Wei Li

CAMPUS:
Yun Nanyuan campus, Nanyang Technological University, Singapore

Computational Intelligence Lab, School of Computer Science and Engineering (SCSE) Nanyang Technological University (NTU) 50 Nanyang Ave, Singapore 639798

PERMANENT:
Computational Intelligence Lab, 50 Nanyang Ave, Singapore 639798
(65) 82916738

▬▬▬ EDUCATION

Ph.D. Candidate in Computer Science, Currently
Nanyang Technological University, 50 Nanyang Ave, Singapore 639798
With a major GPA of 4.75 on a 5 scale
Master of Science in Management Science and Engineering, June 2018
University of Chinese Academy of Sciences, Haidian District, Beijing
Graduated with a major GPA of 86.50 on a 100 scale
Bachelor of Science in Industrial Engineering, June 2015
Shanghai Jiao Tong University, Minhang District, Shanghai
Graduated with a major GPA of 85.54 on a 100 scale
Study in School of Life Science and Biotechnology, September 2011 - July 2012
Shanghai Jiao Tong University, Minhang District, Shanghai

▬▬▬ RESEARCH INTEREST

Sentiment Analysis, Emotion Detection, Conversational Sentiment Analysis, Word Embedding, Stock Price Prediction, Knowledge-based Dialogue Generation

▬▬▬ PROFESSIONAL EXPERIENCE

Research Assistant, September 2016 – September 2017, September 2017 – June 2018
Key Laboratory of Big Data Mining and Knowledge Management, Chinese Academy of Sciences, Beijing, China

- Assist professors in concluding report of the research project supported by the National Natural Science Foundation of China No.71110107026 related to Data Ming and Machine Learning

Research Assistant, Computational Intelligence Lab, School of Computer Science and Engineering, Nanyang Technological University, Singapore, Aug. 2018 – Oct. 2018

- Sentiment analysis application and development in tourism (Under the supervision of Prof. Erik Cambria)
- Stock trading rule discovery with double deep Q-network

Research Student, Agency for Science, Technology and Research, Singapore, July 2019 – Present

- Human-Robot Collaborative AI for Advanced Manufacturing and Engineering (AME) WP4: Commonsense Knowledge

▬▬▬ ACTIVITIES

- Invited Participant, *4th IEEE International Conference on Industrial Economics System and Industrial Security Engineering (IEIS' 2017),* Kyoto, Japan, July 2017
- Invited Participant, Computational Finance and Business Intelligence (CFBI 2017)

Workshop on *International Conference on Computational Science (ICCS 2017)*, Zurich, Switzerland, June 2017

- Invited Participant, *the 4ᵗʰ International Conference on Data Science (ICDS 2017)*, Shanghai, China, May 2017
- Volunteer, *International Conference on Computational Science (ICCS 2018)*, Wuxi, China, June 2018.

REVIEWER

- Knowledge-Based Systems (Outstanding Contribution in Reviewing), **SCI**
- IEEE Transactions on Neural Networks and Learning Systems, **SCI**
- Neural Networks, Information Fusion, Neurocomputing, **SCI**
- Cognitive Computation, IEEE Computational Intelligence Magazine, **SCI**
- EMNLP, COLING, AAAI, **Conference**

PUBLICATIONS

Journal Articles

J1. **Li W.**, Guo K., Shi Y., et al. DWWP: Domain-specific New Words Detection and Word Propagation System for Sentiment analysis in the Tourism Domain[J]. Knowledge-Based Systems, 2018. (**SCI**, IF 8.139)

J2. Shi, Y., Zhu, L., **Li, W.**[*], Guo, K. and Zheng, Y., 2019. Survey on classic and latest textual sentiment analysis articles and techniques. International Journal of Information Technology & Decision Making, 18(04), pp.1243-1287. (**SCI**, Corresponding author, IF 3.508)

J3. **Li, W.**, Zhu, L., Guo, K., Shi, Y. and Zheng, Y., 2018. Build a tourism-specific sentiment lexicon via word2vec. Annals of Data Science, 5(1), pp.1-7.

J4. **Li, W.**, Zhu, L., Shi, Y., Guo, K. and Cambria E, 2020. User reviews: Sentiment analysis using lexicon integrated two-channel CNN-LSTM family models. Applied Soft Computing, p.106435. (**SCI**, IF 5.472)

J5. Zhu L., **Li W.**[*], Shi Y., Guo K. SentiVec: learning sentiment-context vector via kernel optimization function for sentiment analysis. IEEE Transactions on Neural Networks and Learning Systems. 2020 Jul 16;32(6):2561-72. (Corresponding Author, IF 14.26)

J6. Shi Y., **Li W.**, Zhu L., Guo K., Cambria E. Stock trading rule discovery with double deep Q-network. Applied Soft Computing. 2021 Aug 1;107:107320. (IF 8.263)

J7. **Li W.**, Shao W., Ji S., Cambria E. BiERU: Bidirectional emotional recurrent unit for conversational sentiment analysis. Neurocomputing. 2022 Jan 7;467:73-82. (IF 5.779)

J8. **Li W.**, Zhu L., Cambria E. Taylor's theorem: A new perspective for neural tensor networks. Knowledge-Based Systems. 2021 Sep 27;228:107258. (IF 8.139)

J9. **Li, W.**, Li, Y., Pandelea V., Ge M., Zhu L. and Cambria E. ECPEC: Emotion-Cause Pair Extraction in Conversations (**SCI**, *IEEE Transactions on Affective Computing*, IF 13.99)

J10. Mao, R., Liu, Q., He, K., **Li, W.**, and Cambria E. The Biases of Pre-trained Language Models: An Empirical Study on Prompt-based Sentiment Analysis and Emotion Detection. (**SCI**, *IEEE Transactions on Affective Computing*, IF 13.99)

J11 Zhu L., **Li W.**, Mao R., Cambria E. HIPPL: Hierarchical Intent-inferring Pointer Network with Pseudo Labeling for Consistent Persona-driven Dialogue Generation (**SCI**, Under review at IEEE Computational Intelligence Magazine, IF 9.809)

Conference Articles

C1. **Li W.**, Guo K., Shi Y., et al. Improved New Word Detection Method Used in Tourism Field[J]. Procedia Computer Science, 2017, 108:1251-1260. (ICCS2017, EI)

C2. Zheng, Y., Shi, Y., Guo, K., **Li, W.**, & Zhu, L. (2017, July). Enhanced word embedding with multiple prototypes. In *Industrial Economics System and Industrial Security Engineering (IEIS'2017), 2017 4th International Conference on* (pp. 1-5). IEEE. (IEIS2017, EI)

C3. Zhu, L., **Li, W.**, Guo, K., Shi, Y., & Zheng, Y. (2017). The Tourism-Specific Sentiment Vector Construction Based on Kernel Optimization Function. *Procedia computer science*, *122*, 1162-1167. (ITQM2017 Best paper, EI)

C4. Shi, Y., Zheng, Y., Guo, K., **Li, W.**, & Zhu, L. (2018, June). Word Similarity Fails in Multiple Sense Word Embedding. In *International Conference on Computational Science* (pp. 489-498). Springer, Cham. (ICCS 2018, EI)

C5 **Li W.**, Zhu L., Mao R., Cambria E. SKIER: A Symbolic Knowledge Integrated Model for Conversational Emotion Recognition. (Accepted)

C6 Zhu L., Li W., Mao R., Pandelea V., Cambria E. PAED: Zero-Shot Persona Attribute Extraction in Dialogues. (Submitted to ACL2023)