Aditya Kumar

adityak2920.github.io adityak2920@gmail.com | +91 9958201450

EDUCATION

GURU GOBIND SINGH INDRAPRASTHA UNIVERSITY

BTECH IN ELECTRONICS AND COMMUNICATION 2017 - 2021 | New Delhi, India

LINKS

Github:// adityak2920 LinkedIn:// adityak2920 Twitter:// @adityak2920

COURSES

UNDERGRADUATE

Introduction to Programming(C++) Data Structures and Algorithms Operating Systems Computer Architectures Microprocessors Database Management System

MOOCS

Coding Blocks's Machine Learning Udacity's Intro to Deep Learning with PyTorch CS231n Convolutional Neural Network fastai course-v3 Coursera's Improving Deep Neural Network

SKILLS

Languages: Python • C++ • C Frameworks: PyTorch • scikit-learn • OpenCV FastAPI • transformers • Detectron2 Operating System: ubuntu • MacOS Other Skills: Git • jupyter-notebook • MySQL Computer Vision • NLP Deep Learning

EXPERIENCE

RETAIL PULSE | RESEARCH INTERN

August 2020 - Present | Bangalore, Karnataka

• Solving challenging problems faced by FMCG, CPG companies and retailers using deep learning and computer vision.

SPARROSENSE | DEEP LEARNING INTERN

June 2020 - August 2020 | Gurugram, Haryana

- Worked on Unsupervised Representation Learning for steel pouring classification in steel manufacturing process.
- Improved accuracy of classifiers from 85-93% and also improved robustness of model to different scenarios in an industry.

HUMONICS GLOBAL | DATA SCIENCE INTERN

June 2019 – January 2020 | Gurugram, Haryana

- Worked on Automating Car Insurance Claims using Deep Learning.
- Carried out research and built several classification, instance segmentation, object detection models with their training and data pipelines.
- Achieved the mAP of 0.8 for instance segmentation model of car parts and damage.
- Built inference pipelines to reduce speeds by 1.5x for models at production using TorchScript with C++ and JIT.

PROJECTS

TRANING AND INFERENCE | HUMONICS GLOBAL

Code for training a classifier using fastai, converting to TorchScript using PyTorch JIT and inference in C++ using OpenCV and TorchScript.

REDDIT FLAIR CLASSIFICATION | PERSONAL PROJECT

This project deals with scraping posts from reddit, preprocessing, modelling and then deploying the classifier on heroku.

FACIAL RECOGNITION | PERSONAL PROJECT

I have used OpenCV, Haar Cascades, KNN a ML algorithm and ipwebcam app for recognising faces using laptop webcam and android's phone camera.

SEMANTIC SEGMENTATION | PERSONAL PROJECT

Implemented several Semantic Segmentation algorithms for a Kaggle competition called Severstal: Steel Defect Detection using different PyTorch based libraries and used different methods for training and inference for the provided data.

NEURAL ART(STYLE TRANSFER | PERSONAL PROJECT

Implementation of Neural Art(Style Transfer) in PyTorch in C++ and PyTorch.

ACHIEVMENTS

Secure and Private AI Scholarship from Facebook and Udacity Open Source Contributor of OpenCV