DHRUV KUMAR COMPUTER VISION ENGINEER





SUMMARY

I embarking on my journey with a strong will and the willingness to learn every day in the field of **Artificial Intelligence** and **Machine Learning** trying to bring an out-of-the-box solution to the problems in the World of **Computer Vision**. Being focused and Motivated can be some of the highlights of embracing my teammates and also I write **Technical Blogs**.

SKILLS

OpenCVPython

- Deep Learning
- Machine Learning
- Pandas.PyPytorch
- Critical thinking
- Attention to detail

PROJECTS

Face Detection using OpenCV

Blog: <u>Viola-Jones Face Detection Algo</u> Github: <u>Face Detection using OpenCV</u>

- Face Detection using the revolutionary algorithm "Viola-Jones Algorithm" implemented in Python using OpenCV.
- The Project Detects Faces and Eyes on a Human Face
- You can customize the code according to the need and what object to detect just by using the HAAR file which can be downloaded from the link given in the blog.

Covid-19 Drug Design

Github: Covid-19 Drug Design

- Machine-learning project focused on predicting the inhibition potential of chemical compounds against the COVID-19 virus. The project uses a dataset that consists of IC50 (half-maximal inhibitory concentration) data for 104 chemical molecules.
- With an MSE of just 0.18, the model was trained in various Machine Learning Models from the SKLearn Library and Analysed using Pandas, Numpy, Matplotlib, and Seaborn to come up with the best Model to predict the efficiency of the compound against the virus.

Predicting Fetal Health with Machine Learning

Github: <u>Predicting Fetal Health with Machine Learning</u> <u>LinkedIn Post: Cardiotocography Project Explaination</u>

- Leveraging machine learning to predict fetal health using the Cardiotocography (CTG) dataset.
- Accurate assessment of fetal health is vital in prenatal care, and this project showcases the application of machine learning techniques to enhance this critical aspect of healthcare.
- With the help of basic Data Science, Data visualization, and Machine Learning achieved a Model that can predict fetal health with the accuracy of 98%.

Color Detector using OpenCV

Github: Color Detector using OpenCV

- Detecting the desired color object via webcam using openCV in python.
- The script captures video from the default camera (usually the webcam) and tracks objects of a specified color (in this case, red) in real-time. and creates a bounding box around it.
- Wrote a Blog on similar kind of a project that can give an overview about how everything works
 - Link to the Blog: <u>Detecting RGB using OpenCV via Webcam</u>

EDUCATION