March 11, 2025

# Onur Keleş

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# **EDUCATION**

Boğaziçi UniversityIstanbul, TurkeyPhD in LinguisticsStart: Feb 2025

Boğaziçi University
M.A. in Linguistics

Istanbul, Turkey
Sep 2021 - Dec 2024

GPA: 4.0

Supervisors: Kadir Gökgöz and Nazik Dinçtopal Deniz

Thesis: Discourse Cohesion and Phonetics in Turkish Sign Language: An Experimental & Computational Approach

**Boğaziçi University**B.A. in Foreign Language Education
Istanbul, Turkey
Sep 2017 - Aug 2021

GPA: 4.0, Summa Cum Laude

#### **INTERESTS**

Visual-Gestural Modality · Quantitative Linguistics · Computational Social Science · Large Language Models · Pose Estimation

#### ONGOING PROJECTS

- Language processing in LLMs & Adapting multilingual LLMs to low-resource languages.
- Examining discourse cohesion and phonetic properties of signed narratives using computer vision.

#### RESEARCH EXPERIENCE

# Boğaziçi University, Dept. of Linguistics

Research & Teaching Assistant

April 2023 - Present

- Preparing and grading student assignments; holding problem sessions; carrying out administrative tasks.

Computational Linguistics Reading Group

Jun 2021 - Sept 2021

- Contributed to a project which aims to build a Dynamic Benchmark for Sentiment Analysis in Turkish.

Undergraduate Project Assistant

Jan 2019 - Jan 2022

 Undergraduate assistant at the BAP Project "Supporting Sign Language Development of Deaf Children with Hearing Parents through Linguistically-informed Preschool Stories." Pl: Dr. Kadir Gökgöz

#### Boğaziçi University, Psycholinguistics Research Lab

Lab Manager

June 2022 - June 2023

 Employed in a TUBITAK 1001 Project entitled "Use of syntactic and semantic cues in processing negative polarity items in Turkish as a first and second language." PI: Dr. Nazik Dinctopal Deniz. KELEŞ 2

#### SELECT PUBLICATIONS

1. **Keleş, O.** & Dinçtopal Deniz, N. (2024). A comparative study with human data: Do LLMs have superficial language processing?. In 2024 32nd Signal Processing and Communications Applications Conference (SIU) (pp. 1-4). IEEE.

- 2. **Keleş, O.**, Oksal, C., & Bilgili, E. (2023). Using Pose Estimation for Reference Tracking in Turkish Sign Language. In 2023 31st Signal Processing and Communications Applications Conference (SIU) (pp. 1-4). IEEE.
- 3. **Keleş, O.**, Atmaca, F., & Gökgöz, K. (2023). Reference tracking strategies of deaf adult signers in Turkish Sign Language. *Journal of Pragmatics*, 213, 12-35.
- 4. **Keleş, O.** & Gökgöz, K. (2022). Expression of Aboutness Subject Topic Constructions in Turkish Sign Language (TİD) Narratives. *Hrvatska revija za rehabilitacijska istraživanja, 58* (Special Issue), 194-205. https://doi.org/10.31299/hrri.58.si.10
- 5. **Keleş, O.**, Atmaca, F., & Gökgöz, K. (2022). Effects of age of acquisition and category size on signed verbal fluency. *Language Acquisition*, 29(4), 361–383. (The winner of the annual prize for the Best Article Contributing to Linguistic Diversity) https://doi.org/10.1080/10489223.2021.2023814.

#### SELECT PRESENTATIONS

#### Conferences

- 1. **Keleş, O.** & Gökgöz, K, (June, 2024). Applying computer vision to signed discourse: Effects of form and iconicity. (Poster presentation). The International Max Planck Research School (IMPRS) for Language Sciences: Nijmegen, the Netherlands.
- Keleş, O. & Günay, B. (May, 2024). Transfer Learning to the Rescue! Cross-Lingual Transfer for POS Tagging in an Endangered Language: Hamshetsnag (On-stage presentation). Turkey Computational Social Sciences Conference (TCSS) 2024: Koç University, İstanbul, Türkiye.
- 3. **Keleş, O.** & Dinçtopal Deniz, N. (May, 2024). A comparative study with human data: Do LLMs have superficial language processing? (On-stage presentation). 32nd Signal Processing and Communications Applications Conference (SIU): 'Mersin, Turkey.
- 4. Keleş, O. & Bayraklı, Ö. T. (February, 2024). Ekonomiye eLaLeM ne der: Küçük Ölçekli Alan Uyarlamasında Akademik Görevler için QLoRA ve PEFT ile LLaMA-2 Dil Modelinin Ekonomi Metinlerinde İnce Ayarlaması. [Fine-tuning LLaMA-2 with QLoRA and PEFT for small-scale domain adaptation in economics]. (On-stage presentation). 22<sup>th</sup> Akademik Bilişim (Academic Computing) Conference: İstanbul, Türkiye (The winner of best presentation award).
- 5. Gökgöz, K., **Keleş, O.**, & Bilgili, E. (November, 2023). *Morpho-phonology and Articulatory Energy in Expressing Complex Motion Events in Turkish Sign Language (TİD) and Age of Acquisition Effects* (On-stage presentation). 47<sup>th</sup> Boston University Conference on Language Development (BUCLD): Boston, USA.
- Keleş, O., Oksal, C., & Bilgili, E. (July, 2023). Using Pose Estimation for Reference Tracking in Turkish Sign Language (On-stage presentation). 31st Signal Processing and Communications Applications Conference (SIU): İstanbul, Turkey.
- 7. **Keleş, O.**, Atmaca F., & Gökgöz, K. (September, 2022). *Economy principle in signed narratives: Is it agesensitive?* (Poster presentation). The 14<sup>th</sup> Theoretical Issues in Sign Language Research (TISLR): Osaka, Japan (Hybrid Conference).
- 8. **Keleş, O.** & Pekuzun, S. (March, 2021). *Emotion Word Choice Dependent on Language Mode and Proficiency* (Paper presentation). The 45<sup>th</sup> Penn Linguistics Conference (PLC45): Pennsylvania, USA (Online Conference).
- 9. **Keleş, O.**, Atmaca F., & Gökgöz, K. (November, 2020). *Age of Acquisition Effects on Verbal Fluency in Turkish Sign Language* (Poster presentation and Paper Alternate). 45<sup>th</sup> Boston University Conference on Language Development (BUCLD): Boston, USA (Online Conference).

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- 1. Reviewer and session chair, Student Conference on Linguistics 2023 (SCOL'23), Istanbul, Turkey.
- 2. Taught a workshop entitled "ELAN for sign language and gesture annotation", Student Conference on Linguistics 2023 (SCOL'23), Istanbul, Turkey.

#### **TEACHING**

### Boğaziçi University

Teaching Assistant in the Dept. of Linguistics

Sep 2022 - Present

March 2023 - May 2023

- LING 411. Linguistic Methodology with R, Instructor: Ümit Atlamaz (2024, Fall). Syllabus.
- LING 101. Introduction to Linguistics I, Instructor: Ömer Demirok (2024 Fall). Syllabus.
- LING 360. Computational Linguistics with Python, Instructor: Ümit Atlamaz (2024, Spring). Syllabus.
- LING 314. Syntax and Semantics of Modern Turkish, Instructor: Balkız Öztürk (2024, Spring). Syllabus.
- LING 102. Introduction to Linguistics II, Instructor: Mine Nakipoğlu (2024, Spring). Syllabus.
- LING 411. Linguistic Methodology with R, Instructor: Ümit Atlamaz (2023, Fall). Syllabus.
- LING 201. Phonology, Instructor: Stefano Canalis (2023, Fall): Syllabus.
   R & Python Instructor

- Teaching a 10-week-long workshop entitled "Open-Source Coding for Social Scientists".

# **SKILLS**

Training	MEDAL Summer School in Experimental Linguistics at Max Planck Institute for Psycholinguistics in Nijmegen, Netherlands (June 2024).
	3rd International School on Psycholinguistics, Neurolinguistics and Clinical Linguistics at University of Novi Sad, Serbia (April 2023).
	SocialComquant Workshops on Machine Learning, and Natural Language Processing & Topic Modeling with Python at Koç University, Turkey (March 2023).
	The Summer School of Linguistics (with a focus on psycholinguistics methodology) at University of South Bohemia in České Budějovice, Czech Republic (August 2022).
Select Awards	TÜBİTAK Academic Merit Scholarship (6000\$), AlgoRun Data Science Hackathon Winner (2024), Academic Computing Conference Best Presentation Award (2024), Language Acquisiton Best Article Contributing to Linguistic Diversity Award (2022).
Select Programs	$\LaTeX \cdot RMarkdown \cdot Python, \cdot R, \ ELAN, \ Praat, \ Javascript \ \& \ html$
Select Experiment	PCIbex · PsychoPy · Eyelink Experiment Builder
Languages	Turkish (native) $\cdot$ English (proficient) $\cdot$ Spanish (intermediate) $\cdot$ German (elementary) Turkish Sign Language (research experience)