Yuqing Zhang (张宇晴)

 yuqingelsa@gmail.com
 https://yuqing0304.github.io

Education

2022 - Present **PhD in Computational Linguistics**

University of Groningen & Leiden University, the Netherlands

Project: Simulating the Emergence of Linguistic Structure Using Neural Agents
Advisor: Arianna Bisazza, Tessa Verhoef, Gertjan van Noord

2019 - 2022 **M.A. in Language Intelligence and Technology**

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

Thesis: Communicative Efficiency Modulates Relationships between Perceptual Distinctiveness, Articulatory Complexity and Functional Load

Side Project: Discourse Prosody Encoding in Spontaneous Narratives

2015 - 2019 **B.A. in English Language and Literature**

Beijing Foreign Studies University (BFSU), Beijing, China

Thesis: Comparison of pitch profiles in L1 and L2 Mandarin: An acoustic analysis of the accented Mandarin prosody (Excellent Graduation Thesis)

Research Interests

Broad Computational Modeling of Human Language, Speech synthesis

Narrow Emergent communication, language universals, neural agent-based simulation, word order preferences

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: *Proceedings of 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: *Proceedings of 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

Yuchen Lian, **Yuqing Zhang**, Tessa Verhoef, and Arianna Bisazza. "NeLLCom: A New Framework for Studying the Emergence of Language Universals with Neural Agents". In: *ESSLLI 2023 workshop-Internal and external pressures shaping language* (August 2023).

Yuqing Zhang, Zhu Li, and Jinsong Zhang. "Relationships between Perceptual Distinctiveness and Functional Load in Different Phonological Contexts". In: *National Conference on Man-Machine Speech Communication* (October 2021).

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

Manuscripts

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." [arXiv]

Teaching Experience

Winter 2021	**Teaching Assistant**, Introduction to Probability Theory, *BLCU*
Summer 2017	**Teaching Assistant**, Humanity, Science and Nature in the West, *BFSU*

Working Experience

July 2021 - Jan 2022	**Speech Algorithm Intern**, Speech Synthesis and Language Modeling, AI Enabling Platform, *DiDi Chuxing*, Beijing, China
Spring 2019	**Research Assistant**, Language Aging project, Laboratory of Phonetics and Speech Science, *Chinese Academy of Social Sciences*, Beijing, China
Winter 2017	**Dictionary Editing Intern**, Educational Publishing Department, *Foreign Language Teaching and Research Press*, Beijing, China

Languages & Skills

Programming Languages & Tools: Python, R, Praat

Natural Languages: Mandarin (native), English, German (basic), Spanish (basic), Japanese (basic)

Awards & Grants

2021	2nd prize for the best conference paper (PCC 2021) (first author)
2021	3rd prize for the best conference paper (PCC 2021) (third author)
2021	National Scholarship, *BLCU*
2019, 2021	First Class Scholarship, *BLCU*
2018	Second Class Scholarship & Outstanding Student Award, *BFSU*

Activities

2021	**Student Volunteer (online)**, Interspeech 2021 Brno
2020	**Student Volunteer**, Interspeech 2020 Shanghai
Spring 2016	**English Teaching Volunteer**, *Lengquan Village*, Beijing