ALI OSMAN BEKER

IR. DATA SCIENTIST

SUMMARY

I will graduate from Manisa Celal Bayar University Computer Engineering in June. I have been doing my long-term internship, which is a requirement of our school, since March. I have been interested in data science since my 3rd year of university and I am trying to improve myself. Before that, I had 11 months of experience as a .Net developer in a technopolis company. however, I decided that this job was not for me and did not expect a future from this job and left here and gave myself completely to the field of data science. My personal interest is Machine learning algorithms. The place where I currently do my long-term internship is an internet advertising company called AdresGezgini. Here, I work in the data set preparation team in the language recognition project in the R&D department. I perform tasks such as text-to-speech, speech-to-text joint voice control for the model. In my graduation project, I detected ships using Dinov5 in my ship detection project from satellite images. At this stage I am preparing a dataset to classify ships and I am planning to use yolo here. To explain for myself, although I was able to make money in my previous .net developer experience, the reason I quit was because it was very enjoyable for me to work with artificial intelligence models and try to build them, and I came to this decision, exactly the career I wanted. As you can imagine, he doesn't have much professional experience. But I am sure that I can keep up with you in my Kind regards..

EDUCATION

Tavşanlı Science High School

Sept. 2013 - June 2017

Manisa Celal Bayar University Computer Engineering

Sept. 2018 - June 2023

EMPLOYMENT

Adres Gezgini, R&D Engineer, İzmir

Cezeri Mekatronik, Web Developer, Manisa

SKILLS

MACHINE LEARNING: ML Algorithms, Statistics, Math&Linear Algebra SOFTWARE DEVELOPING: Python, C#

PROJECTS

Detecting handwritten mathematical expression based on CNN model and Forward and Forward Algorithm

June 2022 - June 2022

In this study Handwritten mathematical expression recognition (HMER) is a challenging task due to the differences in handwriting styles and the complexity of mathematical symbols. In this paper, we propose a deep learning-based model for HMER using a combination of convolutional neural networks (CNN) and also we use Forward and Forward (FF) algorithm experimental. The model is trained on a dataset of handwritten mathematical expressions and can achieve high recognition accuracy. The performance of the proposed model has been evaluated and compared with several available methods, and the results show that it outperforms the most advanced methods. Additionally, we present an analysis of the model's behavior and discuss possible directions for future work.

Deep Learning Based Ship Detection from Multi-Modal Satellite Images

Sept. 2022 - Dec. 2022

Satellite imagery provides unique insights into various markets, including agriculture, defense and intelligence, energy, and finance. New commercial imagery providers, such as Planet, are using constellations of small satellites to capture images of the entire Earth every day. This flood of new imagery is outgrowing the ability for organizations to manually look at each image that gets captured, and there is a need for machine learning and computer vision algorithms to help automate the analysis process. The aim of this project is to help address the difficult task of detecting the location of large ships in satellite images. Automating this process can be applied to many issues including monitoring port activity levels and supply chain analysis.

Deep Learning Based Ship Classification from Multi-Modal Satellite Images

Feb. 2023 - Current

Agriculture, defense and intelligence, energy, and the financial sector are just a few of the industries that might benefit from satellite imagery's unique insights. The entire Earth is being photographed every day by constellations of small satellites used by new commercial imaging suppliers like Planet. Machine learning and computer vision algorithms are needed to aid automate the analysis process as the volume of new imagery is outpacing businesses' capacity to manually review each image that is produced. The purpose of this project is to contribute to the challenging task of locating huge ships in satellite photos. Numerous problems, such as supply chain analysis and port activity monitoring, can be solved by automating this procedure.

VOLUNTEERING

MCBU Data Science Comminity, Project Team Co-Coordinator

Jan. 2023 - Current

May 2022 - June 2022

As students who are interested in data science, we wanted to establish an organization that will make a difference for ourselves and our environment.

STREAM It Up!, Event guide

I worked as an activity guide for students and mathematics teachers who are interested in mathematics at the high school university level at the Geogebra Education booth at the Manisa Science Festival.