

Osman Batur İNCE

ospanbatyr.github.io

EDUCATION

University of Edinburgh <i>PhD in Designing Responsible NLP</i>	Edinburgh, Scotland <i>Sept. 2024 - June 2028</i>
Koc University <i>MSc in Computer Sciences & Engineering, CGPA: 4.00/4.00</i>	Istanbul, Turkey <i>Sept. 2022 - August 2024</i>
Bilkent University <i>Bachelor of Science in Computer Engineering, CGPA: 3.88/4.00, Top 3%</i>	Ankara, Turkey <i>Sept. 2018 - June 2022</i>

RESEARCH EXPERIENCE

PhD Student <i>Ponti Lab - Centre for Doctoral Training in Designing Responsible NLP</i>	September 2024 – now <i>Edinburgh, Scotland</i>
- Working on efficient multimodal models supervised by Dr Oisin Mac Aodha and Dr Edoardo Ponti - Involved in the evaluation of multicultural generation in world models	
AI Fellow <i>KUIS AI Lab</i>	August 2022 – August 2024 <i>Istanbul, Turkey</i>
- Worked on compositional generalization and multimodal learning under the supervision of Assoc. Prof. Aykut Erdem, collaborated extensively with Prof. Erkut Erdem - Showed that using training dynamics of language models improves their compositional generalization, extended the work to large language models (LLMs) with additional diversity mechanisms - Emphasized the role of multiple modalities in improving compositional generalization - Investigated using vision grounded LLMs in medical domains - Proposed an open-source framework to advance medical LLMs by allowing full transparency from start to finish - Collaborated with another MSc student working on multimodal alignment for humour	
Undergraduate Researcher <i>Bilkent Information Retrieval Group</i>	July 2021 – April 2022 <i>Ankara, Turkey</i>
Worked on unsupervised concept drift detection for multi-label streams with label clustering	

WORK EXPERIENCE

Data Science Intern <i>JotForm</i>	June 2021 – July 2021 <i>Ankara, Turkey</i>
- Built a PII detection system with a manual form reviewing app using spaCy, Presidio, Node.js, Flask, and React. - A dynamic app that protects JotForm users against phishing attacks with the help of PII detection system	
Software Engineer Intern <i>TUBITAK BILGEM YTE</i>	Aug. 2020 – Sept. 2020 <i>Ankara, Turkey</i>
Designed and programmed an event management system using React, Java Spring, and PostgreSQL.	

PUBLICATIONS

O B İnce, A F T Martins, O M Aodha, E M Ponti. Sample-efficient Integration of New Modalities into Large Language Models, ArXiv, 2025 (under submission to ICLR 2026)

E C Acikgoz, **OB İnce**, R Bech, A A Boz, I Kesen, A Erdem, E Erdem. Hippocrates: An Open-Source Framework for Advancing Large Language Models in Healthcare, NAACL, 2025

S Yagcioglu, **OB İnce**, A Erdem, E Erdem, D Elliott, D Yuret. Sequential Compositional Generalization in Multimodal Models, NAACL 2024.

OB İnce, T Zeraati, S Yagcioglu, Y Yaghoozadeh, E Erdem, A Erdem. Harnessing Dataset Cartography for Improved Compositional Generalization in Transformers, Findings of EMNLP 2023.

TEACHING EXPERIENCE

- Teaching Assistant** | *Accelerated Natural Language Processing* Fall '25
- Conducting office hours, answering questions, preparing assignments, marking exams
- Teaching Assistant** | *Computer Systems & Programming* Fall '22, Spring '23, Fall '23, Spring '24
- Preparing labs, assignments, recitations, and exam questions. Grading assignments and exams.

PROJECTS

- DovizTR** | *Dart, Flutter, JavaScript, Github* Oct. 2020 – May 2021
- Co-owned (currency/stock tracking app) doviztr.com, developed the mobile app version with another developer

TECHNICAL SKILLS

Languages: Python, C, Java, JavaScript, C++, SQL (Postgres), HTML/CSS, Dart
Libraries: PyTorch, NumPy, pandas, React, Flutter

REVIEWER

NLP: EMNLP, ACL, ARR **DL & ML:** NeurIPS, ICLR

AWARDS & HONOURS

UKRI CDT Designing Responsible NLP Scholarship: Full tuition waiver & stipend (approx. £85,000 for 4 years)
Google Research Funding: £70,000 funding as a group for world model evaluation in multi-cultural scenarios
High Honor List: Got over 3.5 GPA for 8 consecutive semesters in Bilkent University
Full-Merit Scholarship Student: Full tuition waiver & stipend during the BSc program
Turkish University Entrance Exam: Ranked **30th** & **257th** among 2 million participants in 1st and 2nd steps