JIURUI GUO

18 Lor Sarhad | jiuruiguo@u.nus.edu | +65 9121 3814

EDUCATION

University of Oxford, Faculty of Linguistics, Philology, and Phonetics, UK   **October 2025 – August 2028 (Expected)**
Doctor of Philosophy in Linguistics, Philology, and Phonetics
- Supervisors: Prof. Elinor Payne and Dr. Anna Wilson
- Clarendon Scholar
- Research Area: Multimodality, Prosody-Gesture Alignment, Phonetics and Phonology Interface

National University of Singapore, Faculty of Science, Singapore   **August 2024 – Present**
Master of Science (Statistics)
- Relevant Coursework: Stochastic Process, Spatial Statistics, Advanced Categorical Analysis, Statistical Foundation of Data Science, Sampling from Finite Population

University of Virginia, College of Arts and Science, Charlottesville, USA   **August 2020 – May 2024**
Bachelor of Arts with High Distinction
- Double Major in Linguistics and Applied Statistics, Minor in Greek
- GPA: 3.8/4.0
- Thesis: *Cross-language VOT Perception: The First Perception of Stops in Unfamiliar Languages*
- Dean's List: Fall 2021, Spring 2022, Fall 2022, Spring 2023, Fall 2023, Spring 2024

Fudan University, Shanghai, China   **August 2020 – May 2021**
Exchange Program
- Go-Local exchange program under Department of English at Fudan University

RESEARCH EXPERIENCE

Research Assistant, **PhonLab, Harvard University,** Online   **June 2024 – March 2025**
Principal Investigator: Prof. Kathryn Franich
Project: Cross-Linguistic Patterns in the Timing of Speech and Co-Speech Gesture
- Administer and oversee forced alignment of Cameroonian English data using FAVE aligner and Montreal Forced Aligner, and conduct a comparative study of the effectiveness of the two algorithms
- Verify forced alignment accuracy by analyzing spectrograms and reviewing 20,000+ word-level alignment outputs to ensure precision.

Researcher, **School of Education, University of Virginia,** Charlottesville, VA   **August 2022 – June 2024**
Principal Investigator: Prof. Filip Loncke
Project: Detecting Phonological Indicators of Foreign-ness in Speech
- Designed a phonological test for non-Chinese natives to investigate phonetic and acoustic features of speeches made by non-Chinese speakers, contributing to how different native languages affect the perception of unfamiliar languages.
- Lead comparative study of VOT perception and production of speeches produced by Dutch and French natives, to investigate whether typological or acoustic similarity influences the perception or production of plosive consonants.
- Analyzed acoustic features, especially formant of vowels, of non-Chinese speakers speaking Mandarin for first time based on test mentioned above.
- Created collaboratively detailed guidance videos, demonstrating to participants how to complete test as researchers desired, helped more than 80 participants finish test without any questions.

Research Assistant, **Darden School of Business, University of Virginia,** Charlottesville, VA **August 2023 – July 2024**
Principal Investigator: Prof. Max Biggs
Project: Optimization of Personalized Pricing by Decision Tree.
- Developed a machine learning algorithm that maximizes possibility of generating a personalized price that is lower than expected price of customers.

- Conducted simulations of decision trees of personalized pricing, based on comparison of doubly robust estimations and inverse propensity scoring method.

Research Assistant, **Department of History, Boston University,** Shanghai, China   **May 2021 – September 2021**
Principal Investigator: Prof. Alex Mayfield and Prof. Daryl Ireland
Project: China Historical Christian Database
- Digitized and proofread 300+ pages of data of Protestant missionaries in Northern China during 19th century from paperback books into database collaboratively.
- Conducted literary research to identify locations and surviving institutions mentioned in data, recognize archaic Chinese characters, and research possible connections for ~50 pairs of missionaries and towns with different modern names.

PROFESSIONAL EXPERIENCE

Linguistic Advisor, **Beijing Daxing International Airport,** Beijing, China   **July 2023 – September 2023**
- Worked in Airport Operation Center and analyzed ground-air communication audios between control tower and EFL pilots, including Russian, Thai, Malaysian, Emiratis, and Qatari crews for higher communication efficiency and accuracy.
- Compiled phonetic, phonological, and phonotactic features of each group of pilots into a ~35 pages summary, including an analysis and investigation of an accident caused by perceptional misunderstanding.
- Designed a training scheme with example audios for new controllers to familiarize themselves with non-routine communications influenced by various accents, successfully reducing accidents caused by accented communication to zero since August 2023.

CONFERENCE AND PRESENTATION
- (Mar. 17)   Di Cicco, A. Stone, D. McKenney, B. **Guo, J**., et al. (2023), Detecting Phonological Indicators of Foreign Languages [Poster Presentation], 14th Annual Hunter Student Research Conference, Charlottesville, United States.

ACTIVITIES & VOLUNTEERING

Translator, **Muyou Localization Team,** Online   *August 2019 – October 2023*
- Translated development diary and board games of renowned strategy game studio, Paradox Interactive, weekly in the most influential GST-game localization team in China, Muyou Translation Team.
- Produced more than 40 diaries with 1,300 words in each diary

Organizer, **International Relations Organization,** Charlottesville, Virginia   *November 2021 - April 2022*
- Organized 27th Virginia International Crisis Simulation (VICS XXVII) as session dais member, prepared session papers and backgrounds, oversaw and regulated a conference of 30 delegates from multiple top universities in America

Editor, **Cavalier Daily,** Charlottesville, Virginia   *August 2021 – May 2022*
- Volunteered weekly in the copy office for the most influential student-led newspaper at the University of Virginia
- Worked as a nightshift copy staff proofreading articles, checking citations, and maintaining writing style.

TECHNICAL SKILLS
- **Coding Language and processing**: Four years of Python and R experience, One year of coding with Java, Microsoft Office, SAS
- **Communication**: Mandarin-English Bilateral Translation.
- **Acoustic and Visual Processing and Analytics**: Praat, ELAN, Adobe Audition, Adobe Lightroom
- **Languages**: Mandarin (Native), English (Professional), Japanese (Intermediate), Classical Greek (Intermediate), Latin (Basic), Eastern Armenian (Fieldwork).
- **Extracurricular**: Aviation Photography, Drum sets, Social Media Management.