

EDUCATION

Stony Brook University

Ph.D. in Computational Linguistics. Advisor: Jeffrey Heinz

Stony Brook, NY

Aug 2022 – Present

University of Saskatchewan

M.A. in Applied Linguistics. Advisor: Zhi Li

Saskatoon, Canada

Sep 2019 – May 2021

Hunan University

B.A. in Chinese Language and Literature

Changsha, China

Sep 2015 – Jun 2019

PUBLICATIONS & MANUSCRIPTS

Book Chapter

1. **Wang, Z.** (To appear). Probabilistic Linguistic Knowledge and Token-level Text Augmentation. In *Practical solutions for Diverse Real-World NLP Applications*. Springer book series *Signals and Communication Technology*.

Articles

1. Li, Z., Makarova, V. & **Wang, Z.** (2023). Developing Literature Review Writing Skills through an Online Writing Tutorial Series: Corpus-based Evidence. *Frontiers in Communication*.
2. Hao, H., Cui, Y., **Wang, Z.** & Kim, Y. (2022). Thirty-Two Years of IEEE VIS: Authors, Fields of Study and Citations. *IEEE Transactions on Visualization and Computer Graphics*.
3. Peng, L., & **Wang, Z.** (2017). The Contemporary Reflection on the Sentence-based Theory Postulated by New Grammar of Modern Chinese. *Journal of Hengyang Normal University*.

Proceedings

1. **Wang, Z.** (2023). Learning Transductions and Alignments with RNN Seq2seq Models. *Proceedings of the 16th International Conference on Grammatical Inference*. In *Proceedings of Machine Learning Research, Volume 217*.
2. **Wang, Z.** (2022). Linguistic Knowledge in Data Augmentation for Natural Language Processing: An Example on Chinese Question Matching. *Proceedings of the 5th International Conference on Natural Language and Speech Processing*.
3. **Wang, Z.** (2022). Random Text Perturbations Work, but not Always. *Proceedings of the 3rd Workshop on Evaluation and Comparison of NLP Systems (co-located at ACL 2022)*.

Manuscripts

1. **Wang, Z.** (2021). A Macroscopic Re-examination of Language and Gender: A Corpus-based Case Study in University Instructor Discourses. MA Dissertation, University of Saskatchewan.
2. **Wang, Z.** (2019). Analysis on the quantitateness of reduplication in Modern Mandarin. BA Dissertation (in Chinese), Hunan University.
3. **Wang, Z.** (2017-2019). Grammar as science: Rethinking the construction of Modern Chinese Grammar. Granted project (outcomes are 99 pages/11 papers in Chinese) for the National Student Innovation Training Program.

AWARDS & HONORS

- **Professional Development Award**, Graduate Student Employees Union 2023
- **Mitacs Globalink Graduate Fellowship**, Mitacs 2019
- **Excellent Graduate of the year**, Hunan University 2019
- **Chinese Government Scholarship**, China Scholarship Council 2018
- **The First-Class Scholarship**, Hunan University 2017, 2018
- **National Student Innovation Training Program Grant**, Ministry of Education of China 2017
- **Triple-A student**, Hunan University 2016
- **National Scholarship**, Ministry of Education of China 2016

RESEARCH EXPERIENCE

- **BIAS-NRT Trainee**, Stony Brook University May 2023 – Present
NSF-funded project aimed to detect and address bias in data, humans, and institutions.
- **Research Assistant**, under Owen Rambow, SUNY Research Foundation May 2023 – Present
DARPA-funded project: Influence Campaigns Awareness and Sensemaking (INCAS).
- **Research Assistant**, under Veronika Makarova & Zhi Li, University of Saskatchewan May 2020 – Jun 2021
Assessing the development of Academic ESL Writing by international graduate students.
- **Research Assistant**, under Benjamin V. Tucker, University of Alberta Summer 2018
Phonological perceptions of Chinese English learners for reduced English sounds.

TEACHING EMPLOYMENT

- **Summer Youth Camp in Computational Linguistics**. Secondary Instructor Aug 2023
Organizer: Jeffrey Heinz, Stony Brook University
- **LIN335: Computational Linguistics**. Teaching Assistant Spring 2023
Instructor: Jordan Kodner. Stony Brook University.
- **LIN120: Language and Technology**. Teaching Assistant Fall 2022
Instructor: Owen Rambow. Stony Brook University.

CERTIFICATES

- **Machine Learning Specialization**, Deeplearning.AI 2022
- **Practical Data Science on the AWS Cloud**, Deeplearning.AI 2022
- **Deep Learning Specialization**, Deeplearning.AI 2021
- **Deep Learning Based Natural Language Processing**, Baidu PaddlePaddle 2021

SKILLS

- **Programming:** Python, Java, R, \LaTeX , Octave, HTML, C/C++, Haskell, Unix
- **Frameworks:** PyTorch, TensorFlow, Keras, PaddlePaddle, NumPy, Jax, scikit-learn
- **Cloud Computing:** AWS, Baidu AI Studio, Google Colab
- **Languages:** Mandarin, English, Fuzhou Dialect

PRESENTATIONS

Talks

1. **Wang, Z.** July 2023. Learning Transductions and Alignments with RNN Seq2seq Models. The 16th International Conference on Grammatical Inference (ICGI), Rabat, Morocco.
2. **Wang, Z.** March 2023. Understanding how RNN seq2seq models learn alignment. SYNC (STONY BROOK, YALE, NYU, CUNY Linguistics Conference) 2023, Yale University.
3. **Wang, Z.** December 2022. Linguistic Knowledge in Data Augmentation for Natural Language Processing: An Example on Chinese Question Matching. The 5th International Conference on Natural Language and Speech Processing, Online.
4. **Wang, Z.** October 2022. Random Text Perturbations Work, but not Always. The 3rd Workshop on Evaluation and Comparison of NLP Systems (co-located at AACL 2022), Online.

Posters

1. **Wang, Z.** April 2023. Exploring RNN Seq2seq Models via Transduction Tasks that Require Alignments. The 10th Mid-Atlantic Student Colloquium on Speech, Language and Learning (MASC-SLL 2023), George Mason University.
2. **Wang, Z.** April 2023. Probing the learning capabilities of RNN seq2seq models. IACS (Institute for Advanced Computational Science) Research Day, Stony Brook University.
3. **Wang, Z.** March 2023. Probing the learning capabilities of RNN seq2seq models. The 47th Penn Linguistics Conference, University of Pennsylvania.
4. **Wang, Z.**, Tucker, B. V. & Mukai, Y. August 2018. How does Chinese learner of English perceive and comprehend phonetic reduction? Summer Poster Symposium, University of Alberta.

SERVICE

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| • Student Organizer
Mathematical Linguistics Reading Group, Stony Brook University | Aug 2022 – May 2023 |
| • ESL classroom volunteer
The Global Gathering Place, Saskatoon | Dec 2019 – Mar 2020 |
| • Co-founder and President
Hunan University Student Ambassadors Association, Hunan University | May 2016 – Jun 2019 |
| • Student Organizer
University of Regina's China Study Tour (4 weeks), Hunan University | May 2019 |
| • Volunteer and Interpreter
UNESCO conference "Role of linguistic diversity" (3 days), Changsha | Sep 2018 |