Berke Dilekoglu

dilekogluberke@gmail.com

EDUCATION

SABANCI UNIVERSITY
MSc in Computer Science
July 2022 | Istanbul, TR
Thesis Subject: SUMONet: Deep Sequential Prediction of SUMOylation Sites
GPA:3.77/4.00
High Honor Scholarship

SABANCI UNIVERSITY
BS in Computer Science
Sep 2019 | Istanbul, TR
GPA:3.54/4.00
High Honor Scholarship
BS in Mechatronics
Sep 2018 | Istanbul, TR
GPA:3.50/4.00
High Honor Scholarship

LINKS

Personal:// **berkedilekoglu**
Github:// **berkedilekoglu**
LinkedIn:// **berkedilekoglu**
Medium:// **@berkedilekoglu**
Scholar:// **berkedilekoglu**

COURSEWORK

GRADUATE
Machine Learning
(Research Asst. & Teaching Asst 3x)
Advanced Natural Language Processing
Deep Learning
Graph Theory

UNDERGRADUATE
Data Structures and Algorithms
Linear Algebra
Probability and Statistics
Artificial Intelligence

SKILLS

PROGRAMMING
Languages:
Python • SQL • Unix shell
Packages:
TensorFlow • Pandas • Scikit-learn • Hugging Face
MLOps:
AWS
Familiar:
C++

EXPERIENCE

AREAL.AI | NLP Engineer (Remote)
Jul 2023 - Present | San Francisco, US
- Multi-class classification on documents.
- Label cleaning with ensemble learning.

Tech: AWS, Hugging Face, LLM, Regex, Python

GINOA.IO | Machine Learning Engineer (Remote)
March 2023 - June 2023 | New York, US
- Created a document-based chatbot pipeline using ChatGPT, Hugging Face, and LangChain frameworks.
- Customized the pipeline to optimize the tradeoff between cost, performance, and time.
- Implemented an automated evaluation pipeline.

Tech: LangChain, Flask, OpenAI, Hugging Face, Python

HUAWEI | NLP Research Engineer
March 2021 - March 2023 | Istanbul, TR
- Working on data side of MLOps pipeline with SQL and Hive.
- Enhancing app tagging pipeline with preprocessing and transformers.
- Improving query expansion pipeline for better App Gallery search results.
- Implementing keyword extraction pipeline for enhanced App Gallery search results.

Tech: Scikit-Learn, Hugging Face, LLM, Regex, Python

FORD MOTOR COMPANY TURKEY | Visitor Researcher
Sep 2017 – May 2018 | Istanbul, TR
- Implemented an image stitching pipeline to create 360 degrees of view.
- Adaptation of real-time object detection and avoidance algorithms on image stitching pipeline.

Tech: OpenCV, YOLO, Python

DURHAM UNIVERSITY | Visitor Researcher
June 2017 – Aug 2017 | Durham, UK
- Tested ready-to-use person re-identification algorithm on the synchronized thermal camera system.

Tech: OpenCV, ROS, C++, Python

OPEN SOURCE

Contributions

LangChain
- Add batching for document update in ChromaDB and makes it 8x faster. *PR Link*
- Contributed to similarity metric documentation for vectorestores. *PR Link*

My Projects

SUMOnet Web Server
- Web service for Sumoylation site prediction (Model in my thesis)

SUMOnet
- Python package for Sumoylation site prediction (Model in my thesis)

Warner-Me
- Rest-API to inform users when their code is compiled via Telegram

PUBLICATIONS

[1] B. Dilekoglu and O. Tastan. Sumonet: Deep sequential prediction of sumoylation sites. *bioRxiv*, 2023.
[2] □. S. Ma□ara, C. Yıldırım, F. Yaman, B. Dileko□lu, F. R. Tuta□, E. Öztürk, K. Kaya, □. Ta□tan, and E. Sava□. MI with he: Privacy preserving machine learning inferences for genome studies, 2021.
[3] A. Nabi, B. Dilekoglu, O. Adebali, and O. Tastan. Discovering Misannotated lncRNAs using Deep Learning Training Dynamics. *Bioinformatics*, 12 2022.
[4] C. Özbey, B. Dilekoglu, and S. Açiksöz. The impact of ensemble learning in sentiment analysis under domain shift. In *2021 Innovations in Intelligent Systems and Applications Conference (ASYU)*, pages 1–6, 2021.