Ali Najafi

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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
GPA: 3.95/4.0

University Of Tabriz, Tabriz, Iran   *Sept. 2017 - Sept. 2021*
B.Sc., Computer Science and Engineering,
CGPA: 16.58/20

PUBLICATIONS
GOOGLE SCHOLAR

In preparation
J.4 **Najafi, A.**, Öznur Taştan , Onur Varol, **"Stance Prediction of Twitter accounts in Turkish Political Community"**

Preprints and Under Review Articles
J.3 **Najafi, A.**, Onur Varol, **"TurkishBERTweet: Fast and Reliable Large Language Model for Social Media Analysis"** arXiv preprint arXiv:2311.18063 (2023)

J.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)

CONDUCTED RESEARCH AND ACADEMIC EXPERIENCE

VRLLAB, Istanbul, Turkey   *Sept, 2022 - Present*

- **TurkishBERTweet**
  * 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

- **CON-NET** under CHIST-ERA call funded by EU and TUBITAK
  * Integrating CONtent and NETwork structure for detecting, understanding, and mitigating online misbehaviour
  * Building multimodal machine learning systems for estimating automated activities

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

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TEACHING EXPERIENCE

Sabancı University - Faculty of Engineering and Natural Sciences
CS412: Machine Learning	*June. 2023 - Feb. 2024*
CS210: Introduction to Data Science	*Feb. 2023 - June. 2023*
CS412: Machine Learning	*June. 2022 - Feb. 2023*
CS210: Introduction to Computing	*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

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