

MENGDI ZHANG

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Knowledge Engineering Group Lab.
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EDUCATION

Shandong University
Bachelor of Engineering in Software Engineering

Shandong, China
Sep. 2010 - July 2014

GPA: 82/100 3.40/4.00

Undergraduate Thesis: *Topic-targeted Influence Maximization in Social Network*

Advisor: Prof. Jun Ma

OBJECTIVE

- Ph.D position under Prof. Heng Ji, BLENDER Lab, Computer Science Department, Rensselaer Polytechnic.
- Research interests: Natural Language Processing, Machine Learning and Data Mining

PUBLICATIONS

1. Linmei Hu, Xuzhong Wang, **Mengdi Zhang**, Juanzi Li: "Learning Topic Hierarchies For Wikipedia Category" *ACL*, (2): 346–351, 2015.
2. **Mengdi, Zhang**, Tao Huang, Yixin Cao, Lei: "Target Detection and Knowledge Learning for Domain Restricted Question Answering." *NLPCC*, accepted, 2015.
3. Junbo, Xia, **Mengdi, Zhang**, Lei Hou, Yixin Cao: "CNME: A system for Chinese News Meta-data Extraction" *JIST*, submitted, 2015.

RESEARCH EXPERIENCE

- **Research Assistant** Oct 2014 - Present
KEG Lab, Tsinghua University
Joint 5Ws Modeling and Event Extraction, (June 2015 - Present): I'm working with Prof. Heng Ji and Juanzi Li's group on document-level event extraction. Beyond the traditional sentence-level IE task, I try to connected all the event pieces cross the whole news document by adding discourse relation between sentences. A event network model is expected to constructed firstly. Then propagate the temporal and geometry information through the network, and jointly infer each event's 5Ws and the salient event from this network.
Chinese News Analysis, (Oct 2014 - Mar 2015): We periodically crawled articles from 12 news sites and analyzed news trend on several text mining tasks, including news topic classification, hot topic detection, topic tracing, and salient event extraction. I mainly worked on the 5Ws extraction for each news on a supervised learning fashion. A bunch of NLP tools were tested and combined in my implementation. Our work was presented at the APEC in Beijing. One paper submitted to JIST.
Automated Question Answering, (Sep 2014 - Dec 2014): Work involved automated answering bank user's question based on Frequent Asked Questions corpus. we proposed a semi-automatic domain-restricted FAQ answering framework SDFA, without relying on any external resources. SDFA detected the targets of questions to assist both the fast domain knowledge learning and the answer retrieval. The proposed framework had been successfully applied in real project on bank domain. Extensive experiments on two large datasets demonstrated the effectiveness and efficiency of the approaches. One paper published on NLPCC.
- **Undergraduate Research Assistant** Jan 2014 - Sep 2014
IRLab, Shandong University
Topic-targeted Influence Maximization, (Feb 2014 - May 2014): The problem I worked on is a new scenario of traditional IM problem: how to chose the seed users to maximize the influence on social network targeting a certain topic. I combined the topic to the optimization objective and investigated both greedy and heuristic algorithm, and then proposed a new heuristic strategy by punishing local influence overlap, which

achieved best performance. The experiments were conducted on two huge real-world datasets: a director-actor-writer-movie network from Wikipedia's movie page and a citation network from AMiner. My thesis on this work with Prof. Jun Ma's advisor achieved Excellent Undergraduate Thesis honors.

- **Undergraduate Research Assistant** Jan 2011 - Sep 2012
Database&Search Lab, Shandong University

Distributed Information Search and Retrieval, (Jan 2011 - Sep 2012) : We built a distributed information search and retrieval system based on open source structure of Lucene&Nutch, combining XML and Hadoop technique. I designed and implemented the document retrieval module, dynamic server organization module and the application interface. We won a first prize on Qilu Software competition.

INTERN EXPERIENCE

- **Software Engineer** Jul 2014 - Aug 2014
Yingc Inc., Jinan

Education Quality Analysis and Evaluation System: I built a e-learning platform based on B/S structure for local education government. The system was used for quantizing students' performance and teachers' ability, allowing educational department of government to evaluating each schools's qualification. I independently developed it in two weeks, achieved all function required by myself, including requirement analysis, function modules design, Web front-end development and PHP back-end development. Coded in PHP.

- **Software Engineer** Jun 2013 - Aug 2013
Micro Security Corporation, Jinan

Intelligent Campus System Based on 433MHz Internet of Thing: We built an Internet of Thing system enabling users to use mobile phone app to remotely check the real-time temperature and humidity, and control classroom's light. As the team leader of five other students, I designed the communication structure of whole system and implemented the sensing layer with C on STM32 chip. At last I made a presentation as outstanding student on behalf of my group. Coded in C and Java.

PATENTS

1. Zhang Mengdi. One Type of Variable Screen Mesh, App. No. 201120196592.0, App. Date: Feb. 01. 2012.
2. Zhang Mengdi. One Type of Linkage Distance Adjusting Mesh Screen, App. No. 201120296585.0, App. Date: Nov. 03. 2011.

ACTIVITIES

- Poster on ACL, Beijing, Jul 2015.
- Team leader in CSDGC YCISL program of Stanford University, San Francisco, Feb 2014.
- Team leader in MSRA Student Summer Camp, Beijing, Aug 2013.
- Team leader in Youth Volunteer Activity of community-supported volunteer teacher, Jinan, 2010 - 2011.

HONORS

- 2014.03 Research and Innovation Scholarship, Shandong University,
- 2012.10 Outstanding Student Scholarship, Shandong University.
- 2012.09 Outstanding Innovation individual of College Award, Shandong University.
- 2012.03 Third Prize, 2012 Mathorcup Global Mathematical Modeling Challenge.
- 2011-2012 One First and Two Second Prizes in Tenth Qilu Software Design and Foreign Competition.

SKILLS

- Programming language: Java, C++, Python, PHP, JavaScript.
- Tools: Matlab, Processing, Latex, Emacs.
- Database: Oracle, Mysql, MongoDB.