Arda Uzunoglu

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RESEARCH EXPERIENCE

Johns Hopkins University, Center for Language and Speech Processing   **Sep. 2023 – Present**

Paid Summer Research Intern   *June - August 2024 Baltimore, MD*

- Supervised by Asst. Prof. Benjamin Van Durme and Asst. Prof. Daniel Khashabi, I provided solutions for data collection and inferential statistics analysis on a user study analyzing human dependency on LLM-based search engines.
- Supervised by Asst. Prof. Benjamin Van Durme and Asst. Prof. Daniel Khashabi, I have researched the methods to quantify the data similarity to optimize language model training and improve evaluation.

Student Researcher   *September 2023 - May 2024 Baltimore, MD*

- Supervised by Asst. Prof. Benjamin Van Durme and Asst. Prof. Daniel Khashabi, I have researched the automatic decomposition and conversion of high-level procedural instructions into executable primitive atomic actions.

Koc University, Koc University Is Bank Artificial Intelligence Center   **May 2022 – August 2024**

Research Intern   *Istanbul, Turkey*

- Supervised by Asst. Prof. Gozde Gul Sahin, I have researched automatic learning of procedural language from natural language instructions for improving intelligent assistance systems. My research involves utilizing procedural language elements to evaluate reasoning skills of language models and investigating the representation of procedural knowledge.
- Supervised by Prof. Alper Erdogan and Prof. Deniz Yuret, I have researched various textual data augmentation techniques and non-contrastive information maximization methods for self-supervised sentence embeddings generation.

EDUCATION

Johns Hopkins University   **Sep. 2023 - Present**

B.S., Computer Science   *Baltimore, MD*

- GPA: 4.0/4.0
- Relevant Coursework: Linear Algebra, Differential Equations, Intro to Optimization, Probability, Natural Language Processing, Data Structures
- Member of HopAI, Brain Computer Interface Society, Dragonboat Club

PEER REVIEWED PUBLICATIONS (* indicates First Author)

- A Systematic Survey on Instructional Text: From Representation to Downstream NLP Tasks, In Submission
- The World is Worth How Many APIs, AAAI 2025 & ACL Natural Language Reasoning and Structured Explanations Workshop, 2024
- *PARADISE: Evaluating Implicit Planning Skills of Language Models with Procedural Warnings and Tips Dataset, ACL Findings, 2024
- *Benchmarking Procedural Language Understanding for Low-Resource Languages: A Case Study on Turkish, IJCNLP-AACL, 2023

AWARDS & GRANTS

- **AAAI-25 Scholarship and Volunteer Award -** $1,000
- **Whiting School of Engineering Undergraduate Conference Travel Fund -** $1,600
- **FLI Access Research Grant Summer Extension -** $6,000
- **FLI Access Research Grant -** $2,000
- **Hodson Trust Scholarship at Johns Hopkins University -** $168,000 institutional merit scholarship awarded

to 20 recipients (out of ~1600 students) yearly.

SKILLS & INTERESTS

- **Skills:** Python; PyTorch, Hugging Face libraries, numpy, pandas; NLTK and SpaCy; C/C++; Java
- **Interests**: Filmmaking and Cinema; Science-fiction and High Fantasy Literature; Table-top Games