

# RUI LIU (PHD)

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Dr. Rui Liu received his PhD at Computer Science from Inner Mongolia University of China in 2020. He has been a visiting PhD student at National University of Singapore, fully-funded by China Scholarship Council. Dr. Rui Liu's research interests include speech information processing, machine learning and speech synthesis. He has published in leading journals and conferences, including IEEE/ACM Transactions on Audio, Speech, and Language Processing; IEEE Signal Processing Letters; INTERSPEECH and ICASSP.

## EDUCATION

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<b>PhD (Exchange)</b>	Electrical and Computer Engineering National University of Singapore, Singapore <i>Fully-funded by China Scholarship Council (CSC) Scholarship</i>	2019-2020
<b>PhD</b>	Computer Science Inner Mongolia University, China	2020
<b>BS</b>	Bachelor of Engineering in Software Engineering Dept. of software, Taiyuan University of Technology	2014

## HONORS AND AWARDS

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2020 ICASSP IEEE SPS Travel Grant  
2019 China Scholarship Council (CSC) scholarships  
2018 National scholarship for Doctoral students  
2018 Academic scholarship of Inner Mongolia autonomous region  
2017 National scholarship for Doctoral students  
2017 Academic scholarship of Inner Mongolia autonomous region  
2016 Academic scholarship of Inner Mongolia autonomous region  
2011 National Encouragement scholarship

## SELECTED PUBLICATIONS

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1. **Rui Liu**, Berrak Sisman, Feilong Bao, Jichen Yang, Guanglai Gao and Haizhou Li, Exploiting Morphological and Phonological Features to Improve Prosodic Phrasing for Mongolian Speech

- Synthesis, *IEEE/ACM Transactions on Audio, Speech, and Language Processing*, vol. 29, pp. 274-285, 2021, doi: 10.1109/TASLP.2020.3040523.
2. Yi Zhou, Xiaohai Tian, Xuehao Zhou, Mingyang Zhang, Grandee Lee, **Rui Liu**, Berrak Sisman, and Haizhou Li, NUS-HLT System for Blizzard Challenge 2020, in Proc. Joint Workshop for the Blizzard Challenge and Voice Conversion Challenge, Shanghai, China, October 2020, pp. 44-48.
  3. **Rui Liu**, Berrak Sisman, Feilong Bao, Guanglai Gao and Haizhou Li, Modeling Prosodic Phrasing with Multi-Task Learning in Tacotron-based TTS, *IEEE Signal Processing Letters*, 27, 2020, pp. 1470-1474.
  4. **Rui Liu**, Berrak Sisman, Jingdong Li, Feilong Bao, Guanglai Gao and Haizhou Li. Teacher-Student Training For Robust Tacotron-based TTS. In: 45th International Conference on Acoustics, Speech, and Signal Processing (ICASSP2020)
  5. **Rui Liu**, Berrak Sisman, Feilong Bao, Guanglai Gao and Haizhou Li. WaveTTS: Tacotron-based TTS with Joint Time-Frequency Domain Loss. In: 12nd The Speaker and Language Recognition Workshop (Odyssey2020)
  6. **Rui Liu**, Jingdong Li, Feilong Bao and Guanglai Gao. The IMU speech synthesis entry for Blizzard Challenge 2019. In: Blizzard Challenge 2019
  7. **Rui Liu**, Feilong Bao, and Guanglai Gao. Building Mongolian TTS Front-End with Encoder-Decoder Model by Using Bridge Method and Multi-view Features. In: 33rd International Conference on Neural Information Processing (ICONIP2019)
  8. **Rui Liu**, Feilong Bao, Guanglai Gao, Hui Zhang and Yonghe Wang. Improving Mongolian Phrase Break Prediction by Using Syllable and Morphological Embeddings with BiLSTM Model. In: 15th Conference of the International Speech Communication Association (InterSpeech2018)
  9. **Rui Liu**, Feilong Bao, Guanglai Gao, Hui Zhang and Yonghe Wang. A LSTM Approach with Sub-Word Embeddings for Mongolian Phrase Break Prediction. In: 27th International Conference on Computational Linguistics (COLING 2018)
  10. **Rui Liu**, Feilong Bao, Guanglai Gao, Hui Zhang and Yonghe Wang. Phonologically Aware BiLSTM Model for Mongolian Phrase Break Prediction with Attention Mechanism. In: 15th Pacific Rim International Conference on Artificial Intelligence (PRICAI2018)
  11. Jingdong Li, Hui Zhang, **Rui Liu**, Xueliang Zhang and Feilong Bao. End-to-End Mongolian Text-to-Speech System. In: 11th International Symposium on Chinese Spoken Language Processing (ISCSLP2018)
  12. **Rui Liu**, Feilong Bao, Guanglai Gao and Yonghe Wang. Mongolian Text-to-Speech System Based on Deep Neural Network. National Conference on Man-Machine Speech Communication. Springer, Singapore, 2017: 99-108.
  13. **Rui Liu**, Feilong Bao and Guanglai Gao. Mongolian prosodic phrase prediction using suffix segmentation. In: 20th International Conference on Asian Language Processing (IALP 2016)
  14. **Rui Liu**, Feilong Bao, Guanglai Gao and Hongwei Zhang. Approach to Prediction Mongolian Prosody Phrase Based on CRF Model. In: 13th National Conference on Man-Machine Speech Communication (NCMMSC2015)

## REFERENCES

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1. Dr. Haizhou Li (IEEE Fellow, ISCA Fellow)  
Professor, National University of Singapore  
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2. Dr. Berrak Sisman  
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3. Dr. Guanglai Gao  
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