

# YANTING ZHANG

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Beijing University of Posts and Telecommunications (BUPT), Beijing, China

## EDUCATION

<b>Ph.D. Candidate</b>	Information and Communication Engineering Beijing University of Posts and Telecommunications	(Rank: 6/100) Sep.2016-Present
<b>B.Eng.</b>	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  
1<sup>st</sup> Prize, ICT International PBL Project, 2016  
3<sup>rd</sup> Prize, National Postgraduate Mathematic Contest in Modeling, 2016  
3<sup>rd</sup> Prize, China Graduate Contest on Application, Design and Innovation of Mobile-Terminal, 2016  
2<sup>nd</sup> 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 Qiao](#). 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

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### 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

- Led 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

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### SCI-Indexed Journal Publications:

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

### Conference Proceedings:

2. **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.
3. Yuanyuan Qiao, **Yanting Zhang**, 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. **Yanting zhang**, 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, **Yanting Zhang**, Wenhui Lin, Jie Yang. Analyze Users' Online Shopping Behavior Using Online Interest-Product Network. (Second student author.) (Submitted under review.)

## SKILLS

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- ✧ **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

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### 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

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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.