Giyaseddin BAYRAK

Date of birth: 1996 | **Nationality:** Turkish, Syrian | **Email address:** giyaseddin.bayrak@gmail.com |

Address: 34182, Istanbul, Turkey (Home)

WORK EXPERIENCE

10/2022 – CURRENT Istanbul, Turkey
RESEARCH AND DEVELOPMENT ENGINEER INNOEM

- Developed tools for the innovation and sustainability industry for efficient information retrieval and report generation.
- Worked on R&D projects to improve process efficiency, optimize data management and generate actionable insights.
- Collaborated with cross-functional teams to ensure successful product development and launch.
- Conducted experiments, analyzed results and reported findings to stakeholders.
- Stayed up-to-date with latest industry trends and technologies to drive innovation.

31/08/2021 – 01/09/2022 Istanbul, Turkey
NLP RESEARCH ENGINEER HUAWEI TECHNOLOGIES CO. LTD.

In NLP Research Department (Petal Maps Project),
- Working on optimizing the results of the information retrieval in the map search, using both traditional and state-of-the-art machine learning solutions according to the use.
- Conducting literature reviews related to the ongoing challenges in the product.
- Assisting the Senior and Principal researchers to analyze data, solve problems with the required materials.
- Participating in the initial prototype phase of new features to integrate with the live product; developing required process and procedures tooling of the preliminary evaluation process.
- Taking part in the local and global field-specific conferences.
- Collaborating with team members to overcome any technical or methodological problems in the product.

31/12/2020 – 06/2021 Istanbul, Turkey
SOFTWARE ENGINEER INVENT ANALYTICS

- Working in a data-oriented team that is in charge of the data engineering part of SaaS leading optimization solution for huge retailers (e.g. Apparel Group, Fozzy Group) following Agile/Scrum practices.
- Improving tools for common use in a backward-compatible way.
- Providing support for data transfer between big-data pipeline modules using workflow orchestration tools e.g. Apache Airflow.
- Being the communicating bridge between software teams.
- Participating in major PIPs and features discussions corporate-wise.

01/09/2019 – 30/12/2020 Istanbul, Turkey
SOFTWARE ENGINEER MGS SOFTWARE

- Build infrastructure, toolset, and deployment pipeline to support API development.
- Embedding with other technical teams to support them in learning how to develop and maintain their own APIs.
- Work directly with the business to implement features and understand use cases.
- Guarantee service's continuous deployment ability through a continuous integration workflow.
- Contribute to the functional definition of customer requirements.
- Improving existing scripts.
- Making suggestions on how to improve current back-end applications.
- Communicating with key decision-makers within the company on a daily basis.
- Writing clean and maintainable code.

31/05/2018 – 29/08/2019 Istanbul, Turkey
JUNIOR SOFTWARE ENGINEER MORE IT

- Working closely with other team members to plan, design, and develop robust solutions in a timely manner.
- Modifying existing software to correct errors, upgrade user interfaces and improve performance.

- Writing and maintaining extensible code.
- Consulting weekly with customers on project status, proposals, and technical issues.

EDUCATION AND TRAINING

09/06/2015 – 24/09/2018 Karabük, Turkey
BSC. COMPUTER ENGINEER Karabuk University

Address Karabük, Karabük, Turkey ∣ **Website** https://www.karabuk.edu.tr ∣ **Field of study** Computer Engineering ∣

Final grade 3.5 ∣ **Thesis** Attendance Tracking System using Face Recognition

01/09/2019 – 01/2023 Istanbul, Turkey
MSC. COMPUTER ENGINEER Marmara University

Address Kadıköy, Istanbul, Turkey ∣ **Website** https://www.marmara.edu.tr ∣

Field of study Machine Learning, NLP ∣ **Final grade** 3.6 ∣

Thesis Radiology Report Classification for Low-resource Languages using Machine Learning: A Case Study of Brain Hemorrhage Detection

LANGUAGE SKILLS

Other language(s):

	UNDERSTANDING		SPEAKING		WRITING
	Listening	Reading	Spoken production	Spoken interaction	
ENGLISH	C1	C1	C1	C1	C1
TURKISH	C2	C1	C1	C2	C1
ARABIC	C2	C2	C2	C2	C2

Levels: A1 and A2: Basic user; B1 and B2: Independent user; C1 and C2: Proficient user

DIGITAL SKILLS

Computer Vision ∣ Python ∣ Machine Learning ∣ SQL ∣ Optimization ∣ RESTful Web Services ∣ PHP ∣ SOAP Web Services ∣ Git ∣ C Programming Language ∣ Data Analysis ∣ Parallel Computing ∣ Apache Airflow ∣ Natural Language Processing (NLP) ∣ Big Data and Spark ∣ Amazon Web Service (AWS) ∣ Research Methodologies ∣ Java ∣ Docker ∣ Linux ∣ Knowledge of Language Models and Transformers in NLP ∣ Scikit-Learn, Python-Pandas, Seaborn, Matplotlib, Keras, OpenCV, Tensorflow, PyTorch ∣ Deep Learning

ADDITIONAL INFORMATION

VOLUNTEERING

05/2021 – CURRENT Data Science Earth
Author Writing simplified articles, covering common knowledge related to Data Science. The target audience is the young data science enthusiasts.

PROJECTS

ATTRACK - an ATtendance TRACKing system Bachelor's graduation project
Incorporating machine learning in automating the process of taking attendance from images taken for class members.

Technologies:
Offline Processing: Python, OpenCV, DLib
Web Application: PHP - Laravel, MySQL, HTML5
Android Application: Java

PUBLICATIONS

[Deep learning-based brain hemorrhage detection in CT reports](#) – 2022

Bayrak, G., Toprak, M. Ş., Ganiz, M. C., Kodaz, H., & Koç, U. (2022). Deep learning-based brain hemorrhage detection in ct reports. In *Challenges of Trustable AI and Added-Value on Health* (pp. 866-867). MIE Conference 2022 - IOS Press.

[Traditional Machine Learning and Deep Learning-based Text Classification for Turkish Law Documents using Transformers and Domain Adaptation](#)

– 2022

Akça, O., **Bayrak, G.**, Issifu, A. M., & Ganiz, M. C. (2022, August). Traditional Machine Learning and Deep Learning-based Text Classification for Turkish Law Documents using Transformers and Domain Adaptation. In *2022 International Conference on INnovations in Intelligent SysTems and Applications (INISTA)* (pp. 1-6). IEEE.

Domain-Adapted BERT-based models for Nuanced Arabic Dialect Identification and Tweet Sentiment Analysis

– 2022

Bayrak, G. and Issifu A., (2022) Domain-Adapted BERT-based models for Nuanced Arabic Dialect Identification and Tweet Sentiment Analysis. In *Proceedings of the Seventh Arabic Natural Language Processing Workshop (WANLP 2022)* (Colocated with EMNLP 2022). Association for Computational Linguistics.