

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

Familiar:

C++ • AWS

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. Mağara, C. Yıldırım, F. Yaman, B. Dilekoglu, F. R. Tuta, E. Öztürk, K. Kaya, Taştan, and E. Sava. ML 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.