# Fenqi Wang

### Research Interests

Phonetics, Psycho-/Neurolinguistics, and Computational Linguistics

# Academic Appointments

2023 Lecturer

Department of Linguistics, Simon Fraser University, Canada

2023 **Postdoctoral Fellow** 

Department of Linguistics, Simon Fraser University, Canada

Supervisors: Henny Yeung & Yue Wang

### Education

2020 - 2023 Ph.D. candidate in Linguistics, University of Florida, USA

(expected) Dissertation: The production and perception of vocal emotions in American English and Mandarin Chinese: A cross-linguistic study with computational modeling

Committee Chair: Ratree Wayland

Committee Members: Caroline Wiltshire, Sarah Moeller, Yonghee Oh, Richard

Wang

2020 M.A. in Linguistics, University of Kansas, USA

Thesis: The effect of pitch accent on the perception of English lexical stress by

native listeners

Committee Chair: Annie Tremblay

Committee Members: Allard Jongman, Jie Zhang

2017 M.A. in English Language and Literature, China University of Geosciences

(Wuhan), China

2014 B.A. in English Translation and Interpretation, Wuhan University of En-

gineering Science, China

### **Publications**

### Journal Articles & Proceedings

### Published/Accepted

- In press Ratree Wayland, Kevin Tang, **Fenqi Wang**, Sophia Vellozzi, & Rahul Sengupta. Quantitative acoustic versus deep learning metrics of lenition. *Languages*. [cofirst author]
- In press Ratree Wayland, Kevin Tang, **Fenqi Wang**, Sophia Vellozzi, Rahul Sengupta, & Lori Altmann. Lenition measures: Neural networks' posterior probability versus acoustic cues. In *Proceedings of Meetings on Acoustics, 183ASA*. Acoustical Society of America.
- In press Delin Deng & **Fenqi Wang**. The intonation of the French discourse marker donc with different pragmatic functions. In *Proceedings of the 56th Linguistics Colloquium*.
- 2023 Kevin Tang, Ratree Wayland, **Fenqi Wang**, Sophia Vellozzi, Rahul Sengupta, & Lori Altmann. From sonority hierarchy to posterity probability as a measure of lenition: The case of Spanish stops. *Journal of the Acoustical Society of America*. https://doi.org/10.1121/10.0017247
- Huanhuan Liu, Zibin Guo, Yishan Jiang, John Schwieter, & **Fenqi Wang**. Neural circuits underlying language control and modality control in bilinguals: An fMRI study. *Neuropsychologia*. https://doi.org/10.1016/j.neuropsychologia. 2022.108430
- Delin Deng & **Fenqi Wang**. Review of *Teacher Transition into Innovative Learning Environments: A Global Perspective. Australian Journal of Applied Linguistics*, 5(2), 88-91. https://doi.org/10.29140/ajal.v5n2.721 [co-first author]
- Shuang Liu, John Schwieter, **Fenqi Wang**, & Huanhuan Liu. An event-relation potential study of self-positivity bias in native and foreign language contexts. *Psychophysiology*, e14145. https://doi.org/10.1111/psyp.14145
- Dongxue Liu, John Schwieter, **Fenqi Wang**, Li Mu, & Huanhuan Liu. Uncovering the effects of bilingual language control on rational decisions: An ERP study. *Psychophysiology*, e14066. https://doi.org/10.1111/psyp.14066
- Tingting Guo, **Fenqi Wang**, Ningning Cao, & Huanhuan Liu. Conflicts influence affects: An fMRI study of emotional effects in a conflict task. *Cognitive Neurodynamics*, 1-11. https://doi.org/10.1007/s11571-022-09790-6
- Linyan Liu, John Schwieter, **Fenqi Wang**, & Huanhuan Liu. First and second languages differentially affect rationality when making decisions: An ERP study. *Biological Psychology*, 108265. https://doi.org/10.1016/j.biopsycho. 2022.108265
- Huanhuan Liu, Wanqing Li, Mingyue Zuo, **Fenqi Wang**, Zibin Guo, & John Schwieter. Cross-task adaptation effects of bilingual language control on cognitive control: A dual-brain EEG examination of simultaneous production and comprehension. *Cerebral Cortex*, bhab411. https://doi.org/10.1093/cercor/bhab411

2020

Man Zhang, Xin Wang, **Fenqi Wang**, & Huanhuan Liu. Effect of cognitive style on language control during joint language switching: An ERP study. *Journal of Psycholinguistic Research*, 49(3), 383–400. https://doi.org/10.1007/s10936-019-09682-7

### Manuscripts Under Review/In Revision

Under review

Ratree Wayland, Kevin Tang, **Fenqi Wang**, Sophia Vellozzi, & Rahul Sengupta. Measuring gradient effects of alcohol on speech with neural networks' posterior probability of phonological features. In *Proceedings of the 20th International Congress of the Phonetic Sciences*.

Under review

**Fenqi Wang**, Delin Deng, & Ratree Wayland. [s] or [s]: Investigating the phonetic variation of retroflex fricative in accented Mandarin. In *Proceedings* of 20th International Congress of the Phonetic Sciences.

Under review

Kevin Tang, Ratree Wayland, **Fenqi Wang**, Sophia Vellozzi, & Rahul Sengupta. Evaluating the effectiveness of lenition measures: neural networks' posterior probability, intensity velocity and duration. *JASA Express Letters*.

In revision

**Fenqi Wang**, Kevin Tang, Ratree Wayland, & Delin Deng. The effect of pitch accent on the perception of English lexical stress: Evidence from native listeners.

In revision

Delin Deng & **Fenqi Wang**. A variationist analysis of *quoi* in French native speech: A corpus-based study. *Linguistics Vanguard*. [co-first author]

In revision

Delin Deng, **Fenqi Wang**, & Ratree Wayland. The pitch contour of the French discourse marker *donc*: A corpus-based study using generalized additive mixed-effects modeling. *Journal of French Language Studies*. [co-first author]

### Manuscripts in Preparation

In prep.

**Fenqi Wang**. Speech emotion recognition using support vector machines and convolutional neural network.

In prep.

**Fenqi Wang** & Ratree Wayland. The acoustic profiles of vocal emotions in American English and Mandarin Chinese.

In prep.

Kevin Tang, Ratree Wayland, **Fenqi Wang**, Sophia Vellozzi, & Rahul Sengupta. Kingston's acoustic versus deep learning metrics of lenition.

In prep.

**Fenqi Wang**, Delin Deng, & Ratree Wayland. The phonetic variation of syllable-initial /I/ and /n/ in accented Mandarin: Generalized additive mixed modeling.

In prep.

Ryan Bennett, Kevin Tang, Juan Ajsivinac Sian, & **Fenqi Wang**. Perceptual similarity in the stop consonants of Kaqchikel.

# Conference Presentation

#### **Oral Presentations**

2021

**Fenqi Wang**, Delin Deng, & Ratree Wayland. The ongoing sound change between /I/ and /n/ in Gan Chinese: Random forest classification. *The 181st Meeting of Acoustical Society of America* (ASA), Seattle, USA.

- Fenqi Wang, Delin Deng, Qingcheng Zeng, Ratree Wayland, & Kevin Tang. A corpus study of the production of syllable-initial /I/ and /n/ in Gan-accented Mandarin: Random forest classification. The 49th Meeting of New Ways of Analyzing Variation (NWAV), Austin, USA (virtual).
- 2021 **Fenqi Wang** & Shiyi Wang. The emergence of /I/ in Chongyang Gan Chinese: OT learning with GLA. *The 54th International Conference on Sino-Tibetan Languages and Linguistics* (ICSTLL54), Chengdu, China (virtual).
- **Fenqi Wang**. Merger of /l/ and /n/ in Chongyang Gan Chinese: OT analysis and GLA. *The 34th Paris Meeting on East Asian Linguistics* (JLAO34), Paris, France (virtual).
- Delin Deng & **Fenqi Wang**. The intonation of the French discourse marker donc with different pragmatic functions. *Disfiller 2021*, Bristol, UK (virtual).
- Delin Deng & **Fenqi Wang**. The intonation of the French discourse marker donc with different pragmatic functions. The 56th Linguistics Colloquium, Mainz, Germany (virtual).

#### Posters

- Fenqi Wang, Delin Deng, & Ratree Wayland. Thing or sing: Modeling the phonetic variation of the interdental fricative  $/\theta/$  in accented English. The 184th Meeting of Acoustical Society of America (ASA), Chicago, USA.
- Fenqi Wang & Ratree Wayland. Acoustic properties of vocal emotions in American English and Mandarin Chinese. *The 184th Meeting of Acoustical Society of America* (ASA), Chicago, USA.
- 2023 Ratree Wayland, Kevin Tang, **Fenqi Wang**, Sophia Vellozzi, & Rahul Sengupta. Neural networks' posterior probability as measure of effects of alcohol on speech. *The 184th Meeting of Acoustical Society of America* (ASA), Chicago, USA.
- Fenqi Wang, Delin Deng, & Ratree Wayland. The acoustic profiles of vocal emotions in Japanese: A corpus study with generalized additive mixed modeling. The 183rd Meeting of Acoustical Society of America (ASA), Nashville, USA.
- Fenqi Wang, Delin Deng, & Ratree Wayland. Modeling retroflex fricative variation in accented Mandarin. *The 183rd Meeting of Acoustical Society of America* (ASA), Nashville, USA.
- 2022 Ratree Wayland, Kevin Tang, **Fenqi Wang**, Sophia Vellozzi, Rahul Sengupta, & Lori Altmann. Lenition measures: Neural networks' posterior probability versus acoustic cues. *The 183rd Meeting of Acoustical Society of America* (ASA), Nashville, USA.
- 2022 Rachel Meyer, Ratree Wayland, & **Fenqi Wang**. Measuring second language acquisition of Spanish lenition. *The 183rd Meeting of Acoustical Society of America* (ASA), Nashville, USA.
- Fenqi Wang, Ratree Wayland, & Kevin Tang. Native English listeners' processing of pitch accent in the perception of English lexical stress. *The 96th Annual Meeting of Linguistic Society of America* (LSA), Washington, D.C., USA.

- Delin Deng & **Fenqi Wang**. The Affrication of word-initial /3/ in French Native Speech. *The 96th Annual Meeting of Linguistic Society of America* (LSA), Washington, D.C., USA.
- Fenqi Wang, Kevin Tang, & Ratree Wayland. Native English listeners' processing of pitch accent in the perception of English lexical stress. Florida Psycholinguistic Meeting, Tallahassee, USA (virtual).
- **Fenqi Wang**. An acoustic study of English vowels produced by Chinese learners of English. *UF Graduate Research Blitz*, Gainesville, USA.
- Jun Lyu & **Fenqi Wang**. Compound or single word: Phonological analysis of names in Shanghai Chinese. *The 33rd Meeting of the North American Conference on Chinese Linguistics* (NACCL-33), Chicago, USA (virtual).
- Jun Lyu, **Fenqi Wang**, & Elsi Kaiser. Antecedent prominence and the Chinese reflexive *ziji*. The 45th Annual Penn Linguistics Conference (PLC 45), Philadelphia, USA (virtual).
- **Fenqi Wang**, Kevin Tang, & Jun Lyu. The effect of pitch accent on the perception of English lexical stress by native and non-native listeners. *The 95th Annual Meeting of Linguistic Society of America* (LSA), USA (virtual).
- Jun Lyu, **Fenqi Wang**, Dawei Lu, & Yiyuan Chen. Locality or recency: A story of two Chinese reflexives. *The 50th Annual Meeting of the North East Linguistic Society* (NELS 50), Boston, USA.

### Invited Talks

- Fenqi Wang. Recognizing emotions in speech: Humans vs. machines. Talk invited by Dr. Sarah Moeller, Department of Linguistics, University of Florida, USA.
- Fenqi Wang. Dissertation writing and plan for graduate school. Talk invited by Dr. Edith Kaan, Department of Linguistics, University of Florida, USA.
- Fenqi Wang. An introduction to Montreal Forced Aligner. Workshop hosted by Phonetics and Phonology Reading Group, Department of Linguistics, University of Florida, USA.
- Fenqi Wang. The effect of pitch accent on the perception of English lexical stress: Evidence from native listeners. Colloquium talk hosted by the Department of Linguistics, University of Florida, USA.
- Fenqi Wang. The analysis of the production of syllable-initial /I/ and /n/ in Gan-accented Mandarin. Talk hosted by the Department of Linguistics, University of Florida, USA.
- Fenqi Wang. The application of random forest classification on the production of syllable-initial /I/ and /n/ in Gan-accented Mandarin. Talk invited by Dr. Fei Chen, Hunan University, Hunan, China.
- Fenqi Wang. Perceptual assimilation model and speech learning model. Talk invited by Yihan Chen in *LIN4721 Second Language Acquisition*, Department of Linguistics, University of Florida, USA.
- 2020 **Fenqi Wang**. Data management, data visualization, and text mining using R, Workshops hosted by Speech, Lexicon and Modeling Lab, Department of Linguistics, University of Florida, USA.

# Research Experience

2021 - 2023 Speech, Lexicon and Modeling Lab, University of Florida, USA

Supervisor: Prof. Ratree Wayland

Project: Smart electropalatography for linguistic and medical applications

(NSF Grant: 2037266)
Role: Graduate research assistant

Duties: Analyzed data using R and Python and applied computational models

2020 - 2021 Speech, Lexicon and Modeling Lab, University of Florida, USA

Supervisor: Dr. Kevin Tang

Project: Chinese speech corpus with Montreal Forced Aligner

The effect of pitch accent on the perception of English lexical stress

Role: Graduate research assistant

Duties: Analyzed data using R and Python and applied computational models

Supervisor: Dr. Yu-Yin Hsu

Project: Lexical repetition and persistence of priming effects in Chinese com-

prehension

Role: Research assistant

Duties: Conducted eye-tracking experiments and analyzed data using R

2017 - 2018 Lab for Communication Science, University of Hong Kong, China

Supervisor: Prof. Brendan Weekes

Project: Foreign language anxiety and domain word learning in tertiary students

Role: Research assistant

Duties: Analyzed pilot data using R

2017 - 2018 Research Center of Brain and Cognitive Neuroscience, Liaoning Normal Univer-

sity, China

Supervisor: Dr. Huanhuan Liu

Project: General cognitive abilities and language switch of bilinguals

Role: Research intern

Duties: Conducted ERP experiments and preprocessed ERP data using ERPLAB

# Teaching Experience

2023 IDS2935 Language and Emotion

2023 Summer

University of Florida

Supervisor: Dr. Ann Wehmeyer Role: Graduate teaching assistant

2021 - 2023 The Sound Structure of English (Online)

2021 Spring, Summer, Fall; 2022 Spring, Summer, Fall

Harbour Education Co. Ltd.

Co-instructor: Prof. John Harris (UCL) Role: Teaching assistant & instructor

2022 Educational Psychology: Education, School and Society (Online)

2022 Summer

Harbour Education Co. Ltd.

Co-instructor: Prof. Geoff Hayward (UCambridge)

Role: Teaching assistant & instructor

2022 American Revolution: Politics, Society and Economic Life (Online)

2022 Spring

Harbour Education Co. Ltd.

Co-instructor: Dr. Amy Dru Stanley (UChicago)

Role: Teaching assistant & instructor

2018 - 2020 Ling106 Introductory Linguistics

2018 Fall, 2019 Spring & Fall, 2020 Spring

University of Kansas

Supervisor: Dr. Philip Duncan and Prof. Alison Gabriele

Role: Graduate teaching assistant

2018 American Spoken English, TOEFL, and IELTS

Meten International Education Corporation

Role: Instructor

2017 Neurology and Neuroscience

University of Hong Kong

Supervisor: Prof. Brendan Weekes

Role: Teaching assistant

### **Awards**

Graduate Student Travel Fund, College of Liberal Arts and Sciences, University

of Florida, \$300.

2022 Graduate Travel Fund, Department of Linguistics, University of Florida, \$450.

2021 Graduate Travel Fund, Department of Linguistics, University of Florida, \$450.

2020 - 2023 Graduate Research Assistantship, Department of Linguistics, University of

Florida.

2020 Clark Coan Award for International Student Leadership, University of Kansas,

\$500.

2019 Graduate Scholarly Presentation Travel Fund, University of Kansas, \$500.

- 2018 2020 Graduate Teaching Assistantship, Department of Linguistics, University of Kansas.
   2017 Tin Ka Ping Visiting Fellowship, University of Hong Kong, \$800.
   2016 National Graduate Scholarship, China University of Geosciences (Wuhan), \$3,000.
- 2014 2016 Graduate Student Scholarship, China University of Geosciences (Wuhan), \$1,200.
- 2013 National English Contest for College Students Majoring in English, First Prize, Wuhan University of Engineering Science.
- National Aspiration Scholarship, Wuhan University of Engineering Science, \$1,200.

### Professional Service

- 2022 Helper, R for Ecologists Workshop, University of Florida.
- 2020 Ad-hoc reviewer, *Interspeech 2020*.

### Student Service

- 2021 2022 Coordinator, Phonetics and Phonology Reading Group, Department of Linguistics, University of Florida.
- 2020 2021 Social Coordinator, Department of Linguistics, University of Florida.
- 2019 2020 Student Senate, University of Kansas.
- 2019 2020 Vice President, International Student Association, University of Kansas.
- 2015 2016 Vice President, Association of Science and Technology, China University of Geosciences (Wuhan).

# Student Advising

#### While at Harbour Education Co. Ltd.

- Qi Yu. The effect of proficiency on the pronunciation accuracy of Chinese learners of French: A case study of  $/\tilde{a}/$ . The 3rd International Conference on Educational Innovation and Philosophical Inquiries (ICEIPI 2022), Stanford, USA (virtual).
- Bohan Wang. The environment input in second language acquisition of phonetic details: The GOOSE fronting among Chinese English learners. *The 3rd International Conference on Language, Communication and Culture Studies* (ICLCCS 2022) (virtual).

### Research Skills

#### Programming languages:

o R (proficient), Python (proficient), MATLAB (basic)

#### EEG-related:

EEGLAB/ERPLAB (proficient), Neuroscan (basic), Curry 8 (basic)

#### fMRI-related:

• FreeSurfer (basic), SPM 12 (basic), DPABI (basic)

#### Others:

 Praat (proficient), Paradigm (intermediate), PsychoPy (proficient), Finding-Five (proficient), Linux (proficient), LaTeX (proficient)

# Languages

Native Mandarin Chinese & Gan Chinese

Near-native English
Basic French

# Memberships

2021 - Acoustical Society of America

2020 - Association for Laboratory Phonology

2019 - Linguistic Society of America

2017 - 2018 Society for the Neurobiology of Language