# Yuqing Zhang (张字晴)

### Research Interests

Broad Speech Acquisition, Prosody

Narrow Prosody Acquisition, Functional Load, Improving Prosody in TTS

#### Education

2019 - **M.A.** in Language Intelligence and Technology
(3.89/4.0)

Beijing Language and Culture University (BLCU), Beijing, China

2015 - 2019 **B.A.** in English Language and Literature (3.79/4.0)

Beijing Foreign Studies University (BFSU), Beijing, China

#### Publications

#### Conference Proceedings

Yuqing Zhang, Zhu Li, and Jinsong Zhang. "Towards the Use of Pretrained Language Model GPT-2 for Testing the Hypothesis of Communicative Efficiency in the Lexicon." In: *International Conference on Asian Language Processing* (December 2021). [pdf]

Yuqing Zhang, Zhu Li, Bin Wu, Yanlu Xie, Binghuai Lin, and Jinsong Zhang. "Relationships Between Perceptual Distinctiveness, Articulatory Complexity and Functional Load in Speech Communication." In: *Proc. Interspeech* (2021), pp. 1733–1737. [doi]

Yuqing Zhang, Zhu Li, Binghuai Lin, and Jinsong Zhang. "A Preliminary Study on Discourse Prosody Encoding in L1 and L2 English Spontaneous Narratives." In: *Proc. Interspeech* (2021), pp. 3949–3953. [doi]

Yuqing Zhang, Zhu Li, and Jinsong Zhang. "A Comparison Study on the Alignment of Prosodic and Semantic Units and Its Effects on F0 Shifting in L1 and L2 English Spontaneous Speech." In: *International Symposium on Chinese Spoken Language Processing* (2021). [doi]

Zhu Li, **Yuqing Zhang**, Dengfeng Ke, Binhuai Lin, and Yanlu Xie. "Data-driven Stimulus Continuum Generation with Variational Autoencoder." In: *National Conference on Man-Machine Speech Communication* (October 2021). [pdf]

#### Presentations

Yuqing Zhang and Jinsong Zhang. "Patterns in Information Contributions of Phonemic Contrasts Based on Functional Load". In: The 14th Phonetic Conference of China (July 2021).

Rian Bao, Wenhan Yao, **Yuqing Zhang**, and Jinsong Zhang. "A Quantification Method for Intelligibility and Comprehensibility of Speech Based on Functional Load". In: *The 14th Phonetic Conference of China* (July 2021).

#### In Progress

(Submitted to ICASSP 2022): Zhu Li, **Yuqing Zhang**, Mengxi Nie, Ming Yan, Mengnan He, Ruixiong Zhang, Caixia Gong. "Improving Prosody for Unseen Texts in Speech Synthesis by Utilizing Linguistic Information and Noisy Data."

(Submitted to ICASSP 2022): Mengnan He, Tingwei Guo, **Yuqing Zhang**, Zhu Li, Ruixiong Zhang, Caixia Gong. "Improving GAN-based Vocoder for Fast and High-quality Speech Synthesis."

# Academic Working Experience

Winter 2021 **Teaching Assistant**, Introduction to Probability Theory, BLCU

Spring 2019 **Research Assistant**, Language Aging project, Laboratory of Phonetics and Auditory Science, *Chinese Academy of Social Science* 

# Industrial Working Experience

June 2021 - **Speech Algorithm Intern**, Speech Synthesis and Language Modeling, AI Enabling Platform, *DiDi Chuxing*, Beijing, China

# Language Skills

Programming Languages & Tools: Python, R, Praat

Natural Languages: Mandarin (native), English (fluent), German (basics), Spanish/Catalan (basics), Japanese (basics)

#### Awards & Grants

2021 2nd & 3rd prize for the best conference paper (PCC 2021)

2019, 2021 First Class Scholarship, Beijing Language and Culture University

2021 National Scholarship, Beijing Language and Culture University