Cansu Yıldırım
Data Scientist

in /in/cansu-yil   /cansu-yildirim   M @cansuyildirim   k /cansuyil

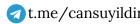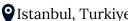✉ cansuxyildirim@gmail.com   t.me/cansuyildir   📍 Istanbul, Turkiye

Professional Expertience

Insight SFI Research Centre, University College Dublin   Machine Learning Intern
- Dublin,Ireland   2023 Aug – 2023 Oct

Successfully developed and optimized back-end components for geological fault detection using **Python**, **SQL**, **Pandas**, **Scikit-learn**, and **PyTorch**, reducing processing time by **15%** and significantly improving system performance. I automated data processing workflows, increasing operational efficiency by **20%**.

I developed interactive dashboards using **Power BI** and **Tableau**, enabling stakeholders to make data-driven decisions. I created **NLP models** and delivered innovative AI solutions using large language models (**LLMs**). Additionally, I created comprehensive visualizations with **Matplotlib**. My expertise in Python, SQL, Spark, Docker, and cloud platforms (**AWS, Azure**) **saved two weeks** and enhanced team performance. The project I contributed to is published in IEEE ACCESS, DOI: ACCESS.2024.3433612.

IBM   Data Science & AI Intern
- Istanbul, Turkiye   2023 Jun – 2023 Jul

Implemented mathematical optimization techniques and contributed to **CRM projects** during my internship. I worked with large datasets on IBM Cloud, applying machine learning and deep learning techniques like regression, classification, CNN, and RNN. I used **Python**, **Scikit-learn**, **TensorFlow**, and **PyTorch** to optimize data workflows and build models. Additionally, I leveraged **Spark** and **Kafka** for data processing and model training.

I deployed models to cloud platforms like IBM Cloud and AWS, using **Docker** and **Kubernetes** for production environments. I also developed **APIs** with **FastAPI** and integrated NLP and computer vision technologies, including **BERT** and **YOLO**. My work included visualizing results with **Matplotlib, Seaborn, and Plotly** for clear communication with stakeholders.

Organization & Projects

Appcircle
- Remote, Turkiye   2023 Jan - 2023 Jun
- React Workshop, organized from Appcircle

Global AI Hub
- Remote, Turkiye   2022 Mar - 2022 Sep
- AI Summer Camp Bootcamp, organized from Global AI Hub and 10millon.AI

Highlighted Projects

Clothing Classification with Fashion-MNIST
Jan 2024 - Jun 2024   Supervisor: Prof. Turgay Aydogan
Developed a machine learning model for clothing classification using the Fashion-MNIST dataset. Tested two model architectures, SimpleCNNModel and ResNet18. Achieved a high accuracy rate with the model. Implemented using Python, TensorFlow, Keras, and PyTorch.

Spotify Clone Project Using React
Developed a Spotify clone with React in a collaborative team setting. Implemented state management with Redux and optimized data fetching using Axios API for better performance.

Cat Dog Classification Transfer Learning
Contributed to the Global AI HUB Summer Camp'22 group project focused on transfer learning using the VGG16 model applied to the well-known cats-dogs dataset. The project aimed to leverage pre-trained neural network architectures to achieve high accuracy in distinguishing between cat and dog images

Health Insurance Analysis
Health Insurance Analysis, Collaborated on a team project at the Global AI HUB Summer Camp'22, specializing in predictive modeling and data-driven insights. Contributed to data preprocessing, feature engineering, and model selection using Python tools like scikit-learn and TensorFlow. Presented findings to optimize decision-making in health insurance analytics

Iris Segmentation with Mediapipe
A Python project for real-time object segmentation from video streams, featuring customizable tools for precise segmentation. Utilizes Mediapipe's modular framework to integrate and customize pre-built components. Includes a pre-processing pipeline for video enhancement and segmentation optimization, alongside a segmentation pipeline using a fine-tuned, pre-trained model.

Computer Skills

- Python, R
- MATLAB
- Docker
- SQL (MySQL, PLSQL)
- AWS, Azure, GCP
- Power BI, Tableau
- Advanced Excel
- Xcode, Visual Studio

Education

Suleyman Demirel University   2020 Aug – 2024 Jun
Bachelor of Science in Computer Engineering   Isparta, Turkiye

Languages

- English, Fluent in spoken and written communication
- German, Entry-level proficiency
- Turkish, Native

🔗 References

- Bengü Sanem Pazvant, Client Engineering Leader at IBM
- Ruihai Dong, Lecturer at University College Dublin (UCD)
- Turgay Aydoğan, Lecturer at Suleyman Demirel University