

Wei GAO

School of Computing and Information Systems
Singapore Management University (SMU)
80 Stamford Road
Singapore 178902

Email: weigao@smu.edu.sg
Office Phone: (+65) 6826 1369



Education

PhD, Chinese University of Hong Kong, 2010
MPhil, Chinese University of Hong Kong, 2004
Bachelor of Engineering, Beijing Info Science & Technology University, China, 1996

Academic Appointments

Assistant Professor of Information Systems, School of Computing and Information Systems, SMU, Dec 2019 - Present

RESEARCH

Research and Project Areas

Natural Language Processing and Text Mining
Social Network Analysis and Mining
Information Retrieval
Artificial Intelligence

Publications

Journal Articles [Refereed]

Potential early identification of a large *Campylobacter* outbreak using alternative surveillance data sources: Autoregressive modelling and spatiotemporal clustering, by ADNAN, Mehnaz; GAO, Xiaoying; BAI, Xiaohan; NEWBERN, Elizabeth; SHERWOOD, Jill; JONES, Nicholas; BAKER, Michael; WOOD, Tim; GAO, Wei. (2020). *JMIR Public Health and Surveillance*, 6 (3), <https://doi.org/10.1108/10.2196/18281> (Published)

InterSentiment: Combining deep neural models on interaction and sentiment for review rating prediction, by FENG, Shi; SONG, Kaisong; WANG, Daling; GAO, Wei; ZHANG, Yifei. (2020). *International Journal of Machine Learning and Cybernetics*, 12 (2), 477-488. <https://doi.org/10.1007/s13042-020-01181-9> (Published)

An attention-based rumor detection model with tree-structured recursive neural networks, by MA, Jing; GAO, Wei; JOTY, Shafiq; WONG, Kam-Fai. (2020). *ACM Transactions on Intelligent Systems and*

Technology, 11 (4), <https://doi.org/10.1145/3391250> (Published)

Detecting fake news in social media: An Asia-Pacific perspective, by CHA, Meeyoung; GAO, Wei; Li, Cheng-Te. (2020). *Communications- ACM*, 63 (4), 68-71. <https://doi.org/10.1145/3378422> (Published)

Utilizing computational trust to identify rumor spreaders on Twitter, by RATH, Bhavtosh; GAO, Wei; MA, Jing; SRIVASTAVA, Jaideep. (2018). *Social Network Analysis and Mining*, 8 (64), 1-16. <https://doi.org/10.1007/s13278-018-0540-z> (Published)

From classification to quantification in tweet sentiment analysis, by GAO, Wei; SEBASTIANI, Fabrizio. (2016). *Social Network Analysis and Mining*, 6 (1), 1-31. <https://doi.org/10.1007/s13278-016-0327-z> (Published)

Information-theoretic multi-view domain adaptation: A theoretical and empirical study, by YANG, Pei; GAO, Wei. (2014). *Journal of Artificial Intelligence Research*, 49 501-525. <https://doi.org/10.1613/jair.4190> (Published)

Dynamic joint sentiment-topic mode, by HE, Yulan; LIN, Chenghua; GAO, Wei; WONG, Kam-Fai. (2013). *ACM Transactions on Intelligent Systems and Technology*, 5 (1), 1-21. <https://doi.org/10.1145/2542182.2542188> (Published)

A link-bridged topic model for cross-domain document classification, by YANG, Pei; GAO, Wei; TAN, Qi; WONG, Kam-Fai. (2013). *Information Processing and Management*, 49 (6), 1181-1193. <https://doi.org/10.1016/j.ipm.2013.05.002> (Published)

Extracting common emotions from blogs based on fine-grained sentiment clustering, by FENG, Shi; WANG, Daling; YU, Ge; GAO, Wei; WONG, Kam-Fai. (2010). *Knowledge and Information Systems*, 27 (2), 281-302. <https://doi.org/10.1007/s10115-010-0325-9> (Published)

Exploiting query logs for cross-lingual query suggestions., by GAO, Wei; NIU, Cheng; NIE, Jian-Yun; ZHOU, Ming; WONG, Kam-Fai; HON, Hsiao-Wuen. (2010). *ACM Transactions on Information Systems*, 28 (2), 1-33. <https://doi.org/10.1145/1740592.1740594> (Published)

Experimental studies using statistical algorithms on transliterating phoneme sequences for English-Chinese name translation, by GAO, Wei; WONG, Kam-Fai. (2006). *International Journal of Computer Processing of Oriental Languages*, 19 (1), 63-88. <https://doi.org/10.1142/S0219427906001396> (Published)

Book Chapters

Detecting semantic uncertainty by learning hedge cues in sentences using an HMM, by LI, Xiujun; GAO, Wei; SHAVLIK, Jude. (2017). In Kam-Fai Wong, Wei Gao, Ruifeng Xu, Wenjie Li (Ed.), *Social media content analysis: Natural language processing and beyond* World Scientific Publishing. https://doi.org/10.1142/9789813223615_0008 (Published)

Cross-language mining and retrieval, by GAO, Wei; NIU, Cheng. (2017). In LIU, Ling; OZSU, Tamer (Ed.), *Encyclopedia of Database Systems* (pp. 523-528) US: Springer. https://doi.org/10.1007/978-1-4899-7993-3_89-3 (Published)

Edited Books

Social media content analysis: Natural language processing and beyond, edited by WONG, Kam-Fai; GAO, Wei; XU, Ruifeng; LI, Wenjie. (2017). World Scientific Publishing. <https://doi.org/10.1142/10535> (Published)

Conference Proceedings

Evidence Aware Neural Pornographic Text Identification for Child Protection, by SONG, Kaisong; KANG, Yangyang; GAO, Wei; GAO, Zhe; SUN, Changlong; LIU, Xiaozhong. (2021). *Proceedings of the Thirty-Fifth AAAI Conference on Artificial Intelligence (AAAI 2021)*, USA: (Accepted)

Debunking rumors on Twitter with tree transformer, by MA, Jing; GAO, Wei. (2020). *Proceedings of the 28th International Conference on Computational Linguistics (COLING 2020)*, (pp. 5455-5466) New York: ACL. (Published)

A cue adaptive decoder for controllable neural response generation, by WANG, Weichao; FENG, Shi; GAO, Wei; WANG, Daling; ZHANG, Yifei. (2020). *WWW '20: Proceedings of The Web Conference 2020, Taipei, Taiwan, April 20-24*, (pp. 2570-2576) Taipei, Taiwan: <https://doi.org/10.1145/3366423.3380008> (Published)

Using customer service dialogues for satisfaction analysis with context-assisted multiple instance learning, by SONG, Kaisong; BING, Lidong; GAO, Wei; LIN, Jun; ZHAO, Lujun; WANG, Jiancheng; SUN, Changlong; LIU, Xiaozhong; ZHANG, Qiong. (2019). *Proceedings of the 2019 Conference on Empirical Methods in Natural Language Processing (EMNLP 2019)*, (pp. 198-207) Hong Kong, China: <https://doi.org/10.18653/v1/D19-1019> (Published)

Evaluating vulnerability to fake news in social networks: A community health assessment model, by RATH, Bhavtosh; GAO, Wei; SRIVASTAVA, Jaideep. (2019). *Proceedings of the 2019 IEEE/ACM International Conference on Social Networks Analysis and Mining (ASONAM 2019)*, (pp. 432-435) Vancouver, Canada: <https://doi.org/10.1145/3341161.3342920> (Published)

Cold-start aware deep memory networks for multi-entity aspect-based sentiment analysis, by SONG, Kaisong; GAO, Wei; ZHAO, Lujun; LIN, Jun; SUN, Changlong; LIU, Xiaozhong. (2019). *Proceedings of the 28th International Joint Conference on Artificial Intelligence (IJCAI 2019)*, (pp. 5197-5203) Macau, China: AAAI Press. <https://doi.org/10.24963/ijcai.2019/722> (Published)

Sentence-level evidence embedding for claim verification with hierarchical attention networks, by MA, Jing; GAO, Wei; JOTY, Shafiq; WONG, Kam-Fai. (2019). *Proceedings of the 57th Annual Meeting of the Association for Computational Linguistics (ACL 2019)*, (pp. 2561-2571) Florence, Italy: Association for Computational Linguistics. <http://doi.org/10.18653/v1/P19-1244> (Published)

Detect rumors on Twitter by promoting information campaigns with generative adversarial learning, by MA, Jing; GAO, Wei; WONG, Kam-Fai. (2019). *Proceedings of the Web Conference (WWW 2019)*, (pp. 3049-3055) San Francisco, CA, USA: ACM Press. <https://doi.org/10.1145/3308558.3313741> (Published)

Attention-based LSTM-CNNs for uncertainty identification on Chinese social media texts, by LI, Binyang; ZHOU, Kaiming; GAO, Wei; HAN, Xu Han; ZHOU, Linna. (2017). *Proceedings of the 2017 International Conference on Security, Pattern Analysis and Cybernetics (SPAC 2017)*, (pp. 609-614) Shenzhen, China: IEEE Press. <https://doi.org/10.1109/SPAC.2017.8304349> (Published)

Personalized microblog sentiment classification via adversarial cross-lingual learning, by WANG, Weichao; FENG, Shi; GAO, Wei; WANG, Daling; ZHANG, Yifei. (2018). *Proceedings of 2018 Conference on Empirical Methods in Natural Language Processing (EMNLP)*, (pp. 338-348) Brussels, Belgium: Association for Computational Linguistics. <https://aclweb.org/anthology/D18-1031> (Published)

Rumor detection on Twitter with tree-structured recursive neural networks, by MA, Jing; GAO, Wei; WONG, Kam-Fai. (2018). *Proceedings of the 56th Annual Meeting of the Association for Computational Linguistics (ACL 2018)*, (pp. 1980-1989) Melbourne, Australia: Association for Computational Linguistics. <https://aclweb.org/anthology/P18-1184> (Published)

Detect rumor and stance jointly by neural multi-task learning, by MA, Jing; GAO, Wei; WONG, Kam-Fai. (2018). *Proceedings of the Web Conference (WWW 2018 Companion)*, (pp. 585-593) Lyon, France: ACM Press. <https://doi.org/10.1145/3184558.3188729> (Published)

Recommendation vs sentiment analysis: A text-driven latent factor model for rating prediction with cold-start awareness, by SONG, Kaisong; GAO, Wei; FENG, Shi Feng; WANG, Daling; WONG, Kam-Fai; ZHANG, Chengqi. (2017). *Proceedings of 26th International Joint Conference on Artificial Intelligence (IJCAI 2017)*, (pp. 2744-2750) Melbourne, Australia: AAAI Press. <https://doi.org/10.24963/ijcai.2017/382> (Published)

Detect rumors in microblog posts using propagation structure via kernel learning, by MA, Jing; GAO, Wei; WONG, Kam-Fai. (2017). *Proceedings of the 55th Annual Meeting of the Association for Computational Linguistics (ACL 2017), Vancouver, Canada, 2017 July 30 - August 4*, (pp. 708-717) Vancouver, Canada: Association for Computational Linguistics. <https://doi.org/10.18653/v1/P17-1066> (Published)

From retweet to believability: Utilizing trust to identify rumor spreaders on Twitter, by RATH, Bhavtosh; GAO, Wei; MA, Jing; SRIVASTAVA, Jaideep. (2017). *Proceedings of the IEEE/ACM International Conference on Advances in Social Networks Analysis and Mining (ASONAM 2017)*, (pp. 179-186) Sydney, Australia: ACM Press. <https://doi.org/10.1145/3110025.3110121> (Published)

Topic extraction from microblog posts using conversation structures, by LI, Jing; LIAO, Ming; GAO, Wei;

- HE, Yulan; WONG, Kam-Fai. (2016). *Proceedings of the 54th Annual Meeting of the Association for Computational Linguistics (ACL 2016)*, (pp. 2114-2123) Berlin, Germany: Association for Computational Linguistics. <https://doi.org/10.18653/v1/P16-1199> (Published)
- Ordinal text quantification, by MARTINO, Giovanni Da San; GAO, Wei; SEBASTIANI, Fabrizio. (2016). *Proceedings of the 38th Annual International ACM SIGIR Conference on Research and Development in Information Retrieval (SIGIR 2016)*, (pp. 937-940) Pisa, Italy: ACM Press. <https://doi.org/10.1145/2911451.2914749> (Published)
- Build emotion lexicon from the mood of crowd via topic-assisted joint non-negative matrix factorization, by SONG, Kaisong; GAO, Wei; CHEN, Ling; FENG, Shi; WANG, Daling; ZHANG, Chengqi. (2016). *Proceedings of the 38th Annual International ACM SIGIR Conference on Research and Development in Information Retrieval (SIGIR 2016)*, (pp. 773-776) Pisa, Italy: ACM Press. <https://doi.org/10.1145/2911451.2914759> (Published)
- Detecting rumors from microblogs with recurrent neural networks, by MA, Jing; GAO, Wei; MITRA, Prasenjit; KWON, Sejeong; JANSEN, Bernard J.; WONG, Kam-Fai; CHA, Meeyoung. (2016). *Proceedings of the 25th International Joint Conference on Artificial Intelligence (IJCAI 2016)*, (pp. 3818-3824) New York, USA: AAAI Press. <https://ijcai.org/Proceedings/16/Papers/537.pdf> (Published)
- QCRI at SemEval-2016 Task 4: Probabilistic Methods for Binary and Ordinal Quantification, by MARTINO, Giovanni Da San; GAO, Wei; SEBASTIANI, Fabrizio. (2016). *Proceedings of the 10th International Workshop on Semantic Evaluation (SemEval 2016)*, (pp. 58-63) San Diego, California, USA: Association for Computational Linguistics. <http://doi.org/10.18653/v1/S16-1006> (Published)
- PerSentiment: A personalized sentiment classification system for microblog users, by SONG, Kaisong; CHEN, Ling; GAO, Wei; FENG, Shi; WANG, Daling; ZHANG, Chengqi. (2016). *Proceedings of the 25th International World Wide Web Conference (WWW 2016 Companion)*, (pp. 255-258) Montral, Qubec, Canada: ACM Press. <https://doi.org/10.1145/2872518.2890540> (Published)
- Detect rumors using time series of social context information on microblogging websites, by MA, Jing; GAO, Wei; WEI, Zhongyu; LU, Yueming; WONG, Kam-Fai. (2015). *Proceedings of the 24th ACM International Conference on Information and Knowledge Management (CIKM 2015)*, (pp. 1751-1754) Melbourne, Australia: ACM Press. <https://doi.org/10.1145/2806416.2806607> (Published)
- Using content-level structures for summarizing microblog repost trees, by LI, Jing; GAO, Wei; WEI, Zhongyu; PENG, Baolin; WONG, Kam-Fai. (2015). *Proceedings of the 2015 Conference on Empirical Methods in Natural Language Processing (EMNLP 2015)*, (pp. 2168-2178) Lisbon, Portugal: Association for Computational Linguistics. <https://doi.org/10.18653/v1/D15-1259> (Published)
- Build emotion lexicon from microblogs by combining effects of seed words and emoticons in a heterogeneous graph, by SONG, Kaisong; FENG, Shi; GAO, Wei; WANG, Daling; CHEN, Ling; ZHANG, Chengqi. (2015). *Proceedings of the 26th ACM Conference on Hypertext and Social Media (Hypertext 2015)*, (pp. 283-292) Guzelyurt, North Cyprus: ACM Press. <https://doi.org/10.1145/2700171.2791035> (Published)
- Tweet sentiment: From classification to quantification, by GAO, Wei; SEBASTIANI, Fabrizio. (2015). *Proceedings of the 2015 IEEE/ACM International Conference on Advances in Social Networks Analysis and Mining (ASONAM 2015)*, (pp. 97-104) Paris, France: ACM Press. <https://doi.org/10.1145/2808797.2809327> (Published)
- Gibberish, assistant, or master? Using tweets linking to news for extractive single-document summarization, by WEI, Zhongyu; GAO, Wei. (2015). *Proceedings of the 38th Annual International ACM SIGIR Conference on Research and Development in Information Retrieval*, (pp. 1003-1006) Santiago, Chile: ACM Press. <https://doi.org/10.1145/2766462.2767835> (Published)
- Personalized sentiment classification based on latent individuality of microblog users, by SONG, Kaisong; FENG, Shi; GAO, Wei; WANG, Daling; YU, Ge; WONG, Kam-Fai. (2015). *Proceedings of the 24th International Joint Conference on Artificial Intelligence (IJCAI 2015)*, (pp. 2277-2283) Buenos Aires, Argentina: AAAI Press. <https://ijcai.org/Proceedings/15/Papers/322.pdf> (Published)
- Using tweets to help sentence compression for news highlights generation, by WEI, Zhongyu; LIU, Yang; LI, Chen; GAO, Wei. (2015). *Proceedings of the 53rd Annual Meeting of the Association for Computational Linguistics (ACL 2015)*, (pp. 50-56) Beijing, China: Association for Computational Linguistics. <https://doi.org/10.3115/v1/P15-2009> (Published)

QCRI: Answer selection for community question answering - Experiment for Arabic and English, by NICOSIA, Massimo; FILICE, Simone; BARRON-CEDENO, Alberto; SALEH, Iman; MUBARAK, Hamdy; GAO, Wei; NAKOV, Preslav; MARTINO, Giovanni Da San; MOSCHITTI, Alessandro; DARWISH, Kareem; MARQUZ, Lluís Marquz; JOTY, Shafiq; MAGDY, Walid Magdy. (2015). *Proceedings of the 9th International Workshop on Semantic Evaluation (SemEval 2015)*, (pp. 203-209) Denver, Colorado, USA: Association for Computational Linguistics. <http://doi.org/10.18653/v1/S15-2036> (Published)

Utilizing microblogs for improving automatic news high-lights extraction, by WEI, Zhongyu; GAO, Wei. (2014). *Proceedings of 25th International Conference on Computational Linguistics (COLING 2014)*, (pp. 872-883) Dublin, Ireland: Association for Computational Linguistics. <https://aclweb.org/anthology/C14-1083> (Published)

Ranking model selection and fusion for effective microblog search, by WEI, Zhongyu; GAO, Wei; EL-GANAINY, Tarek; MAGDY, Walid; WONG, Kam-Fai. (2014). *Proceedings of SIGIR 2014 Workshop on Social Media Retrieval and Analysis (SoMeRA 2014)*, (pp. 21-26) Gold Coast, Queensland, Australia: ACM Press. <https://doi.org/10.1145/2632188.2632202> (Published)

Simple effective named entity recognition for microblogs: Arabic as an example, by DARWISH, Kareem; GAO, Wei. (2014). *Proceedings of the 9th Language Resources and Evaluation Conference (LREC 2014)*, (pp. 2513-2517) Reykjavik, Iceland: The European Language Resources Association. <https://aclweb.org/anthology/L14-1192> (Published)

Democracy is good for ranking: Towards multi-view rank learning and adaptation in web search, by GAO, Wei; YANG, Pei. (2014). *Proceedings of the 7th ACM International conference on Web Search and Data Mining (WSDM 2014)*, (pp. 63-72) New York City, USA: ACM Press. <https://doi.org/10.1145/2556195.2556267> (Published)

An empirical study on uncertainty identification in social media context, by WEI, Zhongyu; CHEN, Junwen; GAO, Wei; LI, Binyang; ZHOU, Lanjun; HE, Yulan; WONG, Kam-Fai. (2013). *Proceedings of the 51th Annual Meeting of the Association for Computational Linguistics (ACL 2013)*, (pp. 58-62) Sofia, Bulgaria: Association for Computational Linguistics. <https://aclweb.org/anthology/P13-2011> (Published)

Multi-view discriminant transfer learning, by YANG, Pei Yang; GAO, Wei. (2013). *Proceedings of 23rd International Joint Conference on Artificial Intelligence (IJCAI 2013)*, (pp. 1848-1854) Beijing, China: AAAI Press. <https://www.ijcai.org/Proceedings/13/Papers/273.pdf> (Published)

Main-stream media behaviour analysis on Twitter: A case study on UK general election, by WEI, Zhongyu; HE, Yulan; GAO, Wei; LI, Binyang; ZHOU, Lanjun; WONG, Kam-Fai. (2013). *Proceedings of the 24th ACM Conference on Hypertext and Social Media (Hypertext 2013)*, (pp. 174-178) Paris, France: ACM Press. <https://doi.org/10.1145/2481492.2481512> (Published)

A self-training framework for automatic identification of exploratory dialogue, by WEI, Zhongyu; HE, Yulan; SHUM, Simon; FERGUSON, Rebecca; GAO, Wei; WONG, Kam-Fai. (2013). *Proceedings of 14th International Conference on Intelligent Text Processing and Computational Linguistics (CICLing 2013)*, Samos, Greece: (Published)

Cross-lingual identification of ambiguous discourse connectives for resource-poor language, by ZHOU, Lanjun; GAO, Wei; LI, Binyang; WEI, Zhongyu; WONG, Kam-Fai. (2012). *Proceedings of 24th International Conference on Computational Linguistics (COLING 2012)*, (pp. 1409-1418) Bombay, India: Association for Computational Linguistics. <https://aclweb.org/anthology/C12-2138> (Published)

Microblog search and filtering with time sensitive feedback and thresholding based on BM25, by GAO, Wei; WEI, Zhongyu; WONG, Kam-Fai. (2012). *Proceedings of the 21st Text Retrieval Conference (TREC 2012)*, Geithersburg, MD, USA: NIST Special Publication: SP 500-298. https://trec.nist.gov/pubs/trec21/papers/qcri_twitsear.micro.final.pdf (Published)

Joint topic modeling for event summarization across news and social media streams, by GAO, Wei; LI, Peng; DARWISH, Kareem. (2012). *Proceedings of the 21st ACM Conference on Information and Knowledge Management (CIKM 2012)*, (pp. 1173-1182) Maui, Hawaii, USA: ACM Press. <https://doi.org/10.1145/2396761.2398417> (Published)

Information-theoretic multi-view domain adaptation, by YANG, Pei; GAO, Wei; TAN, Qi; WONG, Kam-Fai. (2012). *Proceedings of the 50th Annual Meeting of the Association for Computational Linguistics (ACL 2012)*, (pp. 270-274) Jeju Island, Korea: Association for Computational Linguistics. <https://www.aclweb.org/anthology/P12-2053/> (Published)

- Tracking sentiment and topic dynamics from social media, by HE, Yulan; LIN, Chenghua; GAO, Wei; WONG, Kam-Fai. (2012). *Proceedings of the 6th International AAI Conference on Weblogs and Social Media (ICWSM 2012)*, (pp. 483-486) Dublin, Ireland: AAI Press. <https://aaai.org/ICWSM/ICWSM12/paper/view/4496> (Published)
- An effective approach for topicspecific opinion summarization, by LI, Binyang; ZHOU, Lanjun; GAO, Wei; WONG, Kam-Fai; WEI, Zhongyu. (2011). *Proceedings of the Seventh Asian Information Retrieval Societies Conference*, (pp. 398-409) Dubai, UAE: LNCS, Springer. https://doi.org/10.1007/978-3-642-25631-8_36 (Published)
- Exploring tweets normalization and query time sensitivity for Twitter search, by WEI, Zhongyu; GAO, Wei; ZHOU Lanjun; LI, Binyang; WONG, Kam-Fai. (2011). *Proceedings of the 20th Text REtrieval Conference (TREC 2011)*, Geithersburg, MD, USA.: NIST Special Publication: SP 500-296. (Published)
- Unsupervised discovery of discourse relations for eliminating intra-sentence polarity ambiguities, by ZHOU, Lanjun; LI, Binyang; GAO, Wei; WEI, Zhongyu; WONG, Kam-Fai. (2011). *Proceedings of the 2011 Conference on Empirical Methods in Natural Language Processing (EMNLP 2011)*, (pp. 162-171) Edinburgh, Scotland, UK: Association for Computational Linguistics. <https://aclweb.org/anthology/D11-1015> (Published)
- Generating aspect-oriented multi-document summarization with event-aspect model, by LI, Peng; WANG, Yinglin; GAO, Wei; JIANG, Jing. (2011). *Proceedings of the 2011 Conference on Empirical Methods in Natural Language Processing (EMNLP 2011)*, (pp. 1137-1146) Edinburgh, Scotland, UK: Association for Computational Linguistics. <https://aclweb.org/anthology/D11-1105> (Published)
- Relevant knowledge helps in choosing right teacher: Active query selection for ranking adaptation, by CAI, Peng; GAO, Wei; WONG, Kam-Fai; ZHOU, Aoying. (2011). *Proceedings of the 34th Annual International ACM SIGIR Conference on Research and Development in Information Retrieval (SIGIR 2011)*, (pp. 115-124) Beijing, China: ACM Press. <https://doi.org/10.1145/2009916.2009935> (Published)
- Query weighting for ranking model adaptation, by CAI, Peng; GAO, Wei; ZHOU, Aoying; WONG, Kam-Fai. (2011). *Proceedings of the 49th Annual Meeting of the Association for Computational Linguistics (ACL 2011)*, (pp. 112-122) Portland, OR, USA: Association for Computational Linguistics. <https://aclweb.org/anthology/P11-1012> (Published)
- Weight-based boosting model for cross-domain relevance ranking adaptation, by CAI, Peng; GAO, Wei; WONG, Kam-Fai; ZHOU, Aoying. (2011). *Proceedings of the 33rd European Conference on Information Retrieval (ECIR 2011)*, (pp. 562-567) Dublin, Ireland: LNCS, Springer. https://doi.org/10.1007/978-3-642-20161-5_56 (Published)
- Learning to rank only using training data from related domain, by GAO, Wei; CAI, Peng; WONG, Kam-Fai; ZHOU, Aoying. (2010). *Proceedings of the 33rd Annual International ACM SIGIR7 Conference on Research and Development in Information Retrieval (SIGIR 2010)*, (pp. 162-169) Geneva, Switzerland: ACM Press. <https://doi.org/10.1145/1835449.1835478> (Published)
- Exploiting bilingual information to improve web search, by GAO, Wei; BITZER, John; ZHOU, Ming; WONG, Kam-Fai. (2009). *Proceedings of the 47th Annual Meeting of the Association for Computational Linguistics (ACL 2019)*, (pp. 1075-1083) Singapore: Association for Computational Linguistics. <https://www.aclweb.org/anthology/P09-1121/> (Published)
- Joint ranking for multilingual web search, by GAO, Wei; NIU, Cheng; ZHOU, Ming; WONG, Kam-Fai. (2009). *Proceedings of the 31st European Conference on Information Retrieval (ECIR 2009)*, (pp. 114-125) Toulouse, France: LNCS, Springer. https://doi.org/10.1007/978-3-642-00958-7_13 (Published)
- Using English information in Non-English web search, by GAO, Wei; BLITZER, John; ZHOU, Ming. (2008). *Proceedings of the ACM International Workshop on Improving Non-English Web Searching (iNEWS 2008)*, (pp. 17-24) Nappa Valley, California, USA: ACM Press. <https://doi.org/10.1145/1460027.1460031> (Published)
- Cross-lingual query suggestion using query logs of different languages, by GAO, Wei; NIU, Cheng; NIE, Jian-Yun; ZHOU, Ming; HU, Jian; WONG, Kam-Fai; HON, Hsiao-Wuen. (2007). *Proceedings of the 30th Annual International ACM SIGIR Conference on Research and Development in Information Retrieval (SIGIR 2007)*, (pp. 463-470) Amsterdam, The Netherlands: ACM Press. <https://doi.org/10.1145/1277741.1277821> (Published)
- Clique percolation for finding naturally cohesive and overlapping document clusters, by GAO, Wei; WONG,

Kam-Fai; XIA, Yunqing; XU, Ruifeng. (2006). *Proceedings of the 21st International Conference on Computer Processing of Oriental Languages (ICCPOL 2006)*, (pp. 97-108) Singapore: LNAI, Springer. https://doi.org/10.1007/11940098_10 (Published)

Natural document clustering by clique percolation in random graphs, by GAO, Wei; WONG, Kam-Fai. (2006). *Proceedings of the 3rd Asia Information Retrieval Symposium (AIRS 2006)*, (pp. 119-131) Singapore: Springer. https://doi.org/10.1007/11880592_10 (Published)

NIL is not nothing: Recognition of Chinese network informal language expressions, by XIA, Yunqing; WONG; Kam-Fai; GAO, Wei. (2005). *Proceedings of the 4th SIGHAN workshop on Chinese Language Processing*, Jeju Island, Korea: <http://aclweb.org/anthology/I05-3013> (Published)

NIL Is not nothing: Recognition of Chinese network informal language expressions, by XIA, Yunqing; WONG, Kam-Fai; GAO, Wei. (2005). *Proceedings of the 4th SIGHAN workshop on Chinese Language Processing (SIGHAN 2005)*, (pp. 95-102) Jeju Island, Korea: Association for Computational Linguistics. <https://www.aclweb.org/anthology/I05-3013.pdf> (Published)

Improving transliteration with precise alignment of phoneme chunks and using contextual features, by GAO, Wei; WONG, Kam-Fai; LAM, Wai. (2004). *Proceedings of the First Asia Information Retrieval Symposium (AIRS 2004)*, (pp. 106-117) Beijing, China: Springer. https://doi.org/10.1007/978-3-540-31871-2_10 (Published)

Phoneme-based transliteration of foreign names for OOV problem, by GAO, Wei; WONG, Kam-Fai; LAM, Wai. (2004). *Proceedings of the First International Joint Conference on Natural Language Processing (IJCNLP 2004)*, (pp. 110-119) Sanya, Hainan Island, China: Springer. https://doi.org/10.1007/978-3-540-30211-7_12 (Published)

Design issues in a Chinese financial information extraction system, by LI, Qingzhong; GAO, Wei; LI, Wenjie; WONG, Kam-Fai; YUAN, Chunfa; WANG, Yun. (2003). *Advances in computation of oriental languages: 20th International Conference on Computer Processing of Oriental Languages: Shenyang, China, 2003 August 4-6*, (pp. 417-423) Beijing: Tsinghua University Press. <https://worldcat.org/isbn/9787302069423> (Published)

Papers Submitted for Review

Journal Articles [Refereed]

Assessing Individual and Community Vulnerability to Fake News in Social Networks, by RATH, Bhavtosh; GAO, Wei; SRIVASTAVA, Jaideep. (2021). *Social Network Analysis and Mining*, (Submitted)

Working Papers

Improving Rumor Detection by Promoting Information Campaigns with Transformer-based Generative Adversarial Learning, by MA, Jing; LI, Jun; GAO, Wei; YANG, Yang; WONG, Kam-Fai. (2021). (Submitted)

Research Grants

Singapore Management University

Semi-supervised Fact-checking via Multi-View Evidence Embedding, SMU Internal Grant, Ministry of Education (MOE) Tier 1 , PI (Project Level): Wei GAO , Co-PI (Project Level): LIM Ee Peng, 2019, S\$100,000

TEACHING

Teaching Areas

Natural language processing
Social media analysis and mining
Applied machine learning

Courses Taught

Singapore Management University

Undergraduate Programmes :

- IS Project Experience (Applications)
- Natural Language Communication
- Social Analytics and Applications

Postgraduate Professional Programmes :

- Empirical Research Project 1
- Empirical Research Project 4
- Social Analytics and Applications

UNIVERSITY SERVICE

Singapore Management University

Committee Member, Deans Evaluation Committee, Jan 2020 - Present

EXTERNAL SERVICE PROFESSIONAL

Program Committee Member, International Joint Conference on Artificial Intelligence (IJCAI), 2016, 2018-2020, 2021

Program Committee Member, ACM SIGKDD Conference on Knowledge Discovery and Data Mining (KDD), 2021

Program Committee Member, The International AAI Conference on Web and Social Media (ICWSM), 2021

Program Committee Member, The Web Conference (WWW), 2020, 2021

Program Committee Member, The International Conference on Database Systems for Advanced Applications (DASFAA), 2021

Program Committee Member, Annual International ACM SIGIR Conference on Research and Development in Information Retrieval (SIGIR), 2011-2017, 2019-2020, 2021

Program Committee Member, AAAI Conference on Artificial Intelligence (AAAI), 2020, 2021

Program Committee Member, ACM International Conference on Web Search and Data Mining (WSDM), 2015, 2017, 2021

Program Committee Member, Annual Meeting of Association for Computational Linguistics (ACL), 2012, 2014-2020, 2021

Program Committee Member, Annual Conference of the North American Chapter of the Association for Computational Linguistics (NAACL), 2019, 2020, 2021

Committee Member, Thesis Advisory Committee for PhD Research Students, Nanyang Technological University, 2020 - Present

Reviewer Journal Article, IEEE Security & Privacy, 2020 - Present

Editor Associate Editor, ACM Transactions on Asian and Low-Resource Language Information Processing, 2020 - Present

Committee Member, PhD Thesis Defense Committee, The Chinese University of Hong Kong, 2020

Program Committee Member, Conference on Empirical Methods in Natural Language Processing (EMNLP), 2010-2011, 2013-2017, 2020

Standing Review Committee Member, Transactions of the Association for Computational Linguistics, 2020 - Present

Area Chair, Annual Meeting of Association for Computational Linguistics (ACL), 2019, 2020

Standing Review Committee Member, Computational Linguistics, 2020 - Present

Program Committee Member, European Conference on Information Retrieval (ECIR), 2019, 2020

Program Committee Member, ACM International Conference on Information and Knowledge Management (CIKM), 2017, 2018, 2020

Workshop Co-chair, Conference of the Asia-Pacific Chapter of the Association for Computational Linguistics (AACL-IJCNLP), 2020

Area Co-Chair, The CCF International Conference on Natural Language Processing and Chinese Computing (NLPPCC), 2015, 2018, 2019, 2020

Program Committee Member, The International Conference on Computational Linguistics (COLING), 2020

Reviewer Journal Article, Information Processing and Management, 2019 - Present

Senior Program Committee Member, AAAI Conference on Artificial Intelligence (AAAI), 2019

Area Chair, Conference on Empirical Methods in Natural Language Processing (EMNLP), 2019

Program Committee Member, IEEE/ACM International Conference on Advances in Social Networks Analysis and Mining (ASONAM), 2015, 2016, 2017, 2018, 2019

Reviewer Journal Article, Journal of Association for Information Science and Technology, 2018 - Present

Reviewer Journal Article, Information Retrieval, 2018 - Present

Reviewer Grant Proposal, Leverhulme Trust, 2017 - Present

Reviewer Book, SpringerBriefs Series, 2017 - Present

Reviewer Journal Article, IEEE Transactions on Cybernetics, 2017 - Present

Reviewer Journal Article, ACM Transactions on Asian and Low-Resource Language Information Processing, 2017 - Present

Reviewer Journal Article, ACM Computing Surveys, 2016 - Present
Reviewer Journal Article, Neural Computation, 2016 - Present
Reviewer Journal Article, IEEE Transactions on Information Forensics and Security, 2016 - Present
Editor Book, World Scientific Publishing Co. Pte. Ltd, 2015 - 2017
Reviewer Journal Article, Knowledge and Information Systems, 2015 - Present
Reviewer Journal Article, IEEE Intelligent Systems, 2015 - Present
Reviewer Journal Article, Data Mining and Knowledge Discovery, 2015 - Present
Reviewer Journal Article, ACM Transactions on Knowledge Discovery from Data, 2015 - Present
Reviewer Journal Article, ACM Transactions on Information Systems, 2014 - Present
Reviewer Journal Article, ACM Transactions on the Web, 2014 - Present
Reviewer Journal Article, Computational Linguistics, 2013 - Present
Reviewer Journal Article, IEEE Transactions on Knowledge and Data Engineering, 2013 - Present
Reviewer Journal Article, Information Systems, 2012 - Present
Reviewer Journal Article, IEEE Transactions on Computer, 2011 - Present