Chen Chen

Address: Brickyard Suite 411AC (CIDSE), Arizona State University, 699 South Mill Ave, Tempe, AZ, 85281
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RESEARCH INTERESTS

Large scale data mining in graphs, Real-world network analysis and Information dissemination in applications to social media mining and healthcare

EDUCATION

Ph.D. in Computer Science Expected Oct.2018
Arizona State University, Arizona, USA
Advisor: Prof. Hanghang Tong

Ph.D. in Computer Science Sept.2013-May.2014
Graduate Center, City University of New York, New York, USA (Transfer to ASU)
Advisor: Prof. Hanghang Tong

M.S. in Computer Science Sept.2011-May.2013
Courant Institute of Math and Science, New York University, New York, USA

B.Eng. in Computer Science and Engineering Sept.2007-Jul.2011
Beihang University, Beijing, China

HONORS AND AWARDS

- KDD Travel Award 2018
- SBP-BRiMS Doctor Consortium Travel Award 2017
- Bests of KDD 2016 2016
- KDD Travel Award 2016
- ICDM Travel Award 2015
- Bests of SDM 2015 2015
- SDM Travel Award 2015
- Science Fellowship, Graduate Center, City University of New York 2013-2014
- Tencent Scholarship, Beihang University (2/166) 2008-2009
- All-around student of Beihang University, Beihang University 2008-2009
- Academic excellence awards for two consecutive years, Beihang University (top 5%) 2007-2009

RESEARCH

Research Intern, Futurewei Technologies, Inc. May. 2016-Aug. 2016
Mentor: Dr. Hui Zang, Dr. Yinglong Xia
Area of Research: Graph mining, recommender systems
- Worked on the recommendation problems in dynamic networks

Research Assistant, Arizona State University Sept. 2014-Present
Area of Research: Graph mining, information diffusion
- Lead the project of multi-layered network mining
- Work on the project of network connectivity optimization

Research Assistant, City University of New York Sept.2013-May.2014
Area of Research: Graph mining, information diffusion and bioinformatics
- Worked on graph manipulation algorithms to control the diffusion process in network
- Analyzed the graph structure on biological data set to discover critical connections among biological entities

Research Assistant, NYU Proteus Project Group for Natural Language Processing Jun. 2012-Jan. 2013

Area of Research: Named entity extraction
- Developed and optimized the Named Entity expansion system with active learning scheme

Research Assistant, Beihang University Jun. 2010 -Jul. 2011
Area of Research: 3D model retrieval
- Proposed a view based 3D model retrieval algorithm with Bag of Words algorithm

TEACHING

Teaching Assistant, Arizona State University
- Statistical Machine Learning Spring 2016
- Semantic Web Mining Spring 2015

PUBLICATIONS

Journal Papers:

- **Chen Chen**, Jingrui He, Nadya Bliss, Hanghang Tong, "Towards Optimal Connectivity on Multi-layered Networks", IEEE Transactions on Knowledge and Data Engineering 2017
- **Chen Chen**, Hanghang Tong, Lei Xie, Lei Ying, Qing He, "Cross-Dependency Inference in Multi-layered Networks: A Collaborative Filtering Perspective", ACM Transactions on Knowledge Discovery from Data, Special Issue of "Bests of KDD 2016"
- **Chen Chen**, Hanghang Tong, "On the Eigen-Functions of Dynamic Graphs: Fast Tracking and Attribution Algorithms", SAM Special Issue of "Best of SDM 2015"
- **Chen Chen**, Hanghang Tong, B Aditya Prakash, Charalampos Tsourakakis, Tina Eliassi-Rad, Christos Faloutsos, Duen Horng Chau, "Node Immunization on Large Graphs: Theory and Algorithms", IEEE Transactions on Know--ledge and Data Engineering 2016
- **Chen Chen**, Hanghang Tong, B Aditya Prakash, Tina Eliassi-Rad, Michalis Faloutsos, Christos Faloutsos, "Eigen-Optimization on Large Graphs by Edge Manipulation", ACM Transactions on Knowledge Discovery from Data 2016

Conference Papers:
- **Chen Chen**, Ruiyue Peng, Lei Ying, Hanghang Tong, "Network Connectivity Optimization: Fundamental Limits and Effective Algorithms", Proceedings of SIGKDD, 2018
- Jundong Li*, **Chen Chen***, Huan Liu, Hanghang Tong, "Multi-Layered Network Embedding", Proceedings of SDM, 2018 (**Equal Contribution*)
- Qiao Liu, **Chen Chen**, Annie Gao, Hanghang Tong, Lei Xie, "VariFunNet, an Integrated Multiscale Modeling Framework to Study the Effects of Rare Non-Coding Variants in Genome-Wide Association Studies: Applied to Alzheimer's Disease". Proceedings of IEEE BIBM, 2017
- **Chen Chen**, Hanghang Tong, Lei Xie, Lei Ying, Qing He, "FASCINATE: Fast Cross-Layer Dependency Inference on Multi-layered Networks", Proceedings of SIGKDD, 2016 (***Bests of KDD 2016***)
- **Chen Chen**, Jingrui He, Nadya Bliss, Hanghang Tong, "On the Connectivity of Multi-layered Networks: Models, Measures and Optimal Control", Proceedings of IEEE ICDM, 2015
- **Chen Chen**, Hanghang Tong, "Fast Eigen-Functions Tracking on Dynamic Graphs", Proceedings of SDM, 2015 (***Bests of SDM 2015***)

Doctor Consortium:
- **Chen Chen** "Network Connectivity in Complex Networks: Measures, Inference and Optimization", Proceedings of WSDM, Doctor Consortium, 2018
- **Chen Chen**, Hanghang Tong, "Network Connectivity in Complex Networks: Measures, Inference and Optimization", Proceedings of SBP-BRiMS, Doctor Consortium, 2017

SERVICES

- Program Committee:
  The AAAI International Conference on Aritificial Intelligence (AAAI 2019)
  The 26th ACM International Conference on Information and Knowledge Management (CIKM 2017)
  The 6th CCF Conference on Natural Language Processing and Chinese Computing (NLPCC 2017, 2018)

TECHNICAL SKILLS

- Programming Language: Matlab, Python, Java, C/C++
- Operating System: Window, Linux
- SDK: Visual Studio, Eclipse, Android Studio