

RESEARCH INTERESTS

Data Mining, specifically in Social Network Data Mining, Location-based Recommendation and Search

EDUCATION

Simon Fraser University (SFU), Canada Ph.D. Candidate in Computing Science	09/2012- 05/2018
Harbin Institute of Technology (HIT), China B.Sc. in Software Engineering (graduated with honored thesis)	09/2008-07/2012

PUBLICATIONS

- H. Liang, K. Wang, “Top-k Route Search through Submodularity Modeling of Recurrent POI Features”, *In the 41st International ACM SIGIR Conference on Research and Development in Information Retrieval (SIGIR), 2018, 10 pages.*
- Y. Wang, K. Wang, H. Liang, J. Fan, J. Wang, “Pay Minimum for Guaranteed Quality in Crowdsourcing”, *under review.*
- H. Liang*, C. Zhang*, K. Wang, “Trip Recommendation Meets Real World Constraints: POI Availability, Diversity and Traveling Time Uncertainty”, *ACM Transactions on Information Systems (TOIS), 2016. (*Equal contribution)*
- H. Liang, K. Wang, F. Zhu, “Mining Social Ties Beyond Homophily”, *In proc. of the 32nd IEEE International Conference on Data Engineering (ICDE), 2016, 12 pages.*
- C. Zhang, H. Liang, K. Wang, J. Sun, “Personalized Trip Recommendation with POI Availability and Uncertain Traveling Time”, *In proc. of the 24th ACM International Conference on Information and Knowledge Management (CIKM), 2015, 10 pages. [Runner-up Best Student Paper Award]*
- X. Jia, Y. Xia, R. Zhou, H. Liang, “Chinese Document Image Retrieval Based on Recognition Candidates”, *In proc. of the 9th IEEE International Conference on Fuzzy Systems and Knowledge Discovery (FSKD), 2012, 6 pages.*

PROFESSIONAL EXPERIENCE

Research Assistant & Research Group Coordinator <i>Database & Data Mining Lab, SFU, Canada</i>	09/2012-05/2018
<ul style="list-style-type: none">• Research topic on Trip Route Recommendation and Planning<ul style="list-style-type: none">◦ Recommending or planning customized trips (location sequences) under real life constraints• Research topic on Social Patterns Mining<ul style="list-style-type: none">◦ Mining interesting group social ties from large information networks	
Research Intern <i>Research & Innovation Team, GTLC, SAP Canada Inc.</i>	01/2015-08/2015
<ul style="list-style-type: none">• Free and Open Source Software Data Management & Analytics<ul style="list-style-type: none">◦ Studied the problems of open source software data management, recommendation, vulnerabilities prediction, etc◦ Designed the database schemas, developed tools for multi-source data integration and processing	
Teaching Assistant <i>School of Computing Science, SFU, Canada</i>	09/2012-04/2018
<ul style="list-style-type: none">• Courses: Database Systems I, Database Systems II, Introduction to Internet & WWW	
Intern <i>Institute of Computing Technology, Chinese Academy of Sciences, China</i>	07/2011-06/2012
<ul style="list-style-type: none">• A National “863” Program Project: Massive Data Storage and Searching System<ul style="list-style-type: none">◦ Proposed a novel cache policy for distributed NoSQL databases to improve query efficiency◦ Implemented the query module and tools of managing index data; optimized the query performance	

PROFESSIONAL EXPERIENCE (CONTINUED)

Undergraduate Research Assistant

06/2010-07/2011

State Key Laboratory of Robotics and System, HIT, China

- A National “863” Program Project: Mobile Miniature Self-reconfigurable Robots (Type II)
 - Designed a multi-sensor navigation mechanism for Mobile Miniature Self-reconfigurable Robots
 - Implemented an Extended Kalman Filter based navigation algorithm and conducted real machine experiments

ACADEMIC ACTIVITIES

Academic Services

- Session Chair of the Social Media session of SDM 2018
- Program Committee Member of CIKM 2018, BigData 2018, SDM 2018, CIKM 2017

External Reviewer

KDD (2017, 2016, 2015, 2014), ICDE (2015), WWW (2017, 2016), ICDM (2016, 2015, 2014), WSDM (2017), SDM (2017, 2016, 2015, 2013), IJCAI (2016), AAAI (2017, 2016), BigData (2017), Bigdata Congress (2018)

AWARDS AND HONORS

- ACM SIGIR Travel Award (2015, 2018)
- SFU Computing Science Travel Award (2015, 2018)
- SFU Graduate Fellowship (2013-2018)
- SFU GSS Professional Development Grant (2016)
- CIKM2015 Runner-up Best Student Paper Award
- Ebco/Eppich Graduate Scholarships in Intelligent Systems (2015)
- Provincial Excellent Graduate Award (2012)
- HIT Outstanding Student Scholarships (2008-2012)
- Honorable Mention in The 2011 Mathematical Contest in Modeling
- HIT Merit Student of Excellence (2011)
- HIT Innovation Prize (2011)
- Provincial First Prize in The 2010 China Undergraduate Mathematical Contest In Modeling
- HIT Outstanding Student Leader (2010)
- Champion of SAP Vancouver “Triathlon: Ping Pong+Billiards+Foosball” (2015)
- HIT Campus Top Ten Singers (2009)

SUMMARY OF SKILLS

Technical Expertise

- Strong background of Data Mining, Machine Learning, Combinatorial Optimization, Algorithms Design
- Solid knowledge of relational database and various DBMS, data structures
- Practical experience of Object Oriented Design and problem solving, NoSQL Databases and Map-Reduce
- Proficient programming skills: Python, C++, Java, Bash Scripting, JavaScript, Matlab, C#, Git, etc
- Experience of web/desktop application development under Linux, Windows

Transferable Skills

- Self-driven and motivated individual with strong problem solving and critical thinking ability
- Good time management and organizational skills
- Team player and excellent communication skills