Yao Lu

http://luyao.science

Room 308, iLab Tongji, School of Software Engineering
4800 Cao'an Road, Tongji University, Shanghai, China
+86 188-1820-6109 | luyao@ieee.org

EDUCATION

Tongji University **Shanghai, China**
B.Eng. in *Material Science and Engineering* *Sept.2012 - Jun.2017 (Expected)*

- GPA: **4.3/5.0**

University of Alberta **Edmonton, Canada**
Dept. of Computing Science *Visiting Scholar* *June.2016 - September.2016*

- MITACS Scholar (co-funded by China Scholarship Council and Canada Government)
- Research Supervisor: Prof. Randy Goebel and Dr. Mi-Young Kim

RESEARCH EXPERIENCES

Interest: Graph Analysis, Natural Language Processing, Machine Learning, Computer Vision

Microsoft Academic Graph Mining **Microsoft Research Asia**
Collaborate with Dr.Jing Yuan, Microsoft and Prof. Randy Goebel, University of Alberta *July.2016 - Present*

- A project aimed at finding better method to evaluate young researchers in comparison to the h-index and citation number. We use Convolutional Neural Network for the feature extraction for modeling of academic quality. Apply graph embedding to quantify the social impact. We propose a joint learning framework capable of adding more context information for modeling
- The project has been presented at Microsoft Developer Conference

Spatial Association Gene Network Analysis **YuLab@Emory**
Directed by Prof. Tianwei Yu, Emory University *April.2016 - Present*

- A project aimed at integrating expression data with biological networks to find dynamic relationships which has computational hurdles to overcome. The goal of the project was to find vertices around which local expression consistency change significantly between clinical conditions.
- We proposed a new method called DNLC (Differential Network Local Consistency) which can extract significant vertices that are not detected using existing methods.
- Preparing for paper submission & CRAN R Package released

Topic Model Based Microblog Spammer Detection **iLab&NLP@Tongji University**
Collaborate with Prof. Renxian Zhang, Tongji University *Oct.2015 - April.2016*

- The project aimed at detecting smart spammers. This kind of spammers with profiles and tweets are difficult to identify. We proposed a Topic model based spammer detection approach to detect fake accounts in microblog platform. Our method outpeform other methods.
- Co-authored paper accepted by **NAACL-HLT Student Research Workshop(SRW)**, San Diego, 2016

Biologically Inspired Scene Recognition **iLab@Tongji University**
Directed by Prof. Ye Luo, Tongji University *Mar.2016 - Present*

- Using biologically plausible method of Visual Saliency and Gist Descriptor to recognize scenes
- Modified the feature extraction method proposed by Itti et al.
- New features with Linear SVM achieve 10% higher than previous method

PROJECTS AND COMPETITIONS

Beauty of Programming Competition **Microsoft Research Asia**
May.2016

- One of the most famous programming competition in China
- Rank 3 of 1000 teams in the competition
- Project about Microsoft Academic Graph(MAG) search application

Microblog Social Trend Prediction Competition **Alibaba Inc. & Sina Inc.**
Aug.2013 - Feb.2014

- Time series analysis to predict the popularity of Microblog posts
- Top 10% among total 2293 teams
- Develop the competition method to academic paper

Open Source Contribution

Social Network Fake Account Dataset **Open Dataset**
Authors: ***Yao Lu*** *and Linqing Liu* *Oct.2016*

- Kaggle Open dataset (Dataset Link)
- The first public available dataset about detection of human-like fake account
- Paper published in NAACL 16

Differential network local consistency (DNLC) **R Package**
Authors: ***Yao Lu****, Yusheng Ding, Linqing Liu and Tianwei Yu* *Dec.2016*

- Project about detection local consistency
- Package available in R-CRAN (Package Link)

PUBLICATIONS

In Progress	**Yao Lu**, Yusheng Ding, Linqing Liu, Nicholas Jing Yuan, Mi-Young Kim and Randy Goebel "Mining the Rising Star: A Joint Learning Framework for Academic Performance Modeling". **Yao Lu**, Yusheng Ding, Linqing Liu, Jianwei Lu and Tianwei Yu "Differential Network Local Consistency (DNLC): A Study of Subnetwork-level Correlation" In Progress
Published	Linqing Liu, **Yao Lu**, Ye Luo, Renxian Zhang, Jianwei Lu and Laurent Itti, "Detecting Smart Spammers On Social Network: A Topic Model Approach." In NAACL 2016: Student Session, San Diego, USA. Mi-Young Kim, Ying Xu, **Yao Lu** and Randy Goebel. "Legal Question Answering Using Paraphrasing and Entailment Analysis." JSAI International Symposium on Artificial Intelligence. Springer Berlin Heidelberg, 2016.

HONOURS & AWARDS

16' **Top 3 of Beauty of Programming Competition 2016**, Microsoft Inc. (Top 0.3%)
15' **First-class Scholarship**, Tongji University (Top 5%)
First Prize in National Mathematics Competition, Ministry of Education (Top 5%)
14' **First-class Scholarship**, Tongji University (Top 5%)
Outstanding Student Award, Tongji University (Top 2%)
First Prize in Physics Competition, Tongji University (Top 1%)

TECHNICAL STRENGTH

Programming Languages	C/C++, Python, R, Matlab, LaTeX, Shell Script
Skills	Natural Language Processing, Deep Learning, Digital Image Processing
Packages&Tools	Tensorflow, NLTK, NetworkX, OpenCV, Sci-kit Learn, Git