Rui Liu (PhD)

|  |  |
| --- | --- |
| **Contact:** r.liu@u.nus.edu  **Date of Birth:** 1994.05.18  **Gender:** Male  **Nationality:** People’s Republic of China  **Address:** Department of Electrical and Computer Engineering.  4 Engineering Drive 3. Block E4, #06-20. Singapore 117583. | http://ece.nus.edu.sg/hlt/wp-content/uploads/2020/04/Liu-image-e1586399164764-1024x1017.jpg |

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

**PhD (Exchange)** Electrical and Computer Engineering

National University of Singapore, Singapore 2019-2020

*Fully-funded by China Scholarship Council (CSC) Scholarship*

**PhD** Computer Science

Inner Mongolia University, China 2020

**BS** Bachelor of Engineering in Software Engineering

Dept. of software, Taiyuan University of Technology 2014

# Honors and Awards

# 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

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, 2020. (Accepted)
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

1. Dr. Haizhou Li (IEEE Fellow, ISCA Fellow)

Professor, National University of Singapore

Email: eleliha@nus.edu.sg

Contact: +65 6516 6473

Website: <https://www.eng.nus.edu.sg/ece/staff/li-haizhou/>

1. Dr. Berrak Sisman

Assistant Professor, Singapore University of Technology and Design (SUTD)

Email: [Berrak\_sisman@sutd.edu.sg](mailto:Berrak_sisman@sutd.edu.sg)

Contact: +65 86207616

Website: <https://istd.sutd.edu.sg/people/faculty/berrak-sisman>

1. Dr. Guanglai Gao

Professor, Inner Mongolia University

Email: csggl@imu.edu.cn

Contact: +86 138 4703 1101

Website: <https://ccs.imu.edu.cn/info/1152/3125.htm>