YANTING ZHANG

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EDUCATION

Ph.D. Candidate Information and Communication Engineering (Rank: 6/100)

Beijing University of Posts and Telecommunications

Sep.2016-Present

B.Eng. Digital Media Technology

Beijing University of Posts and Telecommunications Sep.2011-Jul.2015

FIELD of INTERESTS

Big data analytics

♦ Human behavior learning

♦ Urban computing

HONORS & AWARDS

Outstanding Graduate Student, BUPT, 2017

1st Prize, ICT International PBL Project, 2016

3rd Prize, National Postgraduate Mathematic Contest in Modeling, 2016

3rd Prize, China Graduate Contest on Application, Design and Innovation of Mobile-Terminal, 2016

2nd Prize, National Undergraduate Business Plan Competition (Capital Division), 2014

Honorable Mention, Mathematical Contest in Modeling (MCM/ICM), 2014

Merit student, BUPT, Three times, 2012, 2013, and 2014

National Endeavor Scholarship, BUPT, Twice, 2013 and 2014

Educational fund of Jiongpan Zhou, BUPT, 2013

RESEARCH EXPERIENCES

An Analysis on the Overlap and Mutual Enlargement of Online and Offline Social Networks

Natural Science Foundation of China (No.NSFC-61671078). Advisor: Jie Yang.

Sep.2016-Present

- Did a deep research for establishment of this project. Read 60+ theses.
- Reconstructed users' historical trajectories based on their points of interests. Discovered four distinct
 mobility patterns by using Latent Dirichlet Allocation (LDA) model.
- Constructed users' online and offline social networks based on their online and offline behavior.
- At present, I keep studying the Multilayer Network theoretical knowledge to dig into the correlation between online and offline social networks.

Research on Network Computing Model of Urban Functional Area and Its Evolution

National Science Foundation of China (No.NSFC-61701031). Advisor: Yuanyuan Qiac.

May.2017-Present

- Explored urban functions by recognizing the mobile traffic usage patterns from mobile big data.
- Studied the urban functional composition in modern cities.
- At present, I am trying to deal with multivariate time series data and studying how the urban functional areas evolve during day, month, and year.

Prediction Model for Urban Functions Using Deep Learning Methods

Summer Research Visit in GSIS, Tohoku University (Japan). Advisor: Nei Kato.

Jul.2017-Aug.2017

- Implemented academic sharing and learned deep learning methods.
- Creatively applied CNN to predict the urban functions from mobile traffic usage conditions.
- One paper and one patent regarding the research result are ongoing.

PROJECT EXPERIENCES

ICT International PBL Project: Robotics

Aug.2016-Dec.2016

- Collaborated with a team of four to control the robot. Defined 4 different kinds of operations to realize basic movement. Designed vision system by recognizing colors using Open CV.
- Solved challenges like the influence of dark light.
- Achieved the best performance prize in competitive performance evaluation during the workshop.

Application, Design and Innovation of Mobile-Terminal

Jul.2016-Oct.2016

- Leaded a team of four to produce a location-based application called Digger, which is used to accomplish tasks published by other users, aiming at sharing human resource.
- Taking fully consideration of various interactions, designed 15+ front-end pages.

Monitoring System for Floating People (Police use.)

Dec.2015-Dec.2016

- Designed some modules of the whole system, like, floating people module, social relation module, and etc.
- Responsible for developing the social relation module, both front-end and back-end engineering.

PUBLICATIONS

SCI-Indexed Journal Publications:

1. Yuanyuan Qiao, Zhongwei Si, <u>Yanting Zhang</u>, Fehmi Ben Abdesslem, Xinyu Zhang, Jie Yang, A Hybrid Markov-based Model for Human Mobility Prediction. Neurocomputing 2017. (First student author.)

Conference Proceedings:

- **Yanting Zhang**, Yuanyuan Qiao, Junhua He, Shuangshuang Han, Jie Yang. Discovering Online Shopping Preferences in Different Urban Area from the View of Mobile Traffic Patterns. Workshop of IJCAI 2017.
- Yuanyuan Qiao, <u>Yanting Zhang</u>, Lindgren Anders, Jie Yang. Understanding Online Shopping and Offline Mobility Behavior in Urban Area from the View of Multilayer Network. IC-NIDC 2016. (First student author.) Best paper award.
- **4.** <u>Yanting zhang</u>, Yi Zhang, Yuanquan Qiao, Wenhui Lin, Jie Yang. From Commuting to Spatial Structure of Cities: Analysis Based on Mobile Big Data. (Submitted under review.)
- **5.** Shuangshuang Han, Yuanyuan Qiao, <u>Yanting Zhang</u>, Wenhui Lin, Jie Yang. Analyze Users' Online Shopping Behavior Using Online Interest-Product Network. (Second student author.) (Submitted under review.)

SKILLS

- ♦ Programming Languages: Python; Matlab; Java; SQL; Html
- ♦ Big Data & Frameworks: Hadoop; Spark; Hive
- Software: NetBeans; Eclipse; Postgres; Unity3D; Adobe Series
- Languages: English; Chinese (native); Japanese (primary)

LEADERSHIP

Monitor, Administrative Class, BUPT

Sep.2012-Present

Took care of routine matters and managed students to participate in diverse activities.

Secretary, Technological Innovation Department, BUPT

Sep.2015-Sep.2016

Designed, proposed plans, and cooperated with other fellows to organize innovative forums.

PERSONAL

I love painting very much. Especially, I enjoy the process of drawing beautiful scenery along a journey. I like playing sports, such as badminton, table tennis, and etc.

I am enthusiastic about volunteer works. I used to be a volunteer in Beijing Marathon and China's National Grand Theater. I was also an English teacher for old people in community.