EDUCATION

Sabanci University, Istanbul, Turkey

Feb. 2022 - Present

M.Sc., Computer Science and Engineering

Thesis: Developing Turkish Language Models for Detecting Manipulations on Social Media

Advisor: Assistant Prof. Onur Varol

CGPA: 3.71/4.0

University Of Tabriz, Tabriz, Iran

Sept. 2017 - Sept. 2021

B.Sc., Computer Science and Engineering

CGPA: 16.58/20

PUBLICATIONS GOOGLE SCHOLAR

Preprints and Under Review Articles

- U.1 Najafi, A., Onur Varol, "TurkishBERTweet: Fast and Reliable Large Language Model for Social Media Analysis" arXiv preprint arXiv:2311.18063 (2023)
- U.2 Najafi, A., et al. "#Secim2023: First Public Dataset for Studying Turkish General Election." arXiv preprint arXiv:2211.13121 (2022)

Journal Articles

J.1 Najafi, A., Gholipour-Shilabin, A., Dehkharghani, R. et al. ComStreamClust: a Communicative Multi-Agent Approach to Text Clustering in Streaming Data. Ann. Data. Sci. (2022)

Refereed Conference Proceedings

C.1 Najafi, A., Onur Varol, "VRLLab at HSD-2Lang 2024: Turkish Hate Speech Detection Online with TurkishBERTweet", EACL" 2024

CONDUCTED RESEARCH AND ACADEMIC EXPERIENCE

VRLLAB, Istanbul, Turkey

Sept, 2022 - Present

- TurkishBERTweet

- \ast Achieved almost 10% significant improvement F1-Score on Text Classification Tasks
- * Developed classification pipelines for Sentiment Analysis and Hate Speech Detection Tasks
- * Trained TurkishBERTweet From Scratch
- * Used Google TPUs for Training the Language Model
- * Trained BPE tokenizer from scratch on 900M Turkish Twitter Data

- Turkish Election Dataset

- * Analyzed the Retweet Speed of specific Turkish Politicians for different time spans of election day
- * Conducted network analysis of politicians on Twitter using Networkx and Gephi
- * Analyzed the followers of politicians to identify social bots using Botometer

INVITED LECTURER AND TALKS

- 1. Presented "#Secim2023: First Public Dataset for Studying Turkish General Election." paper in Turkey Computational Social Sciences Conference (TCSS) 2023, Koc University, Turkey.
- 2. Applications of Large Language Models for Social Scientists, POLS537, Sabanci University, Dr. Fatih Serkant Adiguzel
- 3. Natural Languages for Social Scientists, Summer Institutes in Computational Social Science (SICSS), Ozyegin University, Turkey

Teaching

Sabancı University - Faculty of Engineering and Natural Sciences

EXPERIENCE CS412: Machine Learning

CS210: Introduction to Data Science

CS412: Machine Learning

CS210: Introduction to Computing

June. 2023 - Feb. 2024

Feb. 2023 - June. 2023

June. 2022 - Feb. 2023 Feb. 2022 - June. 2022

Held weekly office hours and recitation sessions to answer questions about course contents Graded exams and assignments

COMPUTER AND LANGUAGE SKILLS

Skills:

Programming Languages: Python, C++, Java

Frameworks: Pytorch, Tensorflow, Keras, Flax, Django Librares: Matplotlib, Seaborn, Pandas, Numpy, Gephi, NetworkX, OpenCV, Jax

DataBase: SQL, NoSQL (Redis)

Familiar with GCP, AWS, LATEX, HTML, CSS, JS

Languages: English (Fluent), Persian (Native), Azerbaijani (Native), Turkish (Fluent)

Honors and Awards

Hate Speech Detection in Turkish - EACL"2024

Jan. 2024

Earned 3rd Rank among 11 participated teams

TUBITAK Scholarship

Aug. 2023 - Present

The Scientific and Technological Research Council of Turkey, Turkey

Awarded to full tuition waiver and a monthly stipend as a researcher in a project funded by TUBITAK

Sabancı University Scholarship

Feb. 2022 - Aug 2023

Sabancı University, Istanbul, Turkey

Awarded a 100% tuition scholarship and a monthly stipend as a Teaching Assistant