

# Zheng Gao

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CONTACT INFORMATION	School of Informatics, Computing, and Engineering Indiana University Bloomington 700 N. Woodlawn Avenue Bloomington, IN, 47408	(412)638-3401 gao27@indiana.edu <a href="https://zhenggao.io">https://zhenggao.io</a>
RESEARCH INTERESTS	My research interests are primarily in the area of Graph Mining and Natural Language Processing (NLP). Particularly, I am applying deep learning techniques on the interdisciplinary field therein them to solve Community Detection, Information Retrieval and Recommendation related tasks.	
EDUCATION	Indiana University Bloomington, USA <b>Ph.D.</b> in Information Science, Advisor: Xiaozhong Liu • Minor in Computer Science, Advisor: Xiaofeng Wang  University of Pittsburgh, USA <b>M.S.</b> in Information Science, Advisor: Daqing He  Shanghai International Studies University, China <b>B.S.</b> in Information Science	08/2015 - 05/2020 (expected)      08/2013 - 05/2015   08/2009 - 05/2013
INDUSTRY EXPERIENCE	<b>Data Scientist Intern</b> , Alexa AI, Amazon • Pattern analysis on user request context  <b>Research Intern</b> , DAMO Academy / AI Lab, Alibaba • Product review summarization from user consecutive behavior • Cross domain community detection via pairwise learning • Adversarial anomaly detection on high dimensional use logs	06/2019 - 09/2019  02/2018 - 03/2019
TEACHING EXPERIENCE	Indiana University Bloomington <b>Instructor</b> • ILS-Z534: Search (Spring/Fall 2018, Spring/Fall 2019)  <b>Associate Instructor</b> • ILS-Z534: Search (Fall 2015, Fall 2016, Fall 2017) • INFO-I590: Topics in Informatics (Summer 2016, Spring/Summer 2017)	
PUBLICATION	<ol style="list-style-type: none"><li>[1] <b>Zheng Gao</b>, Chun Guo, Xiaozhong Liu. Efficient Personalized Community Detection via Genetic Evolution. <i>The Genetic and Evolutionary Computation Conference (GECCO)</i>, 2019.</li><li>[2] <b>Zheng Gao</b>, Gang Fu, Chunping Ouyang, Satoshi Tsutsui, Xiaozhong Liu, Jeremy Yang, Christopher Gessner, Brian Foote, David Wild, Ying Ding, Qi Yu. edge2vec: Representation learning using edge semantics for biomedical knowledge discovery. <i>BMC Bioinformatics</i>, 2019. (impact factor = 2.511).</li><li>[3] Yongzhen Wang, Xiaozhong Liu, <b>Zheng Gao</b>. Neural Related Work Summarization with a Joint Context-driven Attention Mechanism. <i>Conference on Empirical Methods in Natural Language Processing (EMNLP)</i>, 2018.</li><li>[4] <b>Zheng Gao</b>, Lin Guo, Chi Ma, Xiao Ma, Kai Sun, Hang Xiang, Xiaoqiang Zhu, Hongsong Li, Xiaozhong Liu. AMAD: Adversarial Multiscale Anomaly Detection on High-Dimensional and Time-Evolving Categorical Data. <i>Deep Learning Practice for High-Dimensional Sparse Data Workshop at ACM SIGKDD Conference on Knowledge Discovery and Data Mining (DLP-KDD)</i>, 2019.</li><li>[5] Zizhe Gao, <b>Zheng Gao</b>, Heng Huang, Zhuoren Jiang, Yuliang Yan. An End-to-end Model of Predicting Diverse Ranking On Heterogeneous Feeds. <i>eCOM Workshop at ACM SIGIR Conference on Research and Development in Information Retrieval (eCom-SIGIR)</i>, 2018.</li></ol>	

- [6] Zhuoren Jiang, Liangcai Gao, Ke Yuan, **Zheng Gao**, Zhi Tang, Xiaozhong Liu. Mathematics Content Understanding for Cyberlearning via Formula Evolution Map. *ACM International Conference on Information and Knowledge Management (CIKM)*, 2018.
- [7] Xiaozhong Liu, Xing Yu, **Zheng Gao**, Tian Xia, Johan Bollen. Comparing community-based information adoption and diffusion across different microblogging sites. *ACM Conference on Hypertext and Social Media*, 2016.
- [8] **Zheng Gao**, Vincent Malic, Shutian Ma, Patrick Shih. How to Make a Successful Movie: Factor Analysis from both Financial and Critical Perspectives. *International Conference on Information*, 2019.
- [9] Yongzhen Wang, Yan Lin, **Zheng Gao**, Yan Chen. A Two-stage Iterative Approach to Improve Crowdsourcing-based Relevance Assessment. *Arabian Journal for Science and Engineering*, 2019.
- [10] **Zheng Gao**, Xiaozhong Liu. Personalized Community Detection in Scholarly Network. *International Conference on Information*, 2017.
- [11] Tian Xia, Xing Yu, **Zheng Gao**, Yijun Gu, Xiaozhong Liu. Internal/External Information Access and Information Diffusion in Social Media. *International Conference on Information*, 2017.
- [12] Nan Li, Naren Suri, **Zheng Gao**, Tian Xia, Xiaozhong Liu, Katy Borner. Enter a Job, Get Course Recommendations. *International Conference on Information*, 2017.
- [13] **Zheng Gao**, John Wolohan, Fast NLP-based Pattern Matching in Real Time Tweet Recommendation. *Text REtrieval Conference (TREC)*, 2017.
- [14] Chenwei Zhang, **Zheng Gao**, Xiaozhong Liu. How others affect your Twitter #hashtag adoption? Examination of community-based and context-based information diffusion in Twitter, *International Conference on Information*, 2015.
- [15] **Zheng Gao**, Rui Bi. University of Pittsburgh at TREC 2014 Microblog Track. *Text REtrieval Conference (TREC)*, 2014.
- [16] **Zheng Gao**, Patrick C. Shih. Communities of Support: Social Support Discussion in a HIV Online Forum. *International Symposium of Chinese CHI*, 2019.
- [17] Satoshi Tsutsui, **Zheng Gao**, Yuzhuo Wang, Guilin Meng, Ying Ding. A Case Study on Viziometrics: Whats the Role of Western Blots in Alzheimers Disease Literature. *International Conference on Information*, 2018.

## SERVICE

### Conference Reviewer

- The Web Conference (WWW 2018, 2019)
- International ACM SIGIR Conference on Research and Development in Information Retrieval (SIGIR 2018)

### Journal Reviewer

- Journal of the Association for Information Science and Technology (JASIST)
- Social Network Analysis and Mining (SNAM)

### Administrative Service

- Chair of Doctoral Student Association (DSA) at Department of Information and Library Science, Indiana University Bloomington (2016 - 2018)

## AWARD

- Tung-li Yuan Memorial Fellowship, Indiana University Bloomington (2015 - 2018)
- Clayton A. Shepherd Scholarship, Indiana University Bloomington (2018 - 2019)
- IUB SICE Ph.D. Travel Award (2015 - 2019)
- NetSci Student Travel Award (2017)
- IUB GPSG Travel Award (2017)

## SKILLS

- Languages: Python, Java, SQL, Shell, L<sup>A</sup>T<sub>E</sub>X
- Tools: TensorFlow, Spark, Maven