Zhengzhong Liu

CONTACT
INFORMATION

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RESEARCH
INTERESTS

Natural Language Processing, Information Retrieval, Information Extraction, Entity Linking

EDUCATION

Carnegie Mellon University   **Sep, 2014 - now**
- PhD Candidate in Language Technologies
• Current Culmulative GPA: 3.87

Carnegie Mellon University   **2012 - 2014**
- Master in Language Technologies
• Current Culmulative GPA: 3.9

The Hong Kong Polytechnic University   **2007 - 2012**
- Bachelor of Science in Computing
• with First Class Honours
• GPA for Award: 3.93

- Bachelor of Business Administration with a Major in Management
• with Second Class Honours, Division 1
• GPA for Award: 3.43

- Engineering School, Jonköping University (Exchange)   **August, 2009 - December, 2009**

RESEARCH
EXPERIENCES

Deep Exploration and Filtering of Text (DEFT)   **September, 2012 - now**
- Advisors : Prof. Eduad Hovy, Prof. Teruko Mitamura
- The DEFT project aims at discovering deeper and implicit information from text using NLP and AI techniques. Our group focuses on understanding event semantic in text. We develop automated systems in detecting various types of relations among event mentions.

TAC 2011 PolyU Team *(Knowledge Base Population Track)*   **June, 2011 - October, 2011**
- Advisor : Prof. Qin Lu
- Leading the entity linking task and collaborate with my teammates on the slot filling task.

Web Person Name Disambiguation   **June, 2010 - June, 2011**
- Advisor : Prof. Qin Lu
- This became my undergraduate dissertation with topic: Web Person Name Disambiguation – An experimental research on name entity clustering
- Achieved F-Score comparable to all participated system in WePS Campaign in previous years.
- An A+ and award nominated project in Department of Computing, the Hong Kong Polytechnic University in academic year 2010/11

WORKING
EXPERIENCES

Research Intern at Google   **May, 2015 - August, 2015**
- Mentors: Edgar González Pellicer *and* Daniel Gillick
- Worked with the Google NLP team on Verb Phrase Ellipsis to improve dialogue systems.
- We've studied various sub steps of the topic and contribute a dataset to the community.

Student Developer at Google Summer of Code   **May, 2012 - August, 2012**
- Mentor: Pablo N. Mendes
- Worked on the *DBpedia Spotlight* for DBpedia at Google Summer of Code program 2012
- Developed and delivered a collective entity linking system which considers the coherence of all

entities in the document.
- Code base : https://github.com/hunterhector/dbpedia-spotlight

A Bilingual Citation Management Framework   **June, 2011 - August, 2012**
- Involved in development of a citation management system to manage several linguistic journals, including author, article and citation identification and disambiguation

OPEN SOURCE   **DBpedia**
EXPERIENCES   - Developed collective disambiguation module in project DBpedia Spotlight using Scala and Hadoop

HONORS AND   **ACL Outstanding Paper Award**   **2016**
AWARDS

                University Community Service Learning Award   **2010**
                - Bronze Award and the Best Demonstration of Teamwork Award

                The Zhi Yuan Scholarship of China Soong Ching Ling Foundation   **2007 - 2011**
                - For excellent mainland China student pursuing education in Hong Kong

TECHNICAL SKILLS   *Programming Languages:* Java, Scala, Python, C, JavaScript, Shell scripts, Visual Basic, Ruby, R

PUBLICATIONS   Zhiting Hu, Xuezhe Ma, **Zhengzhong Liu**, Eduard Hovy, and Eric Xing (2016). Harnessing Deep Neural Networks with Logic Rules. In Submission to ACL 2016.

                Zhengzhong Liu, Edgar Gonzlez, and Dan Gillick (2016). Exploring the steps of Verb Phrase Ellipsis. In NAACL Workshop on Coreference Resolution Beyond OntoNotes (CORBON 2016).

                Xuezhe Ma, **Zhengzhong Liu**, and Eduard Hovy (2016). Unsupervised Ranking Model for Entity Coreference Resolution. In *The 15th Annual Conference of the North American Chapter of the Association for Computational Linguistics: Human Language Technologies.*

                Teruko Mitamura, **Zhengzhong Liu**, and Eduard Hovy (2016). Overview of TAC KBP 2015 Event Nugget Track. In *Proceedings of the Text Analysis Conference 2015.*

                Zhengzhong Liu, Teruko Mitamura, and Eduard Hovy (2015). Evaluation Algorithms for Event Nugget Detection : A Pilot Study. In Proceedings of the 3rd Workshop on EVENTS at the NAACL-HLT, pages 53-57.

                Zhengzhong Liu, Jun Araki, Eduard Hovy & Teruko Mitamura (2014). Supervised Within-Document Event Coreference using Information Propagation. *The Ninth edition of International Conference on Language Resources and Evaluation.*

                Jun Araki, **Zhengzhong Liu**, Eduard Hovy & Teruko Mitamura (2014). Detecting Subevent Structure for Event Coreference Resolution. *The Ninth edition of International Conference on Language Resources and Evaluation.*

                Xu, J., Lu, Q., **Zhengzhong Liu**, & Chai, J. (2012). Topic Sequence Kernel. In H. Yuexian, N. Jian-Yun, S. Le, W. Bo, & Z. Peng (Eds.), *Lecture Notes in Computer Science* (pp. 457-466). Springer Berlin Heidelberg.

                Xu, J., Lu, Q., & **Zhengzhong Liu** (2012). Aggregating skip bigrams into key phrase-based vector space model for web person disambiguation. In *Proceedings of KONVENS 2012* (Vol. 2012, pp. 108-117).
                Xu, J., Lu, Q., & **Zhengzhong Liu** (2012). PolyUCOMP: Combining semantic vectors with skip bigrams for semantic textual similarity. In *SemEval'12 Proceedings of the First Joint Conference on Lexical and Computational Semantics.*

                Xu, J., Lu, Q., & **Zhengzhong Liu** (2012). Combining Classification with Clustering for Web Person Disambiguation. In *Proceedings of the 21st international conference companion on World Wide Web (WWW2012).* Lyon.

                Zhengzhong Liu, Lu, Q., & Xu, J. (2011). High Performance Clustering for Web Person Name

Disambiguation Using Topic Capturing. In *The first International Workshop on Entity Orientation Search, SIGIR2011 Workshop.*

Jian, X., **Zhengzhong Liu**, Lu, Q., Liu, Y., & Wang, C. (2011). PolyUCOMP in TAC 2011 Entity Linking and Slot-Filling. In *Proceedings of the Fourth Text Analysis Conference (TAC 2011).*

ACTIVITIES

TedX Hong Kong 2010 (http://www.ted.com/tedx/events/1032)   **July - September, 2010**
- Member in promotion team of the organizing committee in preparing the TedX Hong Kong 2010 conference. Mainly responsible for website construction.

Cambodia Service Learning Trip   **July, 2010**
- Team leader in project team in Anjali House, a local children shelter based in Siem Reap. Main responsibilities including installing computer hardware and teaching children simple web development.

The Hong Kong Polytechnic University Student Union **March, 2008 - February, 2009**
- Financial Secretary and General Secretary of the Information Services Affairs Committee
 • The Hong Kong Polytechnic University Notebook Sale, Person in Charge
 • Construction of the cyber cafe in campus