AADITYA SINGH

ACADEMIC PROFILE

Degree/Certificate	Institution	Percentage/CGPA	Year
B.Tech+M.Tech	Metallurgical Engineering, IIT (BHU), Varanasi	7.82	2019
CBSE (XII)	Allahabad Public School, Prayagraj	87.2	2015
CBSE (X)	Daffodils Public School, Lohiya Talab, Mirzapur	9	2013

SKILLS

Languages
- C++, Python, Java, C, SQL, HTML, Haxe

Tools/Technologies
- Bash, Git, vsftpd, Docker, Google Collab, Azure

Area of Interest
- Computer Vision, Microservices, Web Scraping

INTERNSHIP/TRAINING

Crio Launch
Feb 2020 - April 2020

- Worked as a Student Develop at crio.do for Crio Launch program.
- It is a 10-week online merit-based applied learning program to acquire skills in Linux, OS & Networking, Java, Maven Repo, OOPs, Rest API, Jackson, Gradle, Code Refractoring, Applied Data Structures and more.
- It provides projects as curated modules which together form three types of products QBox, QMoney and QCharm which helped me to learn by doing.

Data Science Intern at PNB Metlife
May 2019 - Jul 2019

- Developed a highly precise Aadhaar Masking Pipeline with 72% accuracy without using any cloud services..
- Trained custom deep learning models from scratch for Aadhar Identification and Card type classification. Customised pre-trained deep learning models for text detection and recognition.
- Created several algorithms for finding the Aadhar No. in the OCR results taking several inspirations from Microsoft and Dropbox OCR.
- Worked with OpenCV, Tensorflow, Pytorch, Shapely, Flask and Docker.

PROJECTS

Disaster Monitor (Hackathon)
Oct 2018 - Jan 2019

Monitoring of Natural Disasters using Aerial Images captured by Satellites
- Among top 21 **national finalists** in Codefundo++ 2018 organised by Microsoft.
- Primary focus was on wildfires because they are very destructive and they last for a long time. We created our dataset by scrapping earth observatory website and fine-tuning the Xception network on it. We deployed our model on an Azure Container Instance and created a web interface for demonstration.
- Worked with Docker, Azure Services and the Fastai library.

Zero Shot Learning
May 2018 - Jul 2018

Supervisor: Dr. S.K Singh, Department of Computer Science and Engineering, IIT (BHU)
- Using images containing seen classes we obtain image features using a pre-trained **CNN**. With that and the **GloVe** word embeddings we train a **Conditional Variational Autoencoder**. Using that we generate synthetic examples of unseen classes and train a classifier on real and synthetic data to predict all classes.
- Obtained 21% testing accuracy in generalized zero shot setting, whereas 50% testing accuracy in conventional zero shot setting.