

WORK EXPERIENCE

2018–Current Data Scientist, Microsoft

EDUCATION

2012–2018 University of Maryland, College Park
Advisor: Dr. Douglas W. Oard
Ph.D. in Information Studies
Thesis: Towards Knowledge Base Population from Conversational Sources

2009–2012 Peking University
Advisor: Dr. Zhi-hong Deng
M.S. in Electronic Engineering and Computer Science

2005–2009 Peking University
B.S. in Electronic Engineering and Computer Science

PEER-REVIEWED CONFERENCE PAPERS

- 1. Entity Linking to One Thousand Knowledge Bases**
Ning Gao, and Silviu Cucerzan
Proceedings of the 39th European Conference on Information Retrieval (ECIR 2017).
Acceptance rate 27%
- 2. Reducing Reliance on Relevance Judgments for System Comparison by Using Expectation-Maximization**
Ning Gao, William Webber, and Douglas W. Oard
Proceedings of the 36th European Conference on Information Retrieval (ECIR 2014): pp. 1-12.
Acceptance rate 23%.
- 3. Leveraging Side Information for Speaker Identification with the Enron Conversational Telephone Speech Collection**
Ning Gao, Gregory Sell, Douglas W. Oard, and Mark Dredze
IEEE Automatic Speech Recognition and Understanding Workshop (ASRU 2017).
Acceptance rate 45%.
- 4. Support for Interactive Identification of Mentioned Entities in Conversational Speech**
Ning Gao, Douglas W. Oard, and Mark Dredze
Proceedings of the 40th International ACM SIGIR Conference on Research and Development in Information Retrieval (SIGIR 2017).
Acceptance rate 30%.
- 5. Pearson Rank: A Head-Weighted Gap-Sensitive Score-Based Correlation Coefficient**
Ning Gao, Mossaab Bagdouri, and Douglas W. Oard
Proceedings of the 39th International ACM SIGIR Conference on Research and Development in Informa-

tion Retrieval (SIGIR 2016): pp. 941-944.

Acceptance rate 31%.

6. A Head-Weighted Gap-Sensitive Correlation Coefficient

Ning Gao, and Douglas W. Oard

Proceedings of the 38th international ACM SIGIR conference on Research & development in information retrieval (SIGIR 2015): pp. 799-802.

Acceptance rate 31%.

7. Enhancing Scientific Collaboration Through Knowledge Base Population and Linking for Meetings

Ning Gao, Mark Dredze, and Douglas Oard

Hawaii International Conference on System Sciences (HICSS 2017).

8. Knowledge Base Population for Organization Mentions in Email

Ning Gao, Mark Dredze, and Douglas W. Oard

5th Workshop on Automated Knowledge Base Construction (AKBC 2016), 5 pages.

9. HLTCOE participation in TAC KBP 2015: Cold start and TEDL

Tim Finin, Dawn Lawrie, Paul McNamee, James Mayfield, Douglas Oard, Nanyun Peng, **Ning Gao**, Yiu-Chang Lin, Josh MacLin, and Tim Dowd

Proceedings of the Eighth Text Analysis Conference (TAC 2015), 14 pages.

10. A Test Collection for Email Entity Linking

Ning Gao, Douglas W. Oard, and Mark Dredze

NIPS Workshop on Automated Knowledge Base Construction (AKBC 2014), 5 pages.

11. Guess What I Want: Inferring the Semantics of Keyword Queries Using Evidence Theory

Jia-Jian Jiang, Zhi-Hong Deng, **Ning Gao**, and Sheng-Long Lv

Asia-Pacific Web Conference (APWeb 2012): pp. 388-398.

12. Report on the SIGIR Workshop on "Entertain Me": supporting complex search tasks

Nicholas J. Belkin, Charles L. A. Clarke, **Ning Gao**, Jaap Kamps, and Jussi Karlgren

ACM SIGIR Forum (2011): pp. 51-59.

13. Fully Utilize Feedbacks: Language Model Based Relevance Feedback in Information Retrieval

Sheng-Long Lv, Zhi-Hong Deng, Hang Yu, **Ning Gao**, and Jia-Jian Jiang

Advanced Data Mining and Applications (ADMA 2011): pp. 395-405.

14. ListOPT: Learning to Optimize for XML Ranking

Ning Gao, Zhi-Hong Deng, Hang Yu, and Jia-Jian Jiang

Pacific-Asia Conference on Knowledge Discovery and Data Mining (PAKDD 2011): pp. 482-492.

Acceptance Rate 27%.

15. Adaptive Top-k Algorithm in SLCA-Based XML Keyword Search

Hang Yu, Zhi-Hong Deng, Yong-Qing Xiang, and **Ning Gao**

Asia-Pacific Web Conference (APWeb 2010): pp. 364-366.

16. A New Indexing Strategy for XML Keyword Search

Yong-Qing Xiang, Zhi-Hong Deng, Hang Yu, Sijing Wang, and **Ning Gao**

Seventh International Conference on Fuzzy Systems and Knowledge Discovery (FSKD 2010): pp. 2412-2416.

17. Combining Strategies for XML Retrieval

Ning Gao, Zhi-Hong Deng, Jia-Jian Jiang, Sheng-Long Lv, and Hang Yu

Initiative for the Evaluation of XML Retrieval (INEX 2010): pp. 319-331.
(INEX 2010 Best Student Paper Award)

18. A Learning-to-Rank Method for XML Keyword Search

Ning Gao, Zhi-Hong Deng, Yong-Qing Xiang, and Hang Yu

Initiative for the Evaluation of XML Retrieval (INEX 2009): pp. 81-87.

PEER-REVIEWED JOURNAL PAPERS

19. Person Entity Linking in Email with NIL Detection

Ning Gao, Mark Dredze, and Douglas W. Oard

Journal of the Association for Information Science and Technology (2017).

20. XDist: An Effective XML Keyword Search System With Re-ranking Model Based on Keyword Distribution

Ning Gao, ZhiHong Deng, and ShengLong Lv

Science China Information Sciences 57.5 (2014): pp. 1-17.

21. LAF: A New XML Encoding and Indexing Strategy for Keyword-based XML Search

Zhi-Hong Deng, Yong-Qing Xiang, and **Ning Gao**

Concurrency and Computation: Practice and Experience 25(11) (2013): pp. 1604-1621.

22. Efficient Top-k Algorithm for eXtensible Markup Language Keyword Search

Hang Yu, Zhi-Hong Deng, and **Ning Gao**

IET Software 6(4) (2012): pp. 342-349.

23. MAXLCA: A New Query Semantic Model for XML Keyword Search

Ning Gao, Zhi-Hong Deng, Jia-Jian Jiang, and Hang Yu

Journal of Web Engineering 11(2) (2012): pp. 131-145.

24. Mop: An Efficient Algorithm for Mining Frequent Pattern with Subtree Traversing

Zhi-Hong Deng, **Ning Gao**, and Xiaoran Xu

Fundamenta Informaticae. 111(4)(2011): pp. 373-390.

AWARDS AND SCHOLARSHIPS

2016 ~ 2017

iFellows Doctoral Fellowship

The Andrew W. Mellon Foundation.

2015

SIGIR Travel Grant

38th international ACM SIGIR conference on Research & development in information retrieval.

2014

Jacob K. Goldhaber Travel Grant

Office of the President and the Graduate School, University of Maryland.

2014

International Conference Student Support Award

Office of the President and the Graduate School, University of Maryland.

2012

Best Poster Award Runner-up

iSchool Doctoral Research Day, Information Studies, University of Maryland.

2011

Founder Scholarship

Peking University Founder Group Co.,Ltd (For best student in AI)

- 2010 **Best Student Paper Award**
Workshop of INitiative for the Evaluation of XML Retrieval (INEX)
- 2009 ~ 2012 **College Scholarship**
School of Electronic Engineering and Computer Science, Peking University

PROFESSIONAL MEMBERSHIP

- Program Committee Member of **iConference 2016**
- Program Committee Member of **iConference 2015**
- Co-organizer of **SIGIR 2011 Workshop on “Entertain Me”**
Other Co-organizers:
 - Nick Belkin, Rutgers, USA
 - Charlie Clarke, Waterloo, Canada
 - Jaap Kamps, University of Amsterdam, The Netherlands
 - Jussi Karlgren, SICS Stockholm, Sweden
- Program Committee Member of **Initiative for the Evaluation of XML retrieval (INEX) 2010**

INTERNSHIP

- 2015 May ~ Aug Microsoft Cloud and Information Service Lab, Redmond
Advisor: Nikos Karampatziakis
- 2014 Jun ~ Aug Microsoft Research, Redmond
Advisor: Silviu-Petru Cucerzan

SKILLS

- **Language:** English (Fluent), Chinese-Mandarin (Native)