

Baorian (Rian Bao)

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EDUCATION

Beijing Language and Culture University	Sep 2020 - Jun 2023
Language Intelligence and Technology Master	Beijing
GPA: 3.92 / 4.00 (3/42)	
East China Normal University	Aug 2015 - May 2019
English Bachelor	Shanghai
Senior Thesis: A Phonological Study on Chinese Loanwords in Mongolian (Outstanding Graduation Dissertation Award)	
GPA: 3.23 / 4.00 (first 30%)	
Fudan University	Aug 2017 - Aug 2017
Phonetics and Phonology Summer Courses	Shanghai

RESEARCH INTERESTS

Psycholinguistics, computational linguistics, second language comprehensibility.

My research interest lies in how humans process defective speech. To explore this topic, I studied the relationship between computational linguistics, second language (L2) speech, and psycholinguistic data (listener-based behavioral experiments). Recently, I adopted a mutual-information-based functional load model to quantify the information loss of L2 Chinese speech. Then I explored the relationship between information loss and speech comprehensibility.

Publications

Rian Bao, Linkai Peng, Yuchen Yan, Jinsong Zhang. "An Exploratory Study for Quantifying the Contextual Information for Successful Chinese L2 Speech Comprehension." The 13th International Symposium on Chinese Spoken Language Processing (ISCSLP), Accepted, 2022.

Rian Bao, Linkai Peng, Yingming Gao, Jinsong Zhang. "The Contribution of Phonological and Fluency Factors to Chinese L2 Comprehensibility Ratings: A Case Study of Urdu-speaking Learners." The 13th International Symposium on Chinese Spoken Language Processing (ISCSLP), Accepted, 2022.

Rian Bao, Linkai Peng, Yingming Gao, and Jinsong Zhang. "The Importance of Lexical Tone for Sentence Understanding: Utilizing Functional Load Principle to Simulate Comprehension Process." 2022 International Conference on Asian Language Processing (IALP), 2022. DOI: 10.1109/IALP57159.2022.9961243

Rian Bao, Linkai Peng, and Jinsong Zhang. "The Contributions of Initials and Finals to L2 Chinese Comprehensibility Based on Functional Load Principle." 2022 International Conference on Asian Language Processing (IALP), 2022. DOI:10.1109/IALP57159.2022.9961277

Yin Bao, **Rian Bao**, "Contextual Vowel Nasalization in Mongolian." 2021 International Conference on Asian Language Processing (IALP), 2021. DOI:10.1109/IALP54817.2021.9675254

Presentations

Baorian, W. Yao, Y. Zhang, & J. Zhang, An Exploratory Study for Quantifying Intelligibility and Comprehensibility based on the Functional Load Model (in Chinese), Phonetics Conference of China 2021, Lanzhou, China.

Baorian, The Contribution of Linguistic Factors to Chinese L2 Comprehensibility (in Chinese), 18th International Conference on Chinese as a Second Language 2022, Beijing, China.

Research Experience

Research Assistant at Speech Acquisition and Intelligent Technology Lab (SAIT) [Grad University] Aug 2020 - Present

Prof. Zhang's lab studies speech acquisition of second language learners and hearing-impaired children.

-- Responsibilities include data annotation and processing.

Research Assistant at the Department of Language and Literature of Ethnic Minorities of China [Grad University]

Jun 2021 - Sep 2021

Prof. Bao's department focuses on Mongolian phonetics and phonology.

-- Responsibilities include data analysis, dialect speech recording, and academic paper writing.

Funded Project: A Phonological Study on Chinese Loanwords in Mongolian [Undergrad University]

Student project funded by ECNU undergraduate research funding

-- Corpus analysis on Mongolian Loanword, completed by myself.

HONORS & AWARDS

Outstanding Graduation Dissertation Award of East China Normal University	Jul 2019
Merit Student of Beijing Language and Culture University	Dec 2021
Best Student Paper Award in Phonetics Conference of China	Jul 2021
The Second Prize scholarship	Sep 2020, Sep 2021 and Sep 2022

SKILLS LIST

- Programming Languages: Python scripting (Fluent), Praat scripting (Fluent), R scripting for statistical analysis (Basic), knowledge of the Linux operating system (Basic)
- Data Analysis: SPSS, R (ggplot2, lm, olsrr)
- Experimental Design: E-Prime (Basic), Finding Five (Basic)
- Writing and Communication: Microsoft Office, PowerPoint, Excel, LaTeX
- Languages: Mongolian (mother tongue), Chinese Mandarin (native-level), English (proficient), Spanish (basic)

WORK EXPERIENCE

ByteDance (Tiktok)	Mar 2022 - Jul 2022
English Text-to-Speech Linguistic Data Specialist @ AI-Lab	Beijing
DataBaker	Oct 2021 - Dec 2021
Annotator	Beijing
Zhiyuan Education	Jan 2020 - May 2020
English teacher	Inner Mongolia
College of Foreign Languages, ECNU [Undergrad University]	Sep 2017 - Jul 2019
Peer Advisor (academic advisor to first-year students)	Shanghai

RELEVANT COURSEWORK

- Cognitive Neuroscience
- General Linguistics
- Acoustic Phonetics
- Speech Information Processing
- Corpus Linguistics
- Prosodic Information Processing
- Introduction to Speech and Hearing Sciences
- An Experimental Study on Language Cognition and Eye Movement