Xiang Yue

Homepage: www.whutommy.cn | Lab-site: www.bioinfotech.cn/en/
E-mail: yuexiang9607@163.com | Tel:+86-15827090313

EDUCATION

International School of Software (ISS), Wuhan University (WHU), Wuhan, China

2014.9-2018.6 B.S. Software Engineering GPA: 3.79/4.0 Rank: 1%

CURRENT RESEARCH INTERESTS

- Data Mining, especially for graph mining, graph similarity, bipartite network modeling
- Machine Learning, especially for semi-supervised learning, multiple-label learning, recommendation system
- Application in biology, social network, etc.

PUBLICATIONS

Conference Article

- Predicting drug-disease associations based on the known association bipartite network, **IEEE International Conference on Bioinformatics and Biomedicine 2017 (BIBM 2017)**, July 2017, Wen Zhang*, Xiang Yue, Bolin Li, Weiran Lin, Yanlin Chen (Regular Paper, Accepted, **Rate: 79/414=19.0%**)
- Predicting small RNAs in bacteria via sequence learning ensemble method, **IEEE International Conference on Bioinformatics and Biomedicine 2017 (BIBM 2017)**, July 2017, Wen Zhang*, Jingwen Shi, Guifeng Tang, Wenjian Wu, Xiang Yue, Dingfang Li* (Short Paper, Accepted, **Rate: 81/414=19.6%**)

Journal Article

- Predicting side effects of drugs through linear neighborhood similarity, **BMC Systems Biology**, Sept. 2017, Wen Zhang*, **Xiang Yue**, Feng Liu, Yanlin Chen, Shikui Tu, Qianlong Qu, Xining Zhang (accepted)
- Matrix Factorization with Similarity Constrained for predicting Drug-Disease Associations, **BMC Bioinformatics**, July 2017, Wen Zhang*, **Xiang Yue**, Weiran Lin, Wenjian Wu, Ruoqi Liu, Feng Liu (Awaiting EIC Decision)
- Sequence-based Sparse Graph Learning with Multiple Similarities Optimization for Predicting LncRNA-Protein Interaction, **BMC Bioinformatics**, Sept 2017, Wen Zhang*, **Xiang Yue**, Guifeng Tang, Wenjian Wu, Ruoqi Liu (under review)

*Corresponding Author

HONORS AND AWARDS

- 2016-2017 **LEI JUN Scholarship (Scale: Top1 Winner of National Scholarship, the highest prize for students in WHU)**
- 2014-2017 **First Class Scholarship (Scale: 5%), Three Times, WHU**
- 2014-2017 Excellent Student (Scale: 1%), Three Times, WHU
- 2015-2016 Excellent Volunteer, WHU
- 2015-2016 Excellent Community Activists, WHU
- 2014-2015 **National Scholarship (Scale: 1%), China**

CURRICULUM EXPERIENCES

- Oral Reports at IEEE International Conference on Bioinformatics and Biomedicine 2017, Kansas City, MO, USA
- Teaching Assistant (TA), Object-Oriented Programming (JAVA), Fall 2017
- Teaching Assistant (TA), Computer Systems: A programmer's Perspective, Fall 2017
- Lab Visit, Chinese University of Hong Kong, Hong Kong, July 2017

RESEARCH EXPERIENCES

Sequence-based Sparse Graph Learning with Multiple Similarities for Predicting LncRNA-Protein Interaction

Advisor: Associate Prof. Wen Zhang | 2017.08 – 2017.11

- Propose a novel computational method (SSGLM-LPI) for predicting lncRNA-protein interactions
- SSGLM-LPI projects LncRNAs and proteins from feature spaces into the lncRNA-protein interaction space by sparse learning, and use the multiple similarities as constraints

Matrix Factorization with Similarity Constrained for predicting Drug-Disease Associations

Advisor: Associate Prof. Wen Zhang | 2017.01 – 2017.06

- Present a novel computational method (MFSCDD) to predict the potential associations between drugs and diseases
- MFSCDD incorporates drug features and disease semantic information compared with classical Matrix Factorization
- Develop a web server, available at: http://www.bioinfotech.cn/SCMFDD/, to visualize prediction

Predicting drug-disease associations based on the known association bipartite network

Advisor: Associate Prof. Wen Zhang | 2017.04 – 2017.07

- Propose a computational method named NLNSIM, which make use of known drug-disease network topological similarity, to predict potential associations
- A novel similarity measure (linear neighbor similarity, LNS), is adopted in this study to calculate the topological similarity from the drug-disease network (bipartite).

Predicting side effects of drugs through linear neighborhood similarity

Advisor: Associate Prof. Wen Zhang | 2016.11 – 2017.04

- Develop the linear neighborhood similarity-based methods for the side effect prediction
- Propose the method "LNSM" and its extension "LNSM-SMI", which respectively make use of single-source data and multi-source data to predict the side effects of new drugs.
- Propose the method "LNSM-MSE" based on the known side effects to predict missing side effects of approved drugs.

Person Re-identification based on Deep Learning

Advisor: Prof. Dengpan Ye | 2015.11 – 2016.03

- Develop a Mobile platform to collect data of people's voice, heartbeat and step rate under people's unconscious state
- Adopt DBN (Deep Belief Network) to identify individual's status

PROGRAMMING PROJECT EXPERIENCES

LTalk: An Intelligent Dating Recommendation Platform

Group Leader | 2017.03 – 2017.04

- Develop an amazing dating platform (Android) to help people find true friends
- Utilize our latest research recommendation algorithm in back-end
- Win "Best Achievement Award" in our school

Activity Assistant: A Convenient Mobile Phone Application for College Students

Key Member | 2015.03 – 2016.03

- Offer a platform for student association to post the activity information
- Function including: check, share, comment activities information
- Welcomed by students in our school

StarRuler: An Amazing Mobile Phone Game

Group Leader | 2015.07 – 2015.08

- Use Cocos-2dx Game Engine based on C++ to develop
- Win First Prize of over 80 teams in the competition
- Full-Platform supported (Android, iOS, WinPhone)

EXTRACURRICULAR ACTIVITIES

- 06/2016-06/2017 Executive Vice Minister, Students' Association Union, WHU
- 09/2015-06/2016 President, Right Protection Department of Student Union, ISS, WHU
- 11/2015 Volunteer, International Exchange Student Camp, WHU