# CONNOR MAYER

Department of Language Science 3151 Social Science Plaza A University of California, Irvine Irvine, CA cjmayer@uci.edu http://connormayer.com

Academic Employment	University of California, Irvine Assistant Professor, Department of Language Science	2021 - Present
Education		
	University of California, Los Angeles Ph.D., Linguistics PhD thesis title: Issues in Uyghur backness harmony: Corpus, experimental, and computational studies Committee: Bruce Hayes (chair), Kie Zuraw, Tim Hunter, Adam McCollum	2021
	University of California, Los Angeles M.A., Linguistics Master's thesis title: An algorithm for learning phonological classes from distributional information Committee: Bruce Hayes (chair), Kie Zuraw, Tim Hunter, Pat Keating	2018
	University of British Columbia Bachelor of Computer Science Recipient of the UBC CS Department Academic Award of Excellence (BCS)	2013
	University of British Columbia  B.A. with Honours in Linguistics, Minor in Japanese  Honours thesis title: Talking while chewing: Speaker response to natural perturbation of speech  Advisor. Bryan Gick	2010

#### Publications

# Peer reviewed articles, proceedings, and chapters

Mayer, C. (resubmitted). A large-scale corpus study of phonological opacity in Uyghur. Phonology.

Mayer, C., Tan, A., & Zuraw, K. (accepted). Introducing maxent.ot: an R package for Maximum Entropy constraint grammars. *Phonological Data and Analysis*.

Major, T., & Mayer, C. (in press). A phonological model of Uyghur intonation. In Jun, S.-A. and Khan, S.D. (Eds), *Prosodic Typology III*.

Weller, J., Faytak, M., Steffman, J., Mayer, C., Texeira, G., & Tankou, R. (in press). Supralaryngeal articulation across voicing and aspiration in Yemba vowels. *Selected papers from the 51st & 52nd Annual Conference on African Linguistics*.

Major, T., Mayer, C., & Eziz, G. (2023). Disentangling words, clitics, and suffixes in Uyghur. *Languages,* 8(3), 203. doi:10.3390/languages8030203.

Torres, C., Hanson, K., Graf, T., & Mayer, C. (2023). Modeling island effects with probabilistic tier-based strictly local grammars over trees. *Proceedings of the Society for Computation in Linguistics*. Vol. 6. Article 15.

- Dai, H., Mayer, C., & Futrell, R. (2023). Rethinking representations: A log-bilinear model of phonotactics. *Proceedings of the Society for Computation in Linguistics.* Vol. 6. Article 24.
- Liu, Y., Luo, S., Łuszczuk, M., Mayer, C., Shamei, A., de Boer, G., & Gick, B. (2022). Robustness of lateral tongue bracing under bite block perturbation. *Phonetica*, 79(6), 523-549.
- Mayer, C., McCollum, A., & Eziz, G. (2022). Issues in Uyghur phonology. *Language and Linguistics Compass*, *16*(12).
- Mayer, C. (2021). Capturing gradience in long-distance phonology using probabilistic tier-based strictly local grammars. *Proceedings of the Society for Computation in Linguistics*. Vol. 4. Article 5.
- Mayer, C., & Daland, R. (2020). A method for projecting features from observed sets of phonological classes. *Linguistic Inquiry*, *51*(4), 725–763.
- Gick, B., Mayer, C., Chiu, C., Widing, E., Roewer-Despres, F., Fels, S., Stavness, I. (2020). Quantal biomechanical effects in speech postures of the lips. *Journal of Neurophysiology 124*(3), 833–843.
- Mayer, C. (2020). An algorithm for learning phonological classes from distributional similarity. *Phonology, 37*(1), 91-131.
- Mayer, C., & Nelson, M. (2020). Phonotactic learning with neural language models. *Proceedings of the Society for Computation in Linguistics*. Vol. 3. Article 16.
- Gick, B., Chiu, C., Widing, E., Roewer-Despres, F., Mayer, C., Fels, S., & Stavness, I. (2019). Quantal biomechanical effects in speech postures of the lips. In Calhoun, S., Escudero, P., Tabain, M., and Warren, P. (Eds), *Proceedings of the 19th International Congress of Phonetic Sciences, Melbourne, Australia 2019*: Canberra, Australia: Australasian Speech Science and Technology Association Inc., 1749–1753.
- Graf, T., & Mayer, C. (2018). Sanskrit n-Retroflexion is Input-Output Tier-Based Strictly Local. Proceedings of the 15th SIGMORPHON Workshop on Computational Research in Phonetics, Phonology, and Morphology. The Special Interest Group on Computational Morphology and Phonology: Brussels, Belgium, 151-160.
- Mayer, C., & Major, T. (2018). A challenge for tier-based strict locality from Uyghur backness harmony. In Foret, A., Kobele, G., and Pogodalla, S. (Eds). *Formal Grammar 2018. FG 2018. Lecture Notes in Computer Science, vol 10950.* Springer, Berlin, Heidelberg. doi: 10.1007/978-3-662-57784-4\_4
- Major, T., & Mayer, C. (2018). Towards a phonological model of Uyghur intonation. In K. Klessa, J. Bachan, A. Wagner, M. Karpiński, and D. Śledziński (Eds). *Proceedings of the 9th Speech Prosody International Conference*. doi: 10.21437/SpeechProsody.2018
- Mayer, C., Roewer-Despres, F., Stavness, I., & Gick, B. (2017). Do innate stereotypies serve as a basis for swallowing and learned speech movement? *Behavioral and Brain Sciences, 40.* doi:10.1017/S0140525X16001928
- Mayer, C., Gick, B., Weigel, T., & Whalen, D.H. (2013). Perceptual Integration of Visual Evidence in the Airstream from Aspirated Stops. *Canadian Acoustics*, *41*(3), 23–27.
- Mayer, C., & Gick, B. (2012). Talking while Chewing: Speaker Response to Natural Perturbation of Speech. *Phonetica*, 69(3), 109-123.

#### Publications refereed by abstract

Azreen, J., Mayer, C., Liu, Y., Shamei, A., Stavness, I., & Gick, B. (2023). Biomechanical simulation of lateral asymmetry in tongue bracing. *Canadian Acoustics*, *51*(3), 196-197.

Mayer, C., Major, T., & Yakup, M. (2022). Are neutral roots in Uyghur really neutral? Evaluating a covert phonemic contrast. In P. Jurgec, L. Duncan, E. Elfner, Y. Kang, A. Kochetov, B. O'Neill, A. Ozburn, K. Rice, N. Sanders, J. Schertz, N. Shaftoe, and L. Sullivan (Eds), *Supplemental Proceedings of the 2021 Annual Meeting on Phonology*. Washington, DC: Linguistic Society of America.

Mayer, C., Chiu, C., & Gick, B. (2021). Biomechanical simulation of lip compression and spreading. *Canadian Acoustics*, 49(3), 38-39.

Major, T., & Mayer, C. (2019). What indexical shift sounds like: Uyghur intonation and interpreting speech reports. In M. Baird and J. Pesetsky (Eds). *NELS 49: Proceedings of the Forty-Ninth Annual Meeting of the North East Linguistic Society, 2,* 255–264..

Mayer, C., Stavness, I., & Gick, B. (2018). A biomechanical model for infant speech and aerodigestive movements. *Canadian Acoustics*, *46*(4), 30–31.

Mayer, C., Stavness, I., & Gick, B, (2018). A biomechanical model for infant speech and aerodigestive movements. *Journal of the Acoustical Society of America, 144*(3), Pt. 2: 1963. (published abstract).

Mayer, C., Roewer-Despres, F., Stavness, I., & Gick, B. (2016). Does Swallowing Bootstrap Speech Learning? *Journal of the Canadian Acoustical Association*, *44*(3), 194-195.

Abel, J., Barbosa, A.V., Black, A., Mayer, C., & Vatikiotis-Bateson, E. (2011). The labial viseme reconsidered: Evidence from production and perception. In Y. Laprie and I. Steiner (Eds). *Proceedings of the 9th International Seminar on Speech Production*, 337-344.

Mayer, C. (2010). Voice onset time and the realization of voiced stops in Kwak'wala. In Proceedings of the 45th International Conference on Salish and Neighbouring Languages. *The University of British Columbia Working Papers in Linguistics, 27,* 238–244.

Mayer, C., Gick, B., Weigel, T., & Whalen, D.H. (2010). Perceptual effects of visual evidence of the airstream. *Canadian Acoustics*, *38*(3), 126-127.

Mayer, C., Gick, B. & Ferch, E. (2009). Talking while chewing: Speaker response to natural perturbation of speech. *Canadian Acoustics*, 37(3), 144-145.

#### Books

Gick, B., & Mayer, C. (in prep). How bodies talk.

#### Other publications

Mayer, C. (2021). Issues in Uyghur backness harmony: Corpus, experimental, and computational studies (Unpublished doctoral dissertation). University of California, Los Angeles.

Mayer, C., Stavness, I., & Gick, B. (2018). Understanding how we speak using computational models of the vocal tract. Popular version of presentation at 176th Meeting of the Acoustical Society of America. Acoustical Society of America World Wide Press Room.

https://acoustics.org/5asc1-understanding-how-we-speak-using-computational-models-of-the-vocal-tract-connor-mayer/

Mayer, C. (2018). An algorithm for learning phonological classes from distributional similarity (Unpublished master's thesis). University of California, Los Angeles.

Mayer, C. (2009). Translation of "Note to an old friend" [或旧友へ送る手記] by Akutagawa Ryūnosuke [芥川龍之介] (Unpublished manuscript). University of British Columbia.

#### **Edited Volumes**

Szakay, A., Mayer, C., Rogers, B., Gick, B., & Dunham, J. (Eds.). (2009). *Papers for the Interlocution Conference. Interlocution: Linguistic structure and human interaction.* Vancouver, BC: The University of British Columbia Working Papers in Linguistics, 24.

# Presentations

#### (\* indicates presenting author)

#### Conference talks

\*Franich, K., Mayer, C., \*Major, T., & Eziz, G. An investigation of Uyghur co-speech gestures: Implications for metrical structure. Presented at Tu+9: The 9th Workshop on Turkic and Languages in Contact with Turkic. Ithaca, NY. March, 2024.

Azreen, J., Mayer, C., Liu, Y., Shamei, A., Stavness, I., & \*Gick, B. Biomechanical simulation of lateral asymmetry in tongue bracing. Presented at Acoustics Week in Canada. Montréal, QC. October, 2023.

\*Dai, H., Mayer, C., & Futrell, R. Rethinking representations: A log-bilinear model of phonotactics. Presented at the 2023 *Society for Computation in Linguistics*. June, 2023.

\*Torres, C., Hanson, K., Graf, T., & Mayer, C. Modeling island effects with probabilistic tier-based strictly local grammars over trees. Presented at the 2023 *Proceedings of the Society for Computation in Linguistics*. June, 2023.

\*Khaloo, N., & Mayer, C. The effect of language proficiency on patterns of epenthesis by Persian learners of English. Presented at the Ninth Annual Symposium on Language Research at UC Davis. May, 2023.

\*Mayer, C. Proposal: A repository for phonological software. Presented at the 2022 Annual Meeting on Phonology. October, 2022.

\*Mayer, C., Zuraw, K., & Tan, A. maxent.ot: A package for doing Maximum Entropy Optimality Theory in R. Presented at the 2022 Annual Meeting on Phonology. October, 2022.

\*Mayer, C., Chiu, C., & Gick, B. Biomechanical simulation of lip compression and spreading. Presented at Acoustics Week in Canada. October, 2021.

\*Weller, J., Faytak, M., Steffman, J., Texeira, G., Mayer, C., and Tankou, R. Tongue root position and laryngeal state in Yemba vowels. Presented at the 51st and 52nd Annual Conference on African Linguistics. April 2021.

\*Mayer, C. Capturing gradience in long-distance phonology using probabilistic tier-based strictly local grammars. Presented at the fourth annual meeting of the Society for Computation in Linguistics. Held virtually. February, 2021.

\*Mayer, C., Major, T., & Yakup, M. Conflicting trigger effects in Uyghur backness harmony. Presented at the 5th Workshop on Turkic and languages in contact with Turkic. Newark, Delaware. February 2020.

- \*Mayer, C., Gick, B., Chiu, C., Widing, E., Roewer-Despres, F., Fels, S., Stavness, I. Quantal biomechanical effects in speech postures of the lips. Presented at the 19th International Congress of Phonetic Sciences (ICPhS). Melbourne, Australia. August, 2019.
- Major, T., & \*Mayer, C. A phonological model of Uyghur intonation. Presented at the ICPhS Satellite Meeting on the Intonational Phonology of Typologically Rare or Understudied Languages. Melbourne, Australia. August, 2019.
- \*Mayer, C., & Daland, R. A method for learning features from observed phonological classes. Presented at the 2019 Canadian Linguistics Association Meeting. Vancouver, BC. June, 2019.
- \*Mayer, C., Major, T., & Yakup, M. Wug-testing Uyghur vowel harmony: Trigger conflicts, variation, and distance-based decay. Presented at the 27th Manchester Phonology Meeting. Manchester, England. May, 2019.
- \*Mayer, C., & Major, T. A challenge for tier-based strict locality from Uyghur backness harmony. Formal Grammar 2018. Sofia, Bulgaria. August, 2018.
- \*Mayer, C., Roewer-Despres, F., Stavness, I., & Gick, B. Does swallowing bootstrap speech learning? Acoustics Week in Canada. Vancouver, BC. September, 2016.
- Abel, J., Barbosa, A., Black, A., Mayer, C., & \*Vatikiotis-Bateson, E. The labial viseme reconsidered: Evidence from production and perception. The 9th International Seminar on Speech Production. Montreal, QC. June, 2011.
- \*Mayer, C., Gick, B., Weigel, T., & Whalen, D.H. Perceptual effects of visual evidence of the airstream. Acoustics Week in Canada. Victoria, BC. October, 2010.
- \*Mayer, C., Gick, B., & Ferch, E. Talking while chewing: Speaker response to natural perturbation of speech. Acoustics Week in Canada. Niagara-on-the-Lake, ON. October, 2009.

#### Poster presentations

- \*Khaloo, N., & \*Mayer, C. The effect of language proficiency on patterns of epenthesis by Persian learners of English. Presented at the 2024 Linguistic Society of America Annual Meeting. New York, NY. January, 2024.
- \*Mayer, C. Gradient opacity in Uyghur backness harmony: A large-scale corpus study. Presented at the 29th Manchester Phonology Meeting. Manchester, England. May, 2022.
- \*Narkar, J., Khlystova, E.A., Mayer, C., Aly, A.M., Kim, J., & Sundara, M. Evaluating the learnability of vowel categories from infant-directed speech. Presented at the 182nd meeting of the Acoustical Society of America. Denver, CO. May, 2022.
- \*Mayer, C., Major, T., & Yakup, M. Are neutral roots in Uyghur really neutral? Experimental and structural evidence. Presented at the Annual Meeting on Phonology. Toronto, ON. October, 2021.
- \*Mayer, C. Gradient opacity in Uyghur backness harmony. Presented at the Annual Meeting on Phonology. Santa Cruz, CA. September, 2020.
- \*Mayer, C., & \*Nelson, M. Phonotactic learning with neural language models. Presented at the third annual meeting of the Society for Computation in Linguistics. New Orleans, LA. January, 2020.
- \*Gick, B., & Mayer, C. Tonic activations in speech production. Presented at the 178th Meeting of the Acoustical Society of America. San Diego, CA. December, 2019.

- \*Nelson, M, & Mayer, C. Learning and generalizing phonotactics with recurrent neural networks. Presented at the Annual Meeting on Phonology. Stony Brook, NY. October, 2019.
- \*Mayer, C., Stavness, I., & Gick, B. A biomechanical model for infant speech and aerodigestive movements. Joint 2018 Acoustics Week in Canada and 176th Meeting of the Acoustical Society of America. Victoria, BC. November, 2018.
- Sundara, M., & \*Mayer, C. Modeling developmental changes in infants' discrimination of English vowels. Boston University Conference on Language Development. Boston, MA. November, 2018.
- Graf, T., & \*Mayer, C. Sanskrit n-retroflexion is Input-Output Tier-Based Strictly Local. SIGMORPHON 2018. Brussels, Belgium. October, 2018.
- \*Mayer, C. An algorithm for learning phonological classes from distributional similarity. Annual Meeting on Phonology. San Diego, CA. October, 2018.
- \*Major, T., & Mayer, C. What indexical shift sounds like: Uyghur intonation and interpreting speech reports. North East Linguistics Society. Ithaca, NY. October, 2018.
- \*Sundara, M., & \*Mayer, C. Does the developing lexicon constrain infants' learning of English vowels? 2018 International Congress of Infant Studies. Philadelphia, PA. July, 2018.
- \*Major, T., & \*Mayer, C. Towards a phonological model of Uyghur intonation. 9th International Conference on Speech Prosody. Poznań, Poland. June, 2018.
- \*Sundara, M. & Mayer, C. Does the developing lexicon constrain infants' discrimination of English vowels? Fall Acoustical Society of America meeting in New Orleans. December, 2017.
- \*Mayer, C. & Gick, B. Talking while chewing: Speaker response to natural perturbation of speech. Ultrafest V at Haskins Labs, Yale. New Haven, CT. March, 2010.

#### **Invited Talks**

- Mayer, C. Are scalar models of sonority enough? Insights from L2 acquisition of complex English onsets. University of California, Los Angeles. February 2024.
- Mayer, C. The dual life of sT/sC clusters: Insights from L2 acquisition of English complex onsets. University of Southern California. January 2024.
- Mayer, C. One (semi)ring to rule them all: Reconciling categorical and gradient models of phonotactics. Workshop on Formal Language Theory in Morphology and Phonology. 2024 Linguistic Society of America Annual Meeting. New York, NY. January 2024.
- \*Mayer, C. Stress and intonation in Uyghur. Guest lecture for LIN 460: Structure of a Particular Language: Uyghur taught by Mahire Yakup. University of Buffalo. October 2023.
- \*Mayer, C. Embodying speech using computational models of the vocal tract. CHOC + UCI Pediatric Research and Data Science Group. August 2023.
- \*Mayer, C. Opacity in parallel models of phonology: Insights from Uyghur backness harmony. Department of English, Comparative Literature, and Linguistics. California State University, Fullerton. May 2023.
- \*Mayer, C. Vowel raising processes in Uyghur. Guest lecture for Elementary Uyghur I taught by Gulnar Eziz. Harvard University. July 2021.

- \*Mayer, C., Major, T., and Yakup, M. Phonetic biases and locality in Uyghur backness harmony. Department of Linguistics Colloquium Series. University of California, Los Angeles. June, 2021.
- \*Mayer, C. Acquisition of speech sound categories. Department of Classics. Washington University in St. Louis. April, 2021.
- \*Mayer, C. Acquisition of speech sound categories. Department of Linguistics. Boston University. March, 2021.
- \*Mayer, C. Acquisition of speech sound categories. Department of Language Science. University of California, Irvine. February, 2021.
- \*Mayer, C. Gradient opacity in Uyghur backness harmony. Department of Linguistics. University of Washington. February, 2021.
- \*Mayer, C. Gradient opacity in Uyghur backness harmony. UC Berkeley Phonetics and Phonology Forum (Phorum). Berkeley, CA. October, 2020.
- \*Major, T., & \*Mayer, C. A preliminary model of Uyghur intonation. Phonetics Circle, UCSB. Santa Barbara, CA. May, 2019.
- \*Mayer, C. & Sundara, M. Modeling developmental changes in infants' discrimination of English vowels. Infant Studies Center, University of British Columbia. Vancouver, BC. December, 2018.
- \*Mayer, C. Towards a computational model of emergent features. University of British Columbia West African Vowels Project Meeting. Vancouver, BC. October, 2018.

## Grants, fellowships, and honors

UCI, Outstanding Teaching Award (2023)

Intel, Academic GPU Donation Program (2023) - Intel Arc A770 GPU

National Science Foundation (with Megha Sundara, PI), "A new approach to computational model evaluation: benchmarking against infant experimental data" (2022) - \$550,000

UCI, CORCL Research and Travel Funding (2022) - \$1600

UCI, ADVANCE Career Development Award (2021) - \$2000

UCLA, Dissertation Year Fellowship (2020) - \$37,272

Wisconsin Intensive Summer Language Institutes Partial Tuition Scholarship (2020) - \$2400

Central Eurasian Studies Summer Institute Tuition Remission (2020) - \$2400

Social Sciences and Humanities Research Council (SSHRC), Doctoral Fellowship (2017-2021) - \$80,000

SelfScore Scholarship for International Students (2016) - \$5000

UCLA, Graduate Dean's Scholar Award (2016) - \$14,500

UBC Computer Science Department Academic Award Of Excellence (BCS) (2013)

UBC, David Macaree Prize in English 301 (2010) - \$400

UBC Trek Excellence Scholarship for Continuing Students (2009)

UBC, Margaret Lawrence Scholarship in Arts (2008)

UBC, Timothy Martin Canfield Memorial Scholarship (2008)

UBC, Trek Excellence Scholarship for Continuing Students (2008)

UBC, Trek Excellence Scholarship for Continuing Students (2007)

UBC, Okamatsu Family Scholarship for Japanese Studies (2007)

UBC, President's Entrance Scholarship (2006)

Langara College, Leon and Simma Holt Arts and Science Scholarship (2006)

Teaching
Experience

# Instructor (UCI)

Phonological models (LSCI 119/219)	Spring 2024	
Introduction to acoustic phonetics (LSCI 117/217)	Winter 2024	
Computational skills for language science research (LSCI 202A)	Fall 2023	
Intro to phonology (LSCI 10)	Spring 2023	
Introduction to acoustic phonetics (LSCI 119/219)	Winter 2023	
Formal Languages (LSCI 109/209)	Fall 2022	
Computational skills for language science research (LSCI 202A)	Fall 2022	
Computational modeling of phonetic learning and adaptation using probabilistic inference approaches. Mini-course at the UCI Summer School on Computational Cognitive Modeling for Language.	Summer 2022	
Intro to phonology (LSCI 10)	Spring 2022	
Introduction to acoustic phonetics (LSCI 119/219)	<i>Winter 2022</i>	
Computational skills for language science research (LSCI 202A)	Fall 2021	
Instructor (UCLA)		
Computational linguistics I (LING 185A)	Summer 2020	
Computational linguistics I (LING 185A	Summer 2019	
Teaching assistant (UCLA)		
Computational linguistics I (LING 185A), with Dr. Timothy Hunter	Winter 2019	
Introduction to linguistic analysis (LING 20), with Dr. Carson Schütze	Spring 2018	
Experimental phonetics (LING 104), with Dr. Patricia Keating	Winter 2018	
Introduction to general phonetics (LING 103), with Dr. Patricia Keating	Fall 2017	
Teaching assistant (University of British Columbia)		
Basic algorithms and data structures (CPSC 221), with Dr. Alan Hu	Spring 2013	
Languages of the world (LING 101), with Dr. Strang Burton	Spring 2010	
Guest lecturer		
Teaching demo (University of British Columbia) Lecture: Introduction to vector models of semantics	March 2021	

Teaching demo (University of California, Irvine) Lecture: Introduction to vector models of semantics March 2021

Computational linguistics I (LING 185A, UCLA)

Lecture: A challenge for tier-based strict locality from Uyghur backness harmony

Winter 2019

#### Professional Service

Ad-hoc reviewer for the *Natural Language and Linguistic Theory, Journal of Logic, Language and Information, National Science Foundation, Phonology, Phonological Data and Analysis, Laboratory Phonology, Frontiers in Psychology, Society for Computation in Linguistics, West Coast Conference on Formal Linguistics, International Congress of Phonetic Sciences, Annual Meeting on Phonology, Southern California Undergraduate Linguistics Conference, SIGMORPHON, Banff International Research Station, SAGE Open, Linguistic Society of America, Language Development.* 

Co-organizer, 2024 Meeting of the Society for Computation in Linguistics (SCiL)

Co-organizer, Workshop on Computational Approaches to Phonology (with Kie Zuraw). 2022 Annual Meeting on Phonology.

First-Generation First Quarter Faculty Ally, UCI

Virtual Presence Manager (website, wiki), UCI Language Science

Co-organizer, UCI Summer School on Computational Cognitive Modeling for Language.

Acting Colloquium Director, UCI Language Science

Head of UCLA linguistics department open house committee

Student volunteer. SALT 29

Linguistics blog maintainer, UCLA

Housing organizer, WCCFL 36

Food committee, UCLA linguistics department open house

Vice president, Graduate Linguistics Circle, UCLA

Organizer. Southern California April Meeting on Phonology

Linguistics department website committee member, UCLA

Organizer. Interlocution Conference, Department of Linguistics, UBC

September 2023 - present

*April 2022 - October 2022* 

October 2021 - present

July 2021 - present

August 2022

May 2019

January 2022 - June 2022

September 2019 - March 2020

*September 2018 - June 2021* 

April 20-22, 2018

September 2017 - February 2018

September 2017 - August 2018

*January 2017 - June 2021* 

May 15-17, 2009

May 6, 2017

Employment Record

UCLA, Los Angeles, CA

*June 2020 - June 2021* 

Research Assistant, Department of Linguistics

Supervisor: Dr. K. Zuraw

• Designed and implemented an R package for carrying out Maximum Entropy Optimality Theory analyses

### UCLA, Los Angeles, CA

September 2017 - July 2018

Research Assistant, Department of Linguistics

Supervisor: Dr. H. Koopman

- Worked on Terraling, a website for managing linguistic datasets
- Performed exploratory data analysis on linguistic data sets
- Fixed bugs in the Ruby on Rails backend

#### University of British Columbia, Vancouver, BC

Program Development Consultant. Department of Linguistics.

*June 2016 - July 2016* 

- Supervisor: Dr. B. Gick.
  - Assisted with curriculum and program planning.
  - Conducted market research and interviews with industry professionals.
  - Wrote funding applications.
  - Performed linguistics research.

#### Demonware Inc., Vancouver, BC

Software developer

*April 2013 – June 2016* 

- Responsible for developing new scalable and robust online features for AAA video games, helping studios integrate Demonware technology into their games, and maintaining and updating existing Demonware services.
- Titles worked on in this time period include Skylanders Superchargers (title lead), Call of Duty Online (使命召唤Online), Guitar Hero Live, Call of Duty: Black Ops 3, Call of Duty: Advanced Warfare, Skylanders Trap Team, Diablo 3: Ultimate Evil Edition, Transformers: Rise of the Dark Spark (title lead), Call of Duty: Ghosts, and Skylanders Swap Force.

#### Software development intern

*July 2012 – September 2012* 

• Performed research into how router QoS settings apply to and affect video game traffic.

Software development intern

*May 2011 – December 2011* 

- Wrote ETL software for the Demonware data warehouse.
- Worked on an internal web application used by Demonware engineers and studios.
- Titles worked on in this time period include Call of Duty: Modern Warfare 3 and Skylanders: Spyro's Adventure.

# University of British Columbia, Vancouver, BC

NSERC Undergraduate Student Research Assistant. Department of Linguistics. Supervisor: Dr. E. Vatikiotis-Bateson.

Summer 2010

- Wrote scripts in Matlab and Python to automatically extract multiple maximum and minimum peaks from discrete signals and format and tag the expected data for use in R.
- Wrote scripts in Matlab and Python to take the integrals on specified intervals of discrete signals and format and tag the extracted data for use in R.
- Work from this position was used in Abel et al. (2011).

- Designed and ran experiments examining speech perception and production.
- Wrote online quizzes for LING 313, Introduction to Linguistic Phonetics and Speech Science.
- Proofread grant applications and academic papers.
- Helped to organize an academic conference as liaison between speakers and organizers.
- Work from this position was used in Mayer et al. (2013).

NSERC Undergraduate Student Research Assistant. Department of Linguistics. Summer 2009 Supervisor: Dr. B. Gick.

- Designed and ran experiments examining speech perception and production.
- Analyzed experimental ultrasound and acoustic data.
- Work from this position was used in Mayer & Gick (2012).

Graduate Research Assistant. Department of Asian Studies. Supervisor: Dr. A. Sathaye.

Summer 2009

• Worked on a system for archiving and cataloging Asian folklore.

#### Affiliations

#### Institutional affiliations

Visiting researcher Interdisciplinary Speech Research Lab, University of British Columbia 2016 - present

#### Professional organizations

Member, Linguistic Society of America

Member, Association for Laboratory Phonology Member, Canadian Acoustical Association

# Advising and mentoring

#### Graduate mentoring

Noah Khaloo (UCSD)	External research mentorship	2022-present
Huteng Dai (Rutgers)	External research mentorship	2022-present
Noa Attali (UCI)	CADA committee member	2023
Niels Dickson (UCI)	Supervisor on NSF funded summer RAship	2023
	CADA committee member	2023
	Concentration exam committee member	2022
Weijie Xu (UCI)	Concentration exam committee member	2023
Deborah Tonne (UCI)	Advancement committee member	2023
Charles Torres (UCI)	Concentration exam committee member	2022
	DTEI Summer Graduate Fellow Mentor	2022
Shiva Upadhye (UCI)	DTEI Summer Graduate Fellow Mentor	2022
Jeremy Yeaton (UCI)	DTEI Summer Graduate Fellow Mentor	2022
Zeinab Kachakeche (UCI)	CADA committee member	2024
	Concentration exam committee member	2022
Lily Xu (UCLA)	External research mentorship	2022
Yang Wang (UCLA)	External research mentorship	2022

#### Undergraduate mentoring

Ky-Vinh Mai (UCI)	LSCI 199 research supervisor	present
Defne Bilhan (UCI)	NSF REU supervisor	2023
Cem Belik (UCI)	NSF REU supervisor	2023
Ania Zdziarska (UCI)	NSF REU supervisor	2023

Berta Soler (UCI)	NSF REU supervisor	2022-present
Rutvik Gandhasri (UCI)	LSCI 195 research supervisor	2022-2023
Megan Lwe (UCI)	Research supervision	2023-present
	LSCI 195 research supervisor	2023
Arya Kondur (UCI)	LSCI 199 research supervisor	2022-present
	NSF REU supervisor	2023
	CORCL supervisor	2022
Jacob Kodner (UCI)	UROP Mentor	2022
Daniel Spencer (UCI)	LSCI 195 research supervisor	2022
Kimberly Castillo (UCI)	LSCI 195 research supervisor	2022
Isaac Lee (UCLA)	Research supervision	2020-2022
Bryan Gonzalez (UCLA)	Research supervision	2020-2021
Alyson Jiminez (UCLA)	Research supervision	2020
Daniela Zokaeim (UCLA)	Research supervision	2019
Kat Vlach (UCLA)	Research supervision	2019
Azadeh Safakish (UCLA)	Research supervision	2019
Aiden Jung (UCLA)	Research supervision	2019
Tyler Carson (UCLA)	Research supervision	2019

# Computer Experience

Languages: Python, C++, MySQL, C, Java, R, Matlab, Bash, Latex, Javascript, Erlang, Prolog, Haskell, Ruby

Source control: git, SVN

Operating Systems: Windows, OSX, Linux (Ubuntu and Centos)

Programs: Visual Studio, XCode, Eclipse, Praat, ELAN, Palatoglossatron, Edgetrak, Psyscope, Artisynth

## Languages

**Native**: English

**Proficient**: Japanese (JLPT Level 2) **Basic**: French, Spanish, Uyghur

Research: Kwak'wala, Nuu-chah-nulth, Yemba

# Non-degree training

Central Eurasian Studies Summer Institute - Intermediate Uyghur

*June 2020 - August 2020* 

European Summer School in Language Logic and Information 2018, Sofia, Bulgaria

August 2018