

Current Appointment

Postdoctoral researcher, Department of Linguistics, University of Arizona 2023-2025

Formal Education

PhD in Linguistics, University of Arizona 2019
Dissertation: The rhythmic structure of Persian poetic meters.
(Advisors: Mike Hammond, Simin Karimi)
MS in Human Language Technology, University of Arizona. 2016
BSc. in Software Engineering, Sharif University (Tehran, Iran). 2012

Other Education

Four graduate courses at UC Berkeley (2017 to 2023) on Old Persian, Middle Persian, Manichaean Texts (Manichaean Middle Persian and Parthian), and Inscriptional Middle Persian.

Research Areas

Intonation, Syntax-phonology interface, Meter, Stress, Phonology of Iranian languages

International Journal Articles

- Word order and stress reconstruction in Persian. 2025. *Glossa*. 10(1).
- Mahdavi Mazdeh, Mohsen and Nehzati, Sarah. Low vowel dissimilation in Mazandarani. 2024. *Journal of Iranian Linguistics*. 1:1 pp. 163–183.
- Metrical strength in Persian poetic meters. 2023. *Journal of Linguistics*. 59:4 pp. 795–829.
- Linguistic change and the future of metrical Persian poetry. 2021. *Iranian Studies*. 54:5–6 pp. 737-768.

Other Publication

- نظام وزنی شعر فارسی [The metrical system of Persian poetry]. 2024. Nashr-e now.
(Persian monograph)
- Poetic meter in Iranian languages. Book chapter to appear in Falahati, Reza and Ghane, Zhaleh (eds.) *Handbook of Phonetics and Phonology of Modern Iranian Languages*, Springer. (to appear)
(book chapter)
- *The Manuscript Sources from İstanbul Üniversitesi Nadir Eserler Kütüphanesi: Volume 6*. Demirkol, Neslihan; Mahdavi Mazdeh, Mohsen and Mihçi, Ersin (eds.) *Corpus Musicae Ottomanicae*. Universität Münster. (to appear)
(edited manuscript collection volume of Ottoman Turkish and Persian songs)

- Quantitative meters in Persian folk songs and pop lyrics. 2020. *Advances in Iranian Linguistics*. Benjamins.
(book chapter)
- Smith, Ryan Walter; Nabors, Rana; Mahdavi Mazdeh, Mohsen; Karimi, Simin and Harley, Heidi. Parallelism and specificity in Persian Non-verbal Element Ellipsis. 2017. *Proceedings of GLOW in Asia XI*. MIT Working Papers in Linguistics. pp. 195–204.
(conference proceedings paper)
- Vazirnezhad, Bahram; Soltanzadeh, Fatemeh; Mahdavi Mazdeh, Mohsen and Moradi, Mehdi. 2015. ویرایشگر متن شریف: سامانه ویرایش و خطایابی املائی زبان فارسی [Sharif text editor: A Persian editor and spell checker system]. پردازش علانم و داده‌ها [*Pardāzesh-e alāyem va dādehā*]. 26: pp. 43–52.
(Persian academic journal paper)

Under Review / In Progress

- Intonational effects on the lexical specification of stress in Persian (under review)
- Scope ambiguity of additive clitics in Persian and Turkish (under review, in collaboration with Simin Karimi and Deniz Tat)
- A comparative analysis of four Iranian languages (book under preparation, in collaboration with Simin Karimi and John Powell).
- Prosodic constituents and Vocabulary Insertion: The case of the Persian copula (article under preparation, in collaboration with Saman Meihami)
- Stress and intonation in Pashto (article under preparation)

Language Resources

- [PersianDee](#), a website for learning Persian.
- [UATracker](#), a Django-based web-based tool created during my time in [APIL](#) (under the supervision of Diana Archangeli) for managing and performing advanced search in a database of ultrasound image frames of the tongue.
- [Database](#) for audio recordings of performances involving different Persian poetic meters.
- [Iranian languages catalogue](#). Co-authored with other members of the Arizona Iranian Languages and Linguistics Group (under the supervision of Simin Karimi).
- [Hiaki Dictionary App](#). A Java-based dictionary app for Hiaki (Uto-Aztecan) based on the dictionary by Molina, Valenzuela and Shaul (1999).

Conference Presentations

- 2023: The transmission of Persian poems in the Ottoman musical tradition. Turkologentag. Vienna.
- 2023: Sentential stress and the origins of radif in Persian poetry. 3rd North American Conference on Iranian Linguistics (NACIL3). UCLA, Los Angeles.

- 2021: Phonological effects in the ordering of Persian binomials. 9th International Conference on Iranian Linguistics (ICIL9). Vienna.
- 2019: Low vowel dissimilation in Mazandarani. 2nd North American Conference on Iranian Linguistics (NACIL2). Tucson, AZ.
- 2018: Flexible long vowels in colloquial Modern Persian. The 44th annual meeting of the Berkeley Linguistics Society (BLS). Berkeley, CA.
- 2017: Quantitative meters in Persian folk songs and pop song lyrics. First North American Conference on Iranian Linguistics (NACIL1). Stony Brook, NY.
- 2017: Smith, Ryan Walter; Nabors, Rana; Mahdavi Mazdeh, Mohsen; Karimi, Simin; Harley, Heidi. Parallelism and specificity in Persian ellipsis. First North American Conference on Iranian Linguistics (NACIL1). Stony Brook, NY.
- 2016: Smith, Ryan Walter; Nabors, Rana; Mahdavi Mazdeh, Mohsen; McKay, Isabel; Karimi, Simin and Harley, Heidi. Parallelism and specificity in Persian non-verbal element ellipsis. GLOW in Asia XI, Singapore (poster).
- 2016: The role of language change in the use of meters in Persian poetry, in 17th Annual Southwest Graduate Conference in Middle Eastern and North African Studies, Tucson, AZ.
- 2015: Karimi, Simin; Mahdavi Mazdeh, Mohsen and Smith, Ryan. A Descriptive and Theoretical Analysis of Complex predicates in Iranian languages: Outline of the project, in Theoretical linguistics and language resources; The case of Iranian languages, Paris.
- 2014: Vowel length as an active phonological feature in modern Persian. 15th Annual Southwest Graduate Conference in Middle Eastern and North African Studies, Tucson, AZ.
- 2014: Archangeli, Diana. UATracker: a tool for ultrasound data management, in 168th Meeting of the Acoustical Society of America in Indianapolis, Indiana.

Invited Presentations

- 2023: Intonational effects on the lexical specification of stress in Persian. University of Arizona Colloquium.
- 2022: Quantitative Meter in Iranian Languages. Lectures on Iranian Linguistics in Arizona (LILA).
- 2020: The rhythmic structure of Persian poetic meters.” White Nights Association, Stanford University.
- 2020: The rhythmic structure of Persian poetic meters.” Invited talk at the Linguistics Department of the University of Tehran.
- 2017: Linguistic and stylistic trends in Classical Persian poetry.” Invited talk in Cultural Studies Bureau, Sharif University.
- 2016: A history of the Iranian language family.” Invited talk in Cultural Studies Bureau, Sharif University.
- 2016: The dual identity of vowel length in Persian. One-day workshop on Persian Linguistics, University of Tehran.

Teaching

- 2025 (Spring): Graduate seminar on “Intonation and the syntax-phonology interface”, University of Arizona.
- 2024: Lecture on “Stress and intonation in four Iranian languages” in the University of Arizona’s Summer School on Iranian Linguistics.
- 2022: Six-week workshop on universal metrics. University of Tehran.
- 2021: Private tutor for Arabic.
- 2017 (Summer): “Introduction to Mathematical Approaches to Language”, instructor (online course), University of Arizona.
- 2017 (spring): “Phonology”, teaching assistant, University of Arizona.
- 2015 (fall): “Language”, teaching assistant and section instructor, University of Arizona.

Employment

- 2023-2025: **Postdoctoral Fellow**, Department of Linguistics, University of Arizona
- 2022: **Part-time researcher** on Ottoman Persian manuscripts (working online) with a team at the University of Münster. Editing transcriptions and metrical scansions of poems for a volume on Ottoman manuscripts of musical compositions for the Corpus Musicae Ottomanicae (CMO) project.
- 2021: **Literature and language advisor**: Translating, commentating, and providing technical advice on the Persian poetry of the early modern Indian poet Zeb-un Nissa for a documentary on her by Indian director Prachee Bajania.
- 2020-2021: **Machine Learning Engineer**. Linguist and software engineer at ServiceNow, San Jose.
- 2017: **Research Assistant**, co-authoring articles for “[Iranian Languages Catalogue](#)”: As part of an NSF grant under Prof. Simin Karimi, we created a catalogue covering the phonology, morphology, syntax, and writing systems of several Iranian languages. The work involves extensive literature review as well as original research in many cases.
- 2017: **Computational Linguist** at Voxifier (Calgary, Canada): Designed and implemented software for matching text written in the Perso-Arabic script with their Romanized versions and outputting IPA transcriptions.
- 2013-2016: **Research Assistant** in Iranian Languages Group: Worked as member of the [Iranian languages team](#) (an NSF [project](#) under Prof. Simin Karimi) on the syntax of complex predicates in Iranian languages. Our research involved data collection (elicitation sessions and surveys) and analysis of sentence structure in various Iranian languages including Persian, several Kurdish varieties, Pashto, Mazandarani, and Zazaki.
- 2016: **Speech Recognition Engineer** (intern) in PitchVantage: Part-time intern for a year in PitchVantage (Tucson, AZ). Responsible for enhancing the Kaldi-based performance of the speech recognition system of the company through improving the language model and using a combination of auditory and textual information to detect sentence boundaries.

- 2013-2016: **Research Assistant** in Arizona Phonological Imaging Lab (APIL): Worked as a **developer** for Arizona Phonological Imaging Lab, developing a multi-purpose [tool](#) for managing ultrasound images of the tongue during speech. The tool connects to SQLite in the back-end and comes with two different interfaces; a desktop GUI written in Java, and an online GUI written with Django. It compares image frames from videos of the tongue with annotated timestamps, assigning phonemic information to the image frames and providing an advanced user-friendly environment for managing the image frames and performing search and other operations on them based on the phonological environment in the utterance that each image frame corresponds to.
- 2012: **NLP engineer** in Natural Language Processing lab (Sharif University): Member of a team developing a normalizer and spell checker for Persian texts in Python performing automatic proofing, finding spell errors and offering correction suggestions.

Outside Academia

- Prior to studying linguistics, I created [PersianDee](#), a website for learning Persian.
- I maintain a Persian [blog](#) on languages and linguistics.
- Some of my Persian (non-academic) language-related articles have appeared (either in full or excerpts) in mainstream Persian media, e.g. Radio Zamaneh, Etemaad daily, ISNA, and Meidaan.com.
- In my [YouTube channel](#), I upload educational videos in Persian and English on meter and poetry.

Computational Linguistics

I have worked as a computational linguist in three companies (PitchVantage, Voxifier, and ServisNow; the latter for more than a year as a full-time employee) and have more than ten years of experience with **Java**, **Python**, and various **web technologies** (e.g. PHP, JQuery, Symfony, Django).

I have also had experience with various NLP tools and methods throughout the years, from HMM-based speech recognition systems and traditional parsers to word embeddings.

Languages

Full proficiency:	Persian (native), English, Mazandarani
Advanced:	Arabic (MSA, Levantine), French
Intermediate:	Turkish
Research/coursework experience:	Middle Persian, Old Persian, Sorani Kurdish, Pashto, Ossetian