, high availability, and storage disaggregation.

Bio

Ashraf Aboulnaga is a Senior Research Director at the Qatar Computing Research Institute, Hamad Bin Khalifa University. His research focuses on databases and distributed systems. Ashraf obtained M.S. and Ph.D. degrees from the University of Wisconsin - Madison, and B.S. and M.S. degrees from Alexandria University, all in computer science. Prior to joining QCRI he was an Associate Professor at the University of Waterloo. Before Waterloo he was a Research Staff Member at the IBM Almaden Research Center. Ashraf has received a Google Research Award, the Ontario Early Researcher Award, and Best Paper Awards at the VLDB 2011 and SoCC 2015 conferences. He serves on the editorial boards of the VLDB Journal, the IEEE Transactions on Knowledge and Data Engineering, and the Distributed and Parallel Databases journal. He is an IEEE Senior Member and an ACM Distinguished Scientist.

Session chairs

Xue Li, Qing Li and Xiaofang Zhou

Keynote 3

Title: Information-on-the-Go: Applications and Foundation
Speaker: Dr. Anthony K. H. Tung, National University of Singapore

Abstract

Advances in computing and networking hardware have now enabled information to be provided as and when users need them. We call this concept Information-on-the-Go. In this talk, we will first introduce the concept of Collaborative Social Network (CSN) where users can collaborate over some central theme on the social network so that information can be shared between them dynamically. I will introduce two examples of CSNs,

I. ARShop(http://shopbyar.com/) a system to support shopping using augmented reality and
II. Readpeer (ivle.readpeer.com), a system for documents annotations sharing and enrichment

We will then look at the foundational research that support ARShop and Readpeer: GENIE and LAMP (www.comp.nus.edu.sg/~atung/gl), a system for just-in-time model construction using modern hardware. Explanation will be provided on how "Variety", the third 'V's of big data can be addressed by the GENIE and LAMP framework.

Bio

Dr Anthony K. H. Tung is currently an Associate Professor in the Department of Computer Science, National University of Singapore (NUS). He received both his B.Sc.(2nd Class Honour) and M.Sc. in computer sciences from the National University of Singapore in 1997 and 1998 respectively. In 2001, he received the Ph.D. in computer sciences from Simon Fraser University (SFU). Dr Anthony Tung main research areas are on searching, mining and visualizing complex data. More recently, he also looks into the creation of innovative big data applications over the data processing techniques that he had developed over the past 18 years. Anthony is also the deputy director of NUS NCript research center.

Session chairs

Xue Li, Qing Li and Xiaofang Zhou

Workshop Session BDMS 1

Monday, April 22, 2019 09:00 – 10:15 room number 1

1. A Probabilistic Approach for Inferring Latent Entity Associations in Textual Web Contents
   Lei Li, Kun Yue, Binbin Zhang, and Zhengbao Sun

2. UHRP: Uncertainty-Based Pruning Method for Anonymized Data Linear Regression
   Kun Liu, Wenyan Liu, Junhong Cheng, and Xingjian Lu

3. Meta-path based MiRNA-disease Association Prediction
   Hao Lv, Jin Li, Sai Zhang, Kun Yue, and Shaoyu Wei

Workshop Session BDMS 2

Monday, April 22, 2019 10:30 – 12:10 room number 1

1. Medical Question Retrieval based on Siamese Neural Network and Transfer learning method
   Kun Wang, Bite Yang, and Xiaofeng He

2. An adaptive Kalman filter based Ocean Wave Prediction Model using Motion Reference Unit Data
   Yan Tang, Zequan Guo, and Yin Wu

3. ASLM: Adaptive Single Layer Model for Learned Index
   Xin Li, Jingdong Li, and Xiaoling Wang

4. SparseMAAC: Sparse Attention for Multi-Agent Reinforcement Learning
   Wenhao Li, Bo Jin, and Xiangfeng Wang

Workshop Session GDMA

Monday, April 22, 2019 13:30 – 14:45 room number 1

1. ANDMC: An Algorithm for Author Name Disambiguation Based on Molecular Cross Clustering
   Siyang Zhang, Xinhua E, Tao Huang, and Fan Yang

2. Graph-Based Aspect Extraction and Rating Classification of Customer Review Data
   Sung Whan Jeon, Hye Jin Lee, Hyeonguk Lee, and Sungzoon Cho

3. Streaming Massive Electric Power Data Analysis Based on Spark Streaming
   Xudong Zhang, Zhongwen Qian, Siqi Shen, Jia Shi, and Shujun Wang

Workshop Session BDQM

Monday, April 22, 2019 15:00 – 16:40 room number 1

1. Identifying reference relationship of desktop files based on access logs
   Yukun Li, Xun Zhang, Jie Li, and Yuan Wang

2. Visualization of photo album: selecting a representative photo of a specific event
   Ming Geng, Yukun Li, and Fenglian Liu

3. Title: Data Quality Management in Institutional Research Output Data Center
   Xiaohua Shi, Zhuoyuan Xing, and Hongtao Lu

4. Generalized Bayesian Structure Learning from Noisy Datasets
   Yan Tang, Yu Chen, and Gaolong Ge

Session 1 Big Data

Session chair: Weiwei Sun

Tuesday, April 23, 2019 13:30 – 15:30 room number 1

1. Accelerating Real-time Tracking Applications over Big Data Stream with Constrained Space
   Guangjun Wu, Xiaochun Yun, Chao Li, Shupeng Wang, and Zhihui Zhao

2. A Frequency Scaling based Performance Indicator Framework for Big Data Systems
   Chen yang, Zhihui Du, Xiaofeng Meng, Yongjie Du, and Zhiqiang Duan

3. A Time-Series Sockpuppet Detection Method for Dynamic Social Relationships
   Wei Zhou, Jingli Wang, Junyu Lin, Jizhong, and Songlin Hu

4. Accelerating Hybrid Transactional/Analytical Processing using Consistent Dual-Snapshot
   Liang Li, Gang Wu, Guoren Wang, and Ye Yuan

5. HSDS: an Abstractive Model for Automatic Survey Generation
   Xiao-Jian Jiang, Xian-Ling Mao, Bo-Si Feng, Xiaochi Wei, and Binbin Bian

6. PU-Shapelets: Towards Pattern-based Positive Unlabeled Classification of Time Series
   Shen Liang, Yanchun Zhang, and Jiangang Ma

Session 2 Graphs

Session chair: Qun Chen

Tuesday, April 23, 2019 13:30 – 15:30 room number 2

1. Distributed Parallel Structural Hole Detection on Big Graphs
   Faming Li, Jianzhong Li, Yingshu Li, and Yubiao Chen

2. DynGraphGAN: Dynamic Graph Embedding via Generative Adversarial Networks
   Yun Xiong, Yao Zhang, Hanjie Fu, Wei Wang, Yangyong Zhu and Philip S Yu

3. Evaluating Mixed Patterns on Large Data Graphs Using Bitmap Views
   Xiaoying Wu, Dimitri Theodoratos, Dimitrios Skoutas and Michael Lan

4. Heterogeneous Information Network Hashing for Fast Nearest Neighbor Search
   Zhen Peng, Minnan Luo, Jundong Li, Chen Chen and Qinghua Zheng

5. Learning Fine-grained Patient Similarity with Dynamic Bayesian Network Embedded RNNs
   Yanda Wang, Weitong Chen, Bohan Li, and Robert Boots

6. **Towards Efficient k-TriPeak Decomposition on Large Graphs**
   Xudong Wu, Long Yuan, Xuemin Lin, Shiyu Yang, and Wenjie Zhang

Session 3 Crowdsourcing

Session chair: Xiangfu Meng

Tuesday, April 23, 2019 16:00 – 18:00 room number 1

1. Fast Quorum-based Log Replication, and Replay for Fast Databases
   Donghui Wang, and Peng Cai

2. PDCS: A Privacy-preserving Distinct Counting Scheme for Mobile Sensing
   Xiaochen Yang, Ming Xu, Shaojing Fu, and Yuchuan Luo

3. Reinforced Reliable Worker Selection for Spatial Crowdsensing Networks
   Yang Wang, Junwei Lu, Jingxiao Chen, Xiaofeng Gao, and Guihai Chen

4. SeqST-ResNet: A Sequential Spatial Temporal ResNet for Task Prediction in Spatial Crowdsourcing
   Dongjun Zhai, An Liu, Shi Cheng Chen, Zhixu Li, and Xiangliang Zhang

5. Towards Robust Arbitrarily Oriented Subspace Clustering
   Zhong Zhang, Chongming Gao, Chongzhi Liu, Qinli Yang, and Junming Shao

6. Truthful Crowdsensed Data Trading Based on Reverse Auction and Blockchain
   Baoyi An, Mingjun Xiao, An Liu, Guoju Gao, and Hui Zhao

Session 4 Clustering & Classification

Session chair: Yu Gu

Tuesday, April 23, 2019 16:00 – 18:00 room number 2

1. Discovering Relationship Patterns among Associated Temporal Event Sequences
   Chao Han, Lei Duan, Zhangxi Lin, Rich Qin, Peng Zhang, and Jyrki Nummenmaa

2. Efficient Mining of Event Periodicity in Data Series
   Hua Yuan, Yu Qian, and Bai Mengna

3. EPPADS: An Enhanced Phase-based Performance-Aware Dynamic Scheduler for High Job Execution Performance in Large Scale Data Clusters.
   Prince Hamandawana, Ronnie Mativenga, Se Jin Kwon, and Tae Sun Chung

4. Incremental Discovery of Order Dependencies on Tuple Insertions
   Lin Zhu, Zijing Tan, Xu Sun, and Xiangdong Zhou

5. Multi-view Spectral Clustering via Weighted-view Consensus Similarity, and Matrix-decomposition based Discretization
   Man Sheng Chen, Ling Huang, Chang Dong Wang, and Dong Huang

6. SIRCS: Slope-intercept-residual Compression by Correlation Sequencing for Multi-stream High Variation Data
   Zixin Ye, Wen Hua, Liwei Wang, and Xiaofang Zhou

Session 5 Data Integration

Session chair: Yi Cai

Wednesday, April 24, 2019 10:00 – 12:00 room number 1

1. Efficient Search of the Most Cohesive Co-Located Community in Attributed Networks
   Jiehuan Luo, Xin Cao, Qiang Qu, and Yaqiong Liu

2. Selective Matrix Factorization for Multi-Relational Data Fusion
   Yuehui Wang, Guoxian Yu, Jun Wang, Carlotta Domeniconi, Xiangliang Zhang, and Maozu Guo

3. Selectivity Estimation on Set Containment Search
   Yang Yang, Ying Zhang, Wenjie Zhang, Xuemin Lin, and Liping Wang

4. Typicality-based Across-time Mapping of Entity Sets in Document Archives
   Yijun Duan, Adam Jatowt, Sourav S Bhowmick, and Masatoshi Yoshikawa

5. Unsupervised Entity Alignment using Attribute Triples and Relation Triples
   Fuzhen He, Zhixu Li, Qiang Yang, An Liu, Guanfeng Liu, Pengpeng Zhao, Lei Zhao, Min Zhang, and Zhigang Chen

6. Combining Meta-Graph and Attention for Recommendation over Heterogeneous Information Network
   Chenfei Zhao, Hengliang Wang, Yuan Li, and Kedian Mu

Session 6 Embedding

Session chair: Lei Duan

Wednesday, April 24, 2019 10:00 – 12:00 room number 2

1. A Weighted Word Embedding Model for Text Classification

   Haopeng Ren, Zequan Zeng, Yi Cai, Qing Du, and Qing Li

2. Bipartite Network Embedding via Effective Integration of Explicit and Implicit Relations

   Yaping Wang, Chunyu Lu, Hongtao Liu, Wenjun Wang, and Pengfei Jiao

3. Enhancing Network Embedding with Implicit Clustering

   Qi Li, Jiang Zhong, Qing Li, Xue Li, and Chen Wang

4. MDAL: Multi-task Dual Attention LSTM Model for Semi-supervised Network Embedding

   Longcan Wu, Daling Wang, Shi Feng, Ge Yu, and Yifei Zhang

5. Net2Text: An Edge Labelling Language Model for Personalized Comment Generation

   Shaofeng Xu, Yun Xiong, Xiangnan Kong, and Yangyong Zhu

6. Understanding Information Diffusion via Heterogeneous Information Network Embeddings

   Yuan Su, Xi Zhang, Senzhang Wang, Binxing Fang, Tianle Zhang, and Philip Yu

Session 7 Knowledge Graph 1

Session chair: Dingming Wu

Wednesday, April 24, 2019 13:30 – 15:30 room number 1

1. Evaluating the Choice of Tags in CQA Sites

   Rohan Banerjee, Sailaja Rajanala, and Manish Singh

2. Knowledge Graph 1 Fast Maximal Clique Enumeration for Real-world Graphs

   Yinuo Li, Zhiyuan Shao, Dongxiao Yu, Xiaofei Liao, and Hai Jin

3. Knowledge Graph 1 Leveraging Knowledge Graph Embeddings for Natural Language Question Answering

   Ruijie Wang, Meng Wang, Jun Liu, and Weitong Chen

4. Knowledge Graph 1 Measuring Semantic Relatedness with Knowledge Association Network

   Jiapeng Li, Wei Chen, Binbin Gu, Junhua Fang, Zhixu Li, and Lei Zhao

5. Knowledge Graph 1 SINE: Side Information Network Embedding

   Zitai Chen, Tongzhao Cai, Chuan Chen, Zibin Zheng, and Guohui Ling

Session 8 Machine learning 1

Session chair: Chengfei Liu

Wednesday, April 24, 2019 13:30 – 15:30 room number 2

1. An Approach Based on Bayesian Networks for Query Selectivity Estimation
   Max Halford, Philippe Saint Pierre, and Franck Morvan

2. An Exploration of Cross-Modal Retrieval for Unseen Concepts
   Fangming Zhong, Zhikui Chen, and Geyong Min

3. Continuous Patient-centric Sequence Generation via Sequentially Coupled Adversarial Learning
   Lu Wang, Wei Zhang, and Xiaofeng He

4. DMMAM: A Deep Multi-source Multi-task Attention Model for Intensive Care Unit Diagnosis
   Zhenkun Shi, Wanli Zuo, Weitong Chen, Shining Liang, Yuwei Hao, and Lin Yue

5. Learning k-Occurrence Regular Expressions with Interleaving
   Yeting Li, Xiaolan Zhang, Jialun Cao, and Haiming Chen

6. Learning from User Social Relation for Document Sentiment Classification
   Kangzhi Zhao, Yong Zhang, Yan Zhang, Chunxiao Xing, and Chao Li

Session 9 Knowledge Graph 2

Session chair: Xin Wang

Wednesday, April 24, 2019 16:00 – 18:00 room number 1

1. A Knowledge Graph Enhanced Topic Modeling Approach for Herb Recommendation
   Xinyu Wang, Ying Zhang, Xiaoling Wang, and Jin Chen

2. Knowledge Base Error Detection with Relation Sensitive Embedding
   San Kim, Xiuxing Li, Kaiyu Li, and Jianhua Feng

3. Leon: A Distributed RDF Engine for Multi-query Processing
   Xintong Guo

4. MathGraph: A knowledge graph for solving mathematical exercises
   Tianyu Zhao, Yan Huang, Songfan Yang, Yuyu Luo, Jianhua Feng, Yong Wang, Haitao Yuan, Kang Pan, Kaiyu Li, Haoda Li, and Fu Zhu

5. Multi-Hop Path Queries over Knowledge Graphs with Neural Memory Networks
   Qinyong Wang, Hongzhi Yin, Weiqing Wang, Zi Huang, Guibing Guo, and Quoc Viet Hung Nguyen

6. Sentiment Classification by Leveraging the Shared Knowledge
   Guangyi Lv, Shuai Wang, Bing Liu, Enhong Chen, and Kun Zhang

Session 10 Machine learning 2

Session chair: Jeerayut Chaijaruwanich

Wednesday, April 24, 2019 16:00 – 18:00 room number 2

1. Reinforcement Learning to Diversify Recommendations
   Lixin Zou, Long Xia, Weidong Liu, and Jiaxing Song

2. Retweeting Prediction using Matrix Factorization with Binomial Distribution and Contextual Information
   Bo Jiang, Zhigang Lu, and Ning Li

3. Sparse Gradient Compression for Distributed SGD
   Haobo Sun, Yingxia Shao, Jiawei Jiang, Bin Cui, Kai Lei, Yu Xu, and Jian Wang

4. STDR: A Deep Learning Method for Travel Time Estimation
   Xu Jie, Yong Zhang, and Chunxiao Xing

5. Using Fractional Latent Topic to Enhance Recurrent Neural Network in Text Similarity Modeling
   Yang Song, and Liang He

6. Efficiently Mining Maximal Diverse Frequent Itemsets
   Dingming Wu, Dexin Luo, Christian Jensen, and Joshua Zhexue Huang

Session 11 Spatial

Session chair: Wei Wang

Thursday, April 25, 2019 10:00 – 12:00 room number 1

1. A Hierarchical Index Structure for Region-aware Spatial Keyword Search with Edit Distance Constraint
   Junye Yang, Yong Zhang, Huiqi Hu, and Chunxiao Xing

2. Collective POI Querying Based on Multiple Keywords and User Preference
   Dongjin Yu, Yiyu Wu, Chengfei Liu, and Xiaoxiao Sun

3. DPSCAN: Structural Graph Clustering Based on Density Peaks
   Changfa Wu, Yu Gu, and Ge Yu

4. Spatial Efficient Processing of Spatial Group Preference Queries
   Peiquan Jin

5. Reverse-Auction-Based Competitive Order Assignment for Mobile Taxi-Hailing Systems
   Hui Zhao, Mingjun Xiao, Jie Wu, An Liu, and Baoyi An

6. Top-k Spatio-Topic Query on Social Media Data
   Lianming Zhou, Kai Zheng, and Xuanhao Chen

Session 12 Recommendation 1

Session chair: Tieyun Qian

Thursday, April 25, 2019 10:00 – 12:00 room number 2

1. AdaCML: Adaptive Collaborative Metric Learning for Recommendation
    Tingting Zhang, Pengpeng Zhao, Yanchi Liu, Jiajie Xu, Junhua Fang, Lei Zhao, Victor Sheng, and Zhiming Cui

2. Adaptive Attention-Aware Gated Recurrent Unit for Sequential Recommendation
    Anjing Luo, Pengpeng Zhao, Yanchi Liu, Jiajie Xu, Zhixu Li, Lei Zhao, Victor Sheng, and Zhiming Cui

3. Attention and Convolution Enhanced Memory Network for Sequential Recommendation
    Jian Liu, Pengpeng Zhao, Yanchi Liu, Jiajie Xu, Junhua Fang, Lei Zhao, Victor Sheng, and Zhiming Cui

4. Attention-based Neural Tag Recommender System
    Jiahao Yuan, and Xiaoling Wang

5. Density Matrix based Preference Evolution Networks for E-commerce Recommendation
    Panpan Wang, Zhao Li, Xuming Pan, Donghui Ding, Xia Chen, and Yuexian Hou

6. Multi-Source Multi-Net Micro-Video Recommendation with Hidden Item Category Discovery
    Jingwei Ma, Wen Jiahui, Mingyang Zhong, Weitong Chen, Xiaofang Zhou, and Jadwiga Indulska

Session 13 Social network

Session chair: Pruet Boonma

Thursday, April 25, 2019 10:00 – 12:00 room number 3

1. Structured Spectral Clustering of PurTree Data
   Xiaojun Chen

2. Social network Dynamic stochastic block model with scale-free characteristic for temporal complex networks
   Xunxun Wu, Tianpeng Li, Wenjun Wang, and Pengfei Jiao

3. In Good Company: Efficient Retrieval of the Top-k Most Relevant Event-Partner Pairs
   Dingming Wu, Yi Zhu, and Christian Jensen

4. Local Experts Finding across Multiple Social Networks
   Yuliang Ma, Ye Yuan, Yishu Wang, Guoren Wang, Delong Ma, and Pengjie Cui

5. SBRNE: An Improved Unified Framework for Social and Behavior Recommendations with Network Embedding
   Weizhong Zhao, Huifang Ma, Zhixin Li, Xiang Ao, and Ning Li

6. User Intention-based Document Summarization on Heterogeneous Sentence Networks
   Hsiu Yi Wang, Jia Wei Chang, and Jen Wei Huang

Session 14 Spatio-temporal

Session chair: Yong Zhang

Thursday, April 25, 2019 13:30 – 15:30 room number 1

1. A Frequency-aware Spatio-Temporal Network for Traffic Flow Prediction
   Shunfeng Peng, Yanyan Shen, Yanmin Zhu, and Yuting Chen

2. Efficient Algorithms for Solving Aggregate Keyword Routing Problems
   Qize Jiang, Weiwei Sun, Baihua Zheng, and Kunjie Chen

3. Perceiving Topic Bubbles: Local Topic Detection in Spatio-temporal Tweet Stream
   Junsha Chen, Cong Xue, Neng Gao, Daren Zha, and Chenyang Tu

4. Real-Time Route Planning and Online Order Dispatch for Bus-Booking Platforms
   Hao Zhou, Yucen Gao, Xiaofeng Gao, and Guihai Chen

5. STL: Online Detection of Taxi Trajectory Anomaly based on Spatial-Temporal Laws
   Bin Cheng, Shiyou Qian, Jian Cao, Guangtao Xue, Jiadi Yu, Yanmin Zhu, Minglu Li, and Tao Zhang

Session 15 Recommendation 2
Session chair: Pree Thiengburanathum
Thursday, April 25, 2019 13:30 – 15:30 room number 2

1. Incorporating Task-oriented Representation in Text Classification
   Xue Lei, Yi Cai, Jingyun Xu, and Da Ren

2. Music Playlist Recommendation with Long Short-Term Memory
   Huiping Yang, Yan Zhao, Jinfu Xia, Bin Yao, Min Zhang, and Kai Zheng

3. Online Collaborative Filtering with Implicit Feedback
   Jianwen Yin, Chenghao Liu, Jundong Li, Bing Tian Dai, Yun Chen Chen, Min Wu, and Jianling Sun

4. Subspace Ensemble-based Neighbor User Searching for Neighborhood-based Collaborative Filtering
   Li Zhang, and Zepeng Li

5. Towards Both Local and Global Query Result Diversification
   Ming Zhong, Cheng Huanyu, Ying Wang, Yuanyuan Zhu, Tieyun Qian, and Jianxin Li

Session 16 Privacy & Graph
Session chairs: Chih-Ya Shen and Keng-Pei Lin
Thursday, April 25, 2019 13:30 – 15:30 room number 3

1. Efficient Local Search for Minimum Dominating Sets in Large Graphs
   Yi Fan, Yongxuan Lai, Chengqian Li, Longin Jan Latecki, Nan Li, Jun Zhou, Zongjie Ma, and Kaile Su

2. Multi-level Graph Compression for Fast Reachability Detection
   Shikha Anirban, Junhu Wang, and Saiful Islam

3. Multiple Privacy Regimes Mechanism For Local Differential Privacy
   Ye Yutong, and Zhang Ming

4. Privacy Preserving Elastic Stream Processing with Clouds using Homomorphic Encryption
   Arosha Rodrigo, Miyuru Dayarathna, and Sanath Jayasena

5. Select the Best for Me: Privacy-preserving Polynomial Evaluation Algorithm over Road Network
   Wei Song, Chengliang Shi, Yuan Shen, and Zhiyong Peng

Poster 1

Tuesday, April 23, 2019 13:30 – 15:30 and Wednesday, April 24, 2019 16:00 – 18:00 at poster area.

1. Deletion Robust k-Coverage Queries
   Xingnan Huang, and Jiping Zheng

2. Episodic Memory Network with Self-Attention for Emotion Detection
   Jiangping Huang, Zhong Lin, Xin Liu, and Xiaorui Huang

3. Detecting Suicidal Ideation with Data Protection in Online Communities
   Shaoxiong Ji, Guodong Long, Shirui Pan, Tianqing Zhu, Jing Jiang, and Sen Wang

4. Hierarchical Conceptual Labeling
   Haiyun Jiang, Cengguang Zhang, Yanghua Xiao, Deqing Yang, Jiaqing Liang, Jingping Liu, Jindong Chen, Chao Wang, Bin Liang, Chenguang Li, and Wei Wang

5. Anomaly Detection in Time-Evolving Attributed Networks
   Luguo Xue, Minnan Luo, Zhen Peng, Jundong Li, Yan Chen, and Jun Liu

6. A Multi-task Learning Framework for Automatic Early Detection of Alzheimer's
   Nan Xu, Yanyan Shen, and Yanmin Zhu

7. Top-k Spatial Keyword Query with Typicality and Semantics
   Xiangfu Meng, Xiaoyan Zhang, Quangui Zhang, and Pan Li

8. Align Reviews with Topics in Attention Network for Rating Prediction
   Yile Liang, Tieyun Qian, and Huilin Yu

9. PSMSP: A Parallelized Sampling-based Approach for Mining Top-k Sequential Patterns in Database Graphs
   Mingtao Lei, Xi Zhang, Jincui Yang, and Binxing Fang

10. Value-Oriented Ranking of Online Reviews Based on Reviewer-influenced Graph
    Yiming Cao, Lizhen Cui, and Wei He

11. Ancient Chinese Landscape Painting Composition Classification by Using Semantic Variational Autoencoder
    Bo Yao, Qian Zheng Ji, Xiangdong Zhou, Yue Pang, and Manliang Cao

12. ARNN: An Attention-Based Recurrent Neural Network framework for Knowledge Base Reasoning
    Qi Wang, Yun Xiong, and Yangyong Zhu

Poster 2

Tuesday, April 23, 2019 16:00 – 18:00 and Wednesday, April 24, 2019 10:00 – 12:00 at poster area.

1. SemiSync: Semi-supervised Clustering by Synchronization
   Zhong Zhang, Didi Kang, Chongming Gao, and Junming Shao

2. Neural Review Rating Prediction with Hierarchical Attentions and Latent Factors
   Hongtao Liu, Xianchen Wang, Peiyi Wang, Fangzhao Wu, Pengfei Jiao, and Wenjun Wang

3. MVS-match: An Efficient Subsequence Matching Approach Based on the Series Synopsis
   Kefeng Feng, Jiaye Wu, Peng Wang, Ningting Pan, and Wei Wang

4. Spatial-Temporal Recommendation for On-demand Cinemas
   Taofeng Xue, Beihong Jin, Beibei Li, Kunchi Liu, Qi Zhang, and Sihua Tian

5. Finding the key influences on the house price by Finite Mixture Model based on the real estate data in Changchun
   Xin Xu, Zeyu Huang, Jingyi Wu, Yanjie Fu, Na Luo, Weitong Chen, and Minghao Yin

6. Semi-supervised Clustering with　Deep Metric Learning
   Xiaocui Li, Hongzhi Yin, Ke Zhou, Hongxu Chen, Shazia Sadiq, and Xiaofang Zhou

7. Spatial Bottleneck Minimum Task Assignment with Time-delay
   Long Li, Jingzhi Fang, Bowen Du, and Weifeng Lv

8. SWR: Using Windowed Pre-randomization to Achieve Fast and Balanced Heuristic for Streaming Graph Partitioning
   Jie Wang, and Dagang Li

9. A Mimic Learning Method for Disease Risk Prediction with Incomplete Initial Data
   Lin Yue, Haonan Zhao, Yiqin Yang, Dongyuan Tian, Xiaowei Zhao, and Minghao Yin

10. Hospitalization Behavior Prediction Based on Attention and Time Adjustment Factors in Bidirectional LSTM
    Lin Cheng, Yongjian Ren, Kun Zhang, Li Pan, and Yuliang Shi

11. Modeling Item Category for Effective Recommendation
    Bo Song, Yi Cao, Weike Pan, and Congfu Xu

12. Distributed Reachability Queries on Massive Graphs
    Tianming Zhang, Yunjun Gao, Congzheng Li, Wei Guo, and Qiang Zhou

Demo

Wednesday, April 24, 2019 13:30 – 15:30 at room 4.

1. Distributed Query Engine for Multiple-Query Optimization over Data Stream
   Junye Yang, Yong Zhang, Jin Wang, and Chunxiao Xing

2. Adding Value by Combining Business and Sensor Data: An Industry 4.0 Use Case
   Guenter Hesse, Christoph Matthies, Werner Sinzig, and Matthias Uflacker

3. AgriKG: An Agricultural Knowledge Graph and Its Applications
   Chen Yuanzhe, and Ming Gao

4. KGVis: An Interactive Visual Query Language for Knowledge Graphs
   Qiang Fu, Xin Wang, Jianqiang Mei, Jianxin Li, and Yajun Yang

5. OperaMiner: Extracting Character Relations from Opera Scripts using Deep Neural Networks
   Xujian Zhao

6. GparMiner: A System to mine Graph Pattern Association Rules
   Xin Wang, Yang Xu, Ruocheng Zhao, and Junjie Lin

7. A Data Publishing System Based on Privacy Preservation
   Zhihui Wang, and Yun Zhu

8. Privacy as a Service: Publishing Data and Models
   Ashish Dandekar, Debabrota Basu, Thomas Kister, Stéphane Bressan, Geong Sen Poh, and Jia Xu

9. Dynamic Bus Route Adjustment Based on Hot Bus Stop Pair Extraction
   Liu Jiaye

10. DHDSearch: A Framework for Batch Time Series Searching on MapReduce
    Zhongsheng Li, Qiuhong Li, and Wei Wang

11. Bus Stop Refinement based on Hot Spot Extraction
    Yilian Xin

12. Adaptive Transaction Scheduling for Highly Contended Workloads
    Jixin Wang, Jinwei Guo, Huan Zhou, Peng Cai, and Weining Qian

13. IMOptimizer: An Online Interactive Parameter Optimization System based on Big Data
    Zhiyu Liang, Hongzhi Wang, Jianzhong Li, and Hong Gao

Tutorials

1. Deep learning for Healthcare Data Processing
   Guodong Long, and Weitong Chen
   Tuesday, April 23, 2019 13:30 – 15:30 at room 3

2. Knowledge Graph Data Management
   Xin Wang
   Tuesday, April 23, 2019 16:00 – 18:00 at room 3

3. Cohesive Subgraphs with Hierarchical Decomposition on Big Graphs
   Wenjie Zhang
   Wednesday, April 24, 2019 10:00 – 12:00 at room 3

4. Enterprise Knowledge Graph from Specific Business Task to Enterprise Knowledge Management
   Rong Duan
   Wednesday, April 24, 2019 13:30 – 15:30 at room 3

5. Tracking User Behaviours: Laboratory-Based and In-The-Wild User Studies
   Gianluca Demartini
   Wednesday, April 24, 2019 16:00 – 18:00 at room 3

6. Mining Knowledge Graphs for Vision Tasks
   Xiaojun Chang
   Thusrsday, April 25, 2019 10:00 – 12:00 at room 4