

YIFAN DING

BUPT, Beijing, China

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EDUCATION

Beijing University of Posts and Telecommunications (BUPT), China *09/2013 - 03/2016(expected)*
M.E. in Computer Technology, Institute of Network Technology/ **National Key Laboratory**
Average: 84.6, Ranking: 5/101 (top 5%)

Beijing Information Science and Technology University (BISTU), China *09/2009 - 07/2013*
B.S. in Information Management & Information System, School of Information Management
Average: 91.2, **Ranking: 1/181 (top 1%)**

SELECTED RESEARCH EXPERIENCE

Semantic Classification and Segmentation of Conference Videos June 2015 - Present
State Key Laboratory of AI, Tsinghua University, CMU & Cisco *Advisor: Jianmin Li (Jun Zhu's group)*

- Advised a two-level approach combining Convolutional Neural Networks with Hidden Markov Models and proposed a sampling method to extract semantic information to achieve video semantic segmentation and classification.
- Optimized the approach, implemented the experiment and obtained a good performance (88.4% accuracy).
- Composed a paper about the approach and submitted it to ICME.
- Presented a conference videos database containing thousands of segmented labeled videos (Cisco).

Research in Video QoE & Mobile Social Network October 2013 - June 2014
State Key Lab of Net&Swi Tech, BUPT, National Sci Tech Support Plan Projects *Advisor: Wenjing Li*

- Introduced a resource allocation model base on quantitative relation analysis between video classes and visitor's QoE (Quality of Experience) and developed a test platform to conduct experiments.
- Presented and mathematical proved a mobile social network devices composition and maintenance algorithm.

The Fusion, Mining and Analysis of Communication Data February 2015 - May 2015
BUPT & State Grid Corporation of China *Advisor: Wenjing Li*

- Wrote a patent of a neural network with self-adaptive learning rate to diagnose grid faults.
- Offered a big data based operation quality analytical algorithm combined MapReduce with Apriori.

Experimental Economic Model of Chinese Railway Competition Status May 2012 - July 2012
Beijing Students Research Fund *Advisor: Xinquan Ge*

- Established the experimental economic model of Chinese railway competition status by railway data analysis.
- Published two papers. Was invited to Academic Forum of BJ College Stu's Scientific Research & Innovation.

INTERNSHIP

Intel Labs China July 2015 - Present
Camera Algorithm Intern *Manager: Yu Xia*

- Proposed a visible and near-infrared light fusion algorithm to achieve 1080P videos real-time de-hazing and optimized it with downsampling, fast fuzz algorithm and fast guided filter. A paper was submitted to ICME and there is a patent under writing.
- Realized the algorithm with Matlab and C. It achieved the demanded requirements of efficiency (improved dozens of times) and effect and was applicable to be implemented on the Intel platform.
- Continuing the research of depth camera de-hazing algorithm.

SAP Labs China
Research Developer Intern

April 2015 - June 2015
Mentor: Qian Shang

- Participated in the development of a text analysis tool to classify texts from the international media.
- Coded in a crawler for the information retrieval part in Java. Designed a data de-duplication algorithm.

Jinwei Telemedicine
Developer Intern

July 2011 - November 2011
Mentor: Yanlin Song

- Developed in Jinwei Telemedicine Platform, a web application for over 200 hospitals to apply telemedicine.
- Gained hands-on experience on sql, C#, Java and JavaScript coding.

PUBLICATIONS

- [1] **Yifan Ding**, Sicheng Li, Jianmin Li, Gary Overett. "Conference Video Segmentation and Classification by a Two-Level Model of CNNs and HMM." *International Conference on Multimedia & Expo* 2016 (EI) (under review).
- [2] Jingyun Zhang, **Yifan Ding**. "Real-time Defog Model Based on Visible and Near-infrared Information." *International Conference on Multimedia & Expo* 2016 (EI)(under review).
- [3] Wenjing Li, **Yifan Ding**, et al. "Multi-devices Composition and Maintenance Mechanism in Mobile Social Network." *Communications and Networks, Journal of* 17.2 (2015): 110-117.(1st student author) (SCI)
- [4] Wang, Ruiyi, Yang Geng, **Yifan Ding**, et al. "Assessing the quality of experience of HTTP video streaming considering the effects of pause position." *Network Operations and Management Symposium (APNOMS), 2014 16th Asia-Pacific*. IEEE, 2014.(EI)
- [5] **Yifan Ding**, et al. "QoE-oriented Resource Management Strategy by Considering User Preference for Video Content." *Network Operations and Management Symposium (APNOMS), 2014 16th Asia-Pacific*. IEEE, 2014.(EI)
- [6] **Yifan Ding**, et al. "The Design, Implementation and Application of .net Based Railway Passenger Transport Market Game Experimental Platform." *Computer Engineering and Applications(Chinese)*. 2012.48.
- [7] Yinyu Chen, **Yifan Ding**, et al. "The Experimental Economics Model Design and Analysis of China Railway Passenger Transport Systems Competition Form." *Modern Economic Information(Chinese)*. 2012(14).

SELECTED HONORS

Scholarships & Honors

2012.10 **National** Scholarship
2013.02 Technology Invention Scholarship (1/1000)
2014.10 Excellent Graduate Student of BUPT
2014.11 Excellent Director of Graduate Student Union, BUPT
2009-2015 University Scholarships

Awards

2012.08 **2nd** prize of the second National Computer Game Contest of College Students
2012.11 **1st** prize of Experimental Economics Open Tournament 2012
2012.12 **2nd** prize of the 22nd Information Exchange Meeting of China Computer Users Association Information System Branch
2012.12 **2nd** prize of Beijing in the National Mathematical Modeling Contest of College Students
2010.10 **1st** prize in College Physics Competitions (ranked 1st)
2011.12 **2nd** prize of Oracle Cup Competition of Database Applications

SKILLS

Coding: MATLAB,C, C#, Java, SQL, Python

Tools: Linux, Caffe, Visual Studio, MyEclipse, HANA Studio

Courses: Linear algebra, theory of matrices, probability and mathematical statistics, artificial intelligence, algorithms analysis and design, basic graphics, computer vision, machine learning, deep learning.