

John McGahay

Curriculum Vitae

Address: 939 Palm Avenue
Apt. 403
West Hollywood, CA 90069
Email: jmcgahay@g.ucla.edu
Phone: +1-845-235-6256

Education

- 2027 (expected) **Doctor of Philosophy in Linguistics**
University of California, Los Angeles | Los Angeles, CA
- 2024 **Master of Arts in Linguistics**
University of California, Los Angeles | Los Angeles, CA
“Vowel System Typology and Confusion Minimization”
Advised by Profs. Bruce Hayes (Co-Chair), Megha Sundara (Co-Chair), Meg Cychosz
- 2019 **Bachelor of Arts**
University of Pennsylvania, College of Arts and Sciences | Philadelphia, PA
Honors Thesis: “The Effect of Conditioned Mergers on Underlying Representations”
Advised by Prof. Charles Yang
Majors: Linguistics with Honors
Cognitive Science (Language and Mind concentration)
Minors: Computer Science
German
- Spring 2017 **Semester Abroad**
Berlin Consortium for German Studies | Berlin, Germany
German-language coursework at the Freie Universität and Humboldt-Universität
- 2015 **High School Diploma**
Regis High School | New York, NY

Research Presentations

- Under Review **Journal Article**
Language
“A Theory of Vowel System Typology Based on Confusion Minimization”
- August 2025 **Conference Talk & Proceedings**
Interspeech 2025, Rotterdam, The Netherlands
“Modeling Vowel System Typology Using Iterated Confusion Minimization”
- December 2023 **Poster Presentation**
Acoustics Sydney 2023, hosted by *Acoustical Society of America*
“A Theory of Vowel Dispersion Based on Probabilistic Modeling of Optimized Speakers and Listeners”
- March 2019 **Conference Talk**
Penn Linguistics Conference 43
“The Effect of Conditioned Mergers on Underlying Representations”
 - Won award for Best Undergraduate Abstract

Grants & Fellowships

AY 2025-2026	Graduate Research Mentorship <i>UCLA Graduate Education</i> “Modeling Allophony Using Iterated Confusion Minimization” Advised by Prof. Megha Sundara
Summer 2025	Graduate Summer Research Mentorship <i>UCLA Graduate Education</i> “Modeling the Great Vowel Shift Using Iterated Confusion Minimization” Advised by Prof. Megha Sundara
AY 2024-2025	Graduate Research Mentorship <i>UCLA Graduate Education</i> “Modeling Human Speech Perception Using Automatic Speech Recognition” Advised by Prof. Megha Sundara
Spring 2024	Biggs Graduate Fellowship <i>UCLA Department of Linguistics</i>
Summer 2023	Graduate Summer Research Mentorship <i>UCLA Graduate Education</i> “Testing a New Probabilistic Theory of Phoneme Dispersion” Advised by Prof. Bruce Hayes
Summer 2018	Jumpstart for Juniors Program for independent summer research <i>Penn Center for Undergraduate Research & Fellowships</i> “The Effect of Conditioned Mergers on Underlying Representations” Advised by Prof. Meredith Tamminga
Summer 2016	Penn Undergraduate Research Mentorship <i>Penn Center for Undergraduate Research & Fellowships</i> Grant for summer RA work for rising second year undergrads, mentored by Prof. Meredith Tamminga

Teaching Experience

Fall 2024	Teaching Assistant (50%) to Prof. Laurel Perkins <i>UCLA Linguistics Department Los Angeles, CA</i> LING 185A: Computational Linguistics I Running weekly discussion sections and office hours, grading, and responding to student emails
Spring 2024	Teaching Assistant (25%) to Prof. Sun-Ah Jun <i>UCLA Linguistics Department Los Angeles, CA</i> LING C211: Intonation Running weekly discussion section and office hour, grading, and responding to student emails
Winter 2024	Teaching Assistant (50%) to Prof. Sam Zukoff <i>UCLA Linguistics Department Los Angeles, CA</i> LING 165A: Phonology II Running weekly discussion sections and office hours, grading, and responding to student emails
Winter 2024	Teaching Assistant (25%) to Dr. Elise Bell <i>UCLA Linguistics Department Los Angeles, CA</i> LING 102: Introduction to Applied Phonetics Running weekly discussion sections and office hours, and responding to student emails

- Fall 2023 **Teaching Assistant (50%) to Prof. Sun-Ah Jun**
UCLA Linguistics Department | Los Angeles, CA
 LING 103: Introduction to General Phonetics, instructed by Prof. Sun-Ah Jun
- Running weekly discussion sections and office hours, grading, and responding to student emails
- Sept 2019 – March 2020 **Fulbright English Teaching Assistant**
Nicolaus-Cusanus-Gymnasium | Bonn, Germany
- Fulbright Scholar in Germany assisting English instruction for middle and high school-aged students
 - Ended three months early due to COVID-19 pandemic
- Sept 2015 – May 2019 **German Tutor**
Penn Language Center | Philadelphia, PA
- One-on-one tutoring of beginning to intermediate German students at the University of Pennsylvania
- Fall 2018 **Teaching Assistant to Prof. Meredith Tamminga**
Penn Linguistics Department | Philadelphia, PA
 LING 336: Sound Systems in Use (quantitative corpus sociophonetics)
- Moderating in-class undergraduate discussions, assisting students with R scripting during in-class lab time, holding weekly office hours, responding to student emails

Experience as Research Assistant

- Summer 2024 **Research Assistant to Prof. Jesse Harris**
UCLA Language Processing Lab | Los Angeles, CA
- Splicing and masking of stimuli for pupillometry experiment with phoneme restoration component
- Summer 2023 **Research Assistant to Prof. Sun-Ah Jun**
UCLA Phonetics Lab | Los Angeles, CA
- ToBI-based intonation transcription in experiment stimuli and responses
- May 2016 – May 2019 **Research Assistant to Prof. Meredith Tamminga**
Penn Language Variation and Cognition Lab | Philadelphia, PA
- Maintenance and Reorganization of the Philadelphia Neighborhood Corpus
 - Processing and analysis of phonetic data using Praat scripting, R, and Python
 - Transcription and forced alignment of sociolinguistic interview with ELAN and FAVE
- Feb 2016 – May 2016 **Research Assistant to Prof. Jianjing Kuang**
Penn Phonetics Lab | Philadelphia, PA
- Sound segmentation and labeling of Shanghainese wordlist recordings in Praat

Other Work Experience

- June 2021 – July 2022 **Junior Computational Linguist**
Verbio Technologies | Remote
- Developing intent-classification systems used for call center automation
 - Bash scripting for manipulation of large training datasets
- March 2021 – June 2021 **Natural Language Understanding Specialist**
Cerence | Remote
- Training and testing of neural-network-based language models used for car voice control features
 - Left due to job insecurity from budget cuts associated with semiconductor shortage

- April 2020 –
Aug 2021 **Computational Linguistics Temporary Worker**
Linguistic Data Consortium | Remote
- Assistant on project to develop a new forced aligner
 - Transcription of clinical and experimental linguistic data for research into early language-based markers of neurodegenerative diseases
- May 2019 –
Aug 2019 **Computational Linguistics Temporary Worker**
Linguistic Data Consortium | Philadelphia, PA
- Phonetic and phonological analysis of Portuguese dialects for speech recognition applications
 - Implementation of grammars in OpenFst-based packages Pynini and Thrax

Awards and Honors

- 2019-2022 **Fulbright Scholar**
Fulbright Germany
- May 2019 **Summa cum Laude**
University of Pennsylvania
- May 2019 **Major Honors in Linguistics**
Penn Department of Linguistics
- 2018-2019,
2017-2018,
2016-2017,
2015-2016 **Dean's List**
University of Pennsylvania
- March 2019 **Best Undergraduate Abstract**
Penn Linguistics Conference 43
- April 2018 **Phi Beta Kappa Inductee**
Delta Chapter of Phi Beta Kappa at the University of Pennsylvania

Selected Skills

- Technical: Python; Praat (incl. scripting); R; LaTeX; Microsoft Office; Haskell; OCaml; Java; Matlab; ELAN
- Language: English (native); German (fluent); French, Spanish (intermediate, grammatical and phonological familiarity); Irish, Portuguese, Russian, Italian, ASL (basic, grammatical and phonological familiarity); various others (grammatical and phonological familiarity)

References

Megha Sundara, Ph.D.
megha.sundara@humnet.ucla.edu
+1-310-825-0041

Bruce Hayes, Ph.D.
bhayes@humnet.ucla.edu

Meg Cychosz, Ph.D.
mcychosz4@ucla.edu