Aditya Kumar

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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