Room 318, Wachman Hall 1805 N. Broad St. Philadelphia, PA19122

# Qingqing Cai

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### **EDUCATION**

Temple University

2011.9 - present

Master Candidate in Computer & Information Science GPA: 3.93/4.0; Admitted as **Presidential Fellowship** 

Soochow University

2007.9 - 2011.6

Bachelor Degree in Software Engineering

GPA: 90/100; Ranking: 1/37

## RESEARCH EXPERIENCE

## Research on Semantic Parsing

2011.9 - Present

Temple University

Advisor: Dr. Alexander Yates

- Build a new dataset as testbed for semantic parsing across multiple domains. The dataset contains 917 natural language questions and corresponding meaning representations;
- Implemented a matching system (with recall of 0.8) to identify natural language words that correspond with each relation in a fixed schema for a relational database;
- Implemented a cross-domain semantic parser system which is capable of parsing questions on a large variety of domains with an F1 of 0.63;

### Research on Information Retrieval

2009.10 - 2010.12

Soochow University

Advisor: Dr. Yu Hong

- Proposed a re-ranking model to improve information retrieval performance using Boolean model, VSM consine and Kullback-Linear divergence;
- Implemented an information retrieval system on TDT4 corpus, with MAP of 0.74;

## **PUBLICATION**

Qingqing Cai and Alexander Yates. Large-scale Semantic Parsing via Schema Matching and Lexicon Extension. *Proceedings of the Annual Meeting of the Association for Computational Linguistics (ACL)*, 2013. (Nominated as the Best Paper)

Qingqing Cai and Alexander Yates. Semantic Parsing Freebase: Towards Open-domain Semantic Parsing. Proceedings of the Second Joint Conference on Lexical and Computational Semantics (\*SEM), 2013.

Yu Hong, Qingqing Cai, Song Hua, Jianmin Yao and Qiaoming Zhu. Negative Feedback: The Forsaken Nature Available for Re-ranking. *Proceedings of the 23rd International Conference on Computational Linguistics:Posters (COLING)*, 2010.

## **STRENGTHS**

Languages

ML Algorithm

NLP Software

Java(expert), C++(prior experience), Python(familiar)

Language Model, Maximum Entropy, HMM, etc.

NLP pre-processing tools such as taggers, parser, etc.

Eclipse, Lucene, Weka, Linux, Visual Studio, Matlab