

October 8th 2017, Saturday

9:00 - 9:30 Conference Opening

Chairs: Stas Klimenko; Qing Li; Andrey Klimenko

- **Welcome address:**
- **Opening address:**
- **Program introduction:**

Session Tutorial 1:

Chair:

Session Tutorial 2:

Chair:

14:00 - 15:30 Keynote Talk 01:

Speaker: by Prof. Lei Chen

Chair: Qing Li

Special sessions on Security and Privacy 1:

Chair: Hua Wang

1. A Study on Securing Software Defined Networks

Raihan Ur Rasool, Hua Wang, Wajid Rafique, Jianming Yong, and Jinli Cao

2. A Verifiable Ranked Choice Internet Voting System

Xuechao Yang, Xun Yi, Caspar Ryan, Ron van Schyndel, Fengling Han, Surya Nepal, and Andy Song

3. Privacy Preserving Location Recommendations

Shahriar Badsha, Xun Yi, Ibrahim Khalil, Dongxi Liu, Surya Nepal, and Elisa Bertino

4. Topic Detection with Locally Weighted Semi-supervised Collective Learning

Ye Wang, Yong Quan, Bin Zhou, Yanchun Zhang, and Ming Peng

Special sessions on Security and Privacy 2:

Chair: Hua Wang

1. My Face is Mine: Fighting Unpermitted Tagging on Personal/Group Photos in Social Media

Lihong Tang, Wanlun Ma, Sheng Wen, Marthie Grobler, Yang Xiang, and Wanlei Zhou

2. Cryptographic Access Control in Electronic Health Record Systems: A Security Implication

Pasupathy Vimalachandran, Hua Wang, Yanchun Zhang, Hongbo Kuang, and Guangping Zhuo

3. SDN-based Dynamic Policy Specification and Enforcement for Provisioning Security as a Service in Cloud

Udaya Tupakula, Vijay Varadharajan, and Kallol Krishna Karmakar

4. Botnet command and control architectures revisited: Tor Hidden services and Fluxing

Marios Anagnostopoulos, Georgios Kambourakis, Panagiotis Drakatos, Michail Karavolos, Sarantis Kotsilitis, and David K. Y. Yau

October 8th 2017, Sunday

Morning Plenary Session

Session 01: Microblog Data Analysis

1. A Refined Method for Detecting Interpretable and Real-time Bursty Topic in Microblog Stream (id 165)

Tao Zhang, Bin Zhou, Jiuming Huang, Yan Jia, Bing Zhang, and Zhi Li

2. Connecting Targets to Tweets: Semantic Attention-based Model for Target-specific Stance Detection (id 183)

Yiwei Zhou, Alexandra I. Cristea, and Lei Shi

3. A Network Based Stratification Approach for Extracting Summary Tweets for News Articles (id 58)

Roshni Chakraborty, Maitry Bhavsar, Sourav Dandapat, and Joydeep Chandra

4. Interpreting Reputation through Frequent Named Entities in Twitter (id 95) (short paper)

Nacéra Bennacer, Francesca Bugiotti, Moditha Hewasinghage, Suela Isaj, and Gianluca Quercini

Session 02: Social Network Data Analysis

1. Discovering and Tracking Active Online Social Groups

Md Musfique Anwar, Chengfei Liu, Jianxin Li, and Tarique Anwar

2. Dynamic Relationship Building: Exploitation Versus Exploration on a Social Network

Bo Yan, Yang Chen, and Jiamou Liu

3. Social Personalized Ranking Embedding For Next POI Recommendation

Yan Long, Pengpeng Zhao, Victor S. Sheng, Guanfeng Liu, Jiajie Xu, Jian Wu, and Zhiming Cui

4. Assessment of Prediction Techniques: The Impact of Human Uncertainty

Kevin Jasberg and Sergej Sizov

Session 03: Data mining

1. Incremental Structural Clustering for Dynamic Networks

Yazhong Chen, Rong-Hua Li, Qiangqiang Dai, Zhenjun Li, Shaojie Qiao, and Rui Mao

2. Extractive Summarization Via Overlap-based Optimized Picking

Gaokun Dai and Zhendong Niu

3. Spatial Information Recognition on Web Documents using a Semi-Supervised Machine Learning Method

Hendi Lie, Richi Nayak, and Gordon Wyeth

4. When Will A Repost Cascade Settle Down?

Chi Chen, HongLiang Tian, Jie Tang, and ChunXiao Xing

Session 04: Event Detection

1. Event Cubea Conceptual Framework for Event Modeling and Analysis

Qing Li, Yun Ma, and Zhenguo Yang

2. Cross-Domain and Cross-Modality Transfer Learning for Multi-Domain and Multi-Modality Event Detection (short paper)

Zhenguo Yang, Min Cheng, Qing Li, Yukun Li, Zehang Lin, and Wenyin Liu

3. Determining Repairing Sequence of Inconsistencies in Content-related Data

Yuefeng Du, Derong Shen, Tiezheng Nie, Yue Kou, and Ge Yu

4. Efficient Approximate Entity Matching Using Jaro-Winkler Distance (id 104) (short paper)

Yaoshu Wang, Jianbin Qin, and Wei Wang

Session 05: Cloud Computing

1. Long-term Multi-Objective Task Scheduling with Diff-Serv in Hybrid Clouds

Puheng Zhang, Chuang Lin, Wenzhuo Li, and Xiao Ma

2. Online Cost-aware Service Requests Scheduling in Hybrid Clouds for Cloud Bursting

Yanhua Cao, Li Lu, Jiadi Yu, Shiyong Qian, Yanmin Zhu, Minglu Li, Jian Cao, Zhong Wang, Juan Li, and Guangtao Xue

3. Adaptive Deployment of Service-Based Processes into Cloud Federations

Chahrazed Labba, Nour Assy, Narjs Bellamine Ben Saoud, and Walid Gaaloul

4. Towards a Public Cloud Services Registry (short paper)

Ahmed Mohammed Ghamry, Asma Musabah Alkalbani, Vu Tran, Yi-Chan

Tsai, My Ly Hoang, and Farookh Khadeer Hussain

Session 06: Query Processing

1. Location-based Top-k Term Querying over Sliding Window

Ying Xu, Lisi Chen, Bin Yao, Shuo Shang, Shunzhi Zhu, Kai Zheng, and Fang Li

2. A Kernel-based Approach to Developing Adaptable and Reusable Sensor Retrieval Systems for the Web of Things

Nguyen Khoi Tran, Quan Z. Sheng, M. Ali Babar, and Lina Yao

3. Reliable Retrieval of Top-k Tags

Yong Xu, Reynold Cheng, and Yudian Zheng

October 9th 2017, Monday

Morning Plenary Session

Session 07: Spatial and Temporal Data

1. DTRP: A Flexible Deep Framework For Travel Route Planning

Jie Xu, Chaozhuo Li, Senzhang Wang, Feiran Huang, Zhoujun Li, Yueying He, and Zhonghua Zhao

2. Efficient Order-sensitive Activity Trajectory Search

Kaiyang Guo, Rong-Hua Li, Shaojie Qiao, Zhenjun Li, Weipeng Zhang, and Minhua Lu

3. Effective Caching of Shortest Travel-Time Paths for Web Mapping Mashup Systems

Detian Zhang, An Liu, Gangyong Jia, Fei Chen, Qing Li, and Jian Li

Session 08: Graph Theory

1. Discovering Hierarchical Subgraphs of K-Core-Truss

Zhen-jun Li, Wei-Peng Zhang, Rong-Hua Li, Jun Guo, Xin Huang, and Rui Mao

2. Efficient Subgraph Matching on Non-volatile Memory

Yishu Shen and Zhaonian Zou

3. Influenced Nodes Discovery in Temporal Contact Network

Jinjing Huang, Tianqiao Lin, An Liu, Zhixu Li, Hongzhi Yin, and Lei Zhao

4. Tracking Clustering Coefficient on Dynamic Graph via Incremental Random Walk (short paper)

Qun Liao, Lei Sun, Yunpeng Yuan, and Yulu Yang

Session 09: Interchange session

Chair: Stanislav Klimenko

1. BERYL: a System for Web Block Classification

Andrey Kravchenko

2. Mining Co-Location Patterns with Dominant Features (id 20)

Yuan Fang, Lizhen Wang, Xiaoxuan Wang, and Lihua Zhou (absent?)

3. Maximal Sub-Prevalent Co-location Patterns and Efficient Mining Algorithms (id 134)

Lizhen Wang, Xuguang Bao, Lihua Zhou, and Hongmei Chen (absent?)

4. Overlapping Communities Meet Roles and Respective Behavioral Patterns in Networks with Node Attributes (id 143)

Gianni Costa and Riccardo Ortale (absent)

5. Time Series Classification by Modeling the Principal Shapes (id 170)

Zhenguo Zhang, Yanlong Wen, Ying Zhang, and Xiaojie Yuan (absent?)

6. Estimating Support Scores of Autism Communities in Large-Scale Web Information Systems (id 226) (short paper)

Nguyen, Hung Nguyen, Svetha Venkatesh, and Dinh Phung (absent?)

7. Cross-Cultural Web Usability Model (id 145)

Rukshan Alexander, David Murray, and Nik Thompson (absent?)

8. A Robust and Fast Reputation System for Online Rating Systems (id 207) (short paper)

Mohsen Rezvani and Mojtaba Rezvani (absent?)

9. Exploring the Impact of Co-Experiencing Stressor Events for Teens

Stress Forecasting (id 255)

Qi Li, Liang Zhao, Yuanyuan Xue, Li Jin, and Ling Feng (absent?)

Yingying Wang paper 4 for HIS2017.

1. Modeling Complementary Relationships of Cross-Category Products for Personal Ranking (id 24) (short paper)

Wenli Yu, Li Li, Fei Hu, Fan Li, and Jinjing Zhang (absent?)

1. Extracting Web Content by Exploiting Multi-Category Characteristics (id 180)

Qian Wang, Qing Yang, Jingwei Zhang, Rui Zhou, and Yanchun Zhang (absent?)

1. DARE to Care: A Context-Aware Based Framework to Track Suicidal Ideation on Social Media (id 187) (short paper)

Bilel Moulahi, J'er^ome Az'e, and Sandra Bringay (absent?)

4. Taxi Route Recommendation Based on Urban Traffic Coulomb's Law

Zheng Lyu, Yongxuan Lai, Kuan-Ching Li, Minghong Liao, and Xing Gao (absent?)

Session 10: Crowdsourcing and Crowdsensing

1. Real-time Target Tracking through Mobile Crowdsensing

Jinyu Shi and Weijia Jia

2. Crowdsourced Entity Alignment: A Decision Theory Based Approach

Yan Zhuang, Guoliang Li, and Jianhua Feng

3. A QoS-aware Online Incentive Mechanism for Mobile Crowd Sensing (short paper)

Hui Cai, Yanmin Zhu, and Jiadi Yu

4. Iterative Reduction Worker Filtering for Crowdsourced Label Aggregation (short paper)

Jiyi Li and Hisashi Kashima

Session 11: Web data model

2. Semantic Web Datatype Inference: Towards Better RDF Matching

Irvin Dongo, Yudith Cardinale, Firas Al-Khalil, and Richard Chbeir

3. How fair is your network to new and old objects? : A modelling of object selection in web based user-object networks **(short paper)**

Anita Chandra, Himanshu Garg, and Abyayananda Maiti

Session 12: Language Processing and Web Protocols

1. Eliminating Incorrect Cross-Language Links in Wikipedia **(short paper)**

Nacéra Bennacer, Francesca Bugiotti, Jorge Galicia, Mariana Patricio, and Gianluca Quercini

2. Combining Local and Global Features in Supervised Word Sense Disambiguation

Xue Lei, Yi Cai, Qing Li, Haoran Xie, Ho-fung Leung, and Fu Lee Wang

3. A Concurrent Interdependent Service Level Agreement Negotiation Protocol in Dynamic Service-oriented Computing Environments

Lei Niu, Fenghui Ren, and Minjie Zhang

4. A New Static Web Caching Mechanism based on Mutual Dependency between Result Cache and Posting List Cache **(short paper)**

Thanh Trinh, Dingming Wu, and Joshua Zhexue Huang

October 10th 2017, Tuesday

Keynote Talk 02:

Speaker: Prof. Jie Lu

Chair: Yanchun Zhang

Session 13: Web-based Applications

1. **A Large-Scale Visual Check-In System for TV Content-Aware Web with Client-Side Video Analysis Offloading**

Shuichi Kurabayashi and Hiroki Hanaoka

2. **The Automatic Development of SEO-friendly Single Page Applications Based on HIJAX Approach (short paper)**

Siamak Hatami

3. **Towards Effective web crawling - A theme weight and Bayesian Page Rank based approach (short paper)**

Yan Tang, Lei Wei, Wangsong Wang, and Pengcheng Xuan

Session 14: Data Storage and Generator

2. **Efficient Multi-Version Storage Engine for Main Memory Data Store**

Jinwei Guo, Bing Xiao, Peng Cai, Weining Qian, and Aoying Zhou

3. **WeDGeM: A Domain-specific Evaluation Dataset Generator for Multilingual Entity Linking Systems (short paper)**

Emrah Inan and Oguz Dikenelli

Session 15: Security and Privacy

1. **PrivacySafer: Privacy Adaptation for HTML5 Web Applications**

Georgia M. Kapitsaki and Theodoros Charalambous

2. **Anonymity-based Privacy-preserving Task Assignment in Spatial Crowdsourcing**

Yue Sun, An Liu, Zhixu Li, Guanfeng Liu, Lei Zhao, and Kai Zheng

3. **Understanding Evasion Techniques that Abuse Differences among JavaScript Implementations**

Yuta Takata, Mitsuaki Akiyama, Takeshi Yagi, and Takeo Hairu, Shigeki Goto

4. **Mining Representative Patterns Under Differential Privacy (short paper)**

Xiaofeng Ding, Long Chen, and Hai Jin

5. A Survey on Security as a Service (short paper)

Wenyuan Wang and Sira Yongchareon

Session 16: Sentiment Analysis

2. SGMR: Sentiment-aligned Generative Model for Reviews (short paper)

He Zou, Litian Yin, Dong Wang, and Yue Ding

3. An Ontology-Enhanced Hybrid Approach to Aspect-Based Sentiment Analysis (short paper)

Daan de Heij, Artiom Troyanovsky, Cynthia Yang, Milena Zychlinsky Schar, Kim Schouten, and Flavius Frasincar

Session 17: Recommender Systems 1

1. Local Top-N Recommendation via Rened Item-User Bi-Clustering

Yuheng Wang, Xiang Zhao, Yifan Chen, Wenjie Zhang, and Weidong Xiao

2. HOMMIT: A Sequential Recommendation for Modeling Interesttransferring via High-order Markov Model

Yang Xu, Xiaoguang Hong, Zhaohui Peng, Yupeng Hu, and Guang Yang

3. Modeling Implicit Communities in Recommender Systems

Xiao Lin and Zhaoquan Gu

4. Coordinating Disagreement and Satisfaction in Group Formation for Recommendation

Xiao Lin and Zhaoquan Gu

Session 18: Recommender Systems 2

1. Factorization Machines Leveraging Lightweight Linked Open Data-enabled Features for Top-N Recommendations

Guangyuan Piao and John G. Breslin

2. A Fine-grained Latent Aspects Model for Recommendation: Combining Each Rating with Its Associated Review

Xuehui Mao, Shizhong Yuan, Weimin Xu, and Daming Wei

3. Auxiliary Service Recommendation for Online Flight Booking (short

paper)

Hongyu Lu, Jian Cao, Yudong Tan, and Quanwu Xiao

4. How does Fairness matter in Group Recommendation (short paper)

Xiao Lin and Zhaoquan Gu

5. Exploiting Users' Rating Behaviour to Enhance the Robustness of Social Recommendation (short paper)

Zizhu Zhang, Weiliang Zhao, Jian Yang, Surya Nepal, Cecile Paris, and Bing Li