Justin Bai /dʒʌstɪn beɪ/ justin.bai@colorado.edu

Research interests

Laboratory Phonology, phonetics/phonology interface, listener-directed effects, contrastive hyperarticulation, secondary cues, sociolinguistics

Education

University of Colorado Boulder

Aug 2019 – May 2025 (expected)

PhD candidate, Linguistics Advisor: Rebecca Scarborough

Brown University

Sep 2015 – May 2019

BA Linguistics, BS Cognitive Science

Publications

Is Zoom viable for sociophonetic research? A comparison of in-person and online recordings for vocalic analysis

Jeremy Calder, Rebecca Wheeler*, Sarah Adams*, Daniel Amarelo*, Katherine Arnold-Murray*, **Justin Bai***, Meredith Church*, Josh Daniels*, Sarah Gomez*, Jacob Henry*, Yunan Jia*, Brienna Johnson-Morris*, Kyo Lee*, Kit Miller*, Derrek Powell*, Caitlin Ramsey-Smith*, Sydney Rayl*, Sara Rosenau*, Nadine Salvador*.

Linguistics Vanguard. 2022.

The Cross-linguistic Phonological Frequencies (XPF) Corpus manual

Uriel Cohen Priva, Emily Strand, Shiying Yang*, William Mizgerd*, Abigail Creighton*, Justin Bai*, Rebecca Mathew*, Allison Shao*, Jordan Schuster*, and Daniela Wiepert*. *Accessible online, https://cohenpr-xpf.github.io/XPF/manual/xpf_manual.pdf.* 2021.

Conferences

Neighborhood density and minimal pair effects on English pre-voicing vowel duration [accepted]

Justin Bai and Rebecca Scarborough. OCP22: Amsterdam, NL. Feb 2025.

Communicative motivations for acoustic variations in maternal child-directed speech

Bhuvana Narasimhan, Rebecca Scarborough, Allison Hilger, Kanupriya Kale, Justin Bai, Chloe Circenis, Tessa Moskoff, Caitlin Amero, Abigail Major, Zoe Seibold, Chase Hutton. *LSA Annual Meeting 2025*: Philadelphia, PA. 10 Jan 2025.

Listener-directed contrastive hyperarticulation in voicing-conditioned vowel duration

Justin Bai and Rebecca Scarborough. LabPhon 19: Seoul, South Korea. 28 Jun 2024.

Minimal pair effects on voicing-conditioned vowel lengthening in English Justin Bai and Rebecca Scarborough. *LabPhon 18*. Jun 2022.

Enhancing secondary voicing cues in words with minimal pairs

Justin Bai and Rebecca Scarborough. 182nd Meeting of the Acoustical Society of America: Denver, CO. 23 May 2022.

'Don't California my Colorado!': the status of the Western Vowel Shift in the Colorado Front Range

Andrew Ting, Justin Bai, and J Calder. New Ways of Analyzing Variation. 2021.

Yucatec Maya in SBCG: A Fragment

Justin Bai, Maksymilian Dabkowski, Kalinda Pride, and Nicholas Tomlin. 24th International Conference on Head-Driven Phrase Structure Grammar. 8 July 2017.

Invited talks

The effects of minimal pairhood on secondary feature enhancement in English Justin Bai. *Phorum* (University of California, Berkeley). 1 Dec 2023.

Research assistantships

Language, Development, and Cognition Lab

Jan 2024 – May 2024

PI: Bhuvana Narasimhan, CU Boulder

Worked on a project on maternal language (child-directed speech) and helped to supervise three undergraduate lab members during weekly lab meetings, offering guidance and help with acoustic analysis

Cross-linguistic Phonological Frequencies (XPF) Corpus

Sep 2018 – Aug 2019

PI: Uriel Cohen Priva, Brown University

Collected and annotated the phonological makeup of languages for a project in corpus linguistics and phonology; identified sounds that exist in a language and wrote regular expressions to transform alphabets into phonological representations

A'ingae Language Documentation Project

May 2017 - May 2019

PI: Scott AnderBois, Brown University

Updated and maintained language archive for A'ingae (a language isolate spoken in Ecuador) through use of CMDI Maker, Arbil, and LAMUS; analyzed and researched aspects of A'ingae grammar while working with consultant

Teaching

LING 3100: Sound Structures (Undergraduate level; Spring 2025)

Primary instructor for a course with 52 students. Introductory course on phonetics and phonology. Responsibilities include preparing and giving lectures, holding office hours, designing assignments and exams.

LING 5030: Linguistic Phonetics (Graduate level; Fall 2024, Fall 2023, Fall 2022) Teaching assistant for a course of approx. 15 – 20 students with smaller lab sections. Master's level phonetics course. Responsibilities included leading weekly lab sections (covering topics in phonetic theory as well as statistical methods and acoustic analysis), holding office hours, grading assignments.

LING 1000: Language in US Society (Undergraduate level; Spring 2023, Spring 2022, Spring 2021, Fall/Spring 2020)

Teaching assistant for large lecture course with smaller recitation sections of approx. 20 students. Introductory course on sociolinguistics. Responsibilities included leading weekly recitation sections, holding office hours, grading and providing feedback on writing assignments.

LING 1020: Languages of the World (Undergraduate level; Fall 2021, Fall 2019) Teaching assistant for large lecture course with smaller recitation sections of approx. 20 students. Introductory course on linguistics through the lens of typology. Responsibilities included leading weekly recitation sections, holding office hours, creating problem-set worksheets, grading assignments.

Department service

CU Boulder Linguistics Peer Mentorship

2022 - 2025

Provided guidance and support to Master's students in academic and professional development through regular mentorship meetings

Graduate Linguistic Association, Social Chair

Sep 2023 – May 2024

Planned and coordinated social events to foster community and inclusivity among graduate students in the linguistics department