

Rui Feng

(+86)18867155882 Zijiang Campus, Zhejiang University, Hangzhou, China 310057
neo_rfeng@zju.edu.cn

EDUCATION

ZHEJIANG UNIVERSITY, Hangzhou, China

Statistics and English

Cumulative GPA: 3.99, Major GPA: 4.2

Core Courses: Mathematical Analysis, Mathematical Statistics, Advanced Data Structure and Algorithm,
Stochastic Analysis, Real Analysis, Functional Analysis

2015 –Present

Homepage <http://ruis.tech/about>

Github <https://github.com/rhythmswing>

RESEARCH INTERESTS

- Data analysis in social science
- Social network mining
- Statistical learning theories
- Geometric view of machine learning

PUBLICATIONS

Yang Yang *, **Rui Feng** *, Fei Wu, Yueting Zhuang, Zhanlin Sun. *Non-discriminative Representation Learning: An Adversarial Gaming Framework*. submitted to IJCAI 2018 (*in review*).

**these authors contributed equally to the work*

Rui Feng *, Yang Yang *, Wenjie Hu, Yueting Zhuang, Fei Wu. *Representation Learning for Scale-free Networks*. accepted by AAAI 2018 (*to appear*).

**these authors contributed equally to the work*

RESEARCH PROJECTS

Task-specific representation learning of heterogeneous social networks

Research Assistant, Digital media Computing & Design Lab, Zhejiang University
Joint work with Yang Yang, Yuhong Xu, and Lekui Zhou

Zhejiang University
March 2017 – Present

- Analysis of mobile networks consisting of millions of users, learn distributed vector representation of users
- Incorporating community embedding and node embedding to effectively learn local structures of a node and compensate for incomplete network data
- Inferring the influence of a user's friends to help debt collection for P2P lending services

Non-discriminative Representation Learning

Research Assistant, Digital media Computing & Design Lab, Zhejiang University
Joint work with Yang Yang and Zhanlin Sun

Zhejiang University
March 2017- Jan. 2018

- Studied the problem of de-biasing historical discrimination in data sets when applying machine learning algorithms
- By mapping attributes to a latent feature, where sensitive information that is potential for causing discrimination is effectively masked while other information is preserved as much as possible, machine learning algorithms leads to fair decision making process.
- Proposed a min-max adversarial gaming framework to incorporate de-biasing in the process of representation learning.

Representation Learning for Scale-free Networks

Research Assistant, Digital media Computing & Design Lab, Zhejiang University
Joint work with Yang Yang and Wenjie Hu

Zhejiang University
April 2017- Nov. 2018

- Theoretically analyzed the feasibility of embedding scale-free networks onto Euclidean space using tools of the sphere packing analysis
- Proposed *degree-punishment principle* to optimize the embedding efficiency of scale-free networks in terms of the

ability to preserve the scale-free property

- Our principle is able to significantly improve efficiency of representation vectors both in terms of scale-free property and in various real-world social network mining tasks.

MISCELLANEOUS

Computer skills

- Programming languages and softwares: C, C++, Python, Matlab, R.
- Operating System: Linux.

Languages: English. Working proficiency; Chinese. Native Language; German. Basic knowledge; French. Basic knowledge.

Standard Tests: TOEFL (109).

Honors

- **Meritorious Winner of Interdisciplinary Contest in Modeling 2017**
- **The Third Price of Zhejiang University Sanhao Rugby Championship in 2017**