ANIMESH GUPTA

 animesh-007 | animesh721 | animesh-007.github.io | agupta33_be19@thapar.edu

EDUCATION

Thapar University, Patiala
B.Tech. in Electronics and Computer Engineering   *Aug. 2019 – June 2023 (expected)*
CGPA: 7.97/10

PUBLICATIONS

1. **Double-Hard Debias: Tailoring Word Embeddings for Gender Bias Mitigation** [code, pdf]
   Haswanth Aekula, Sugam Garg, **Animesh Gupta**,
   ML Reproducibility Challenge 2020 - under Review (Blind submission)

WORK EXPERIENCE

Research Engineer (Part-time), Minus Zero   *Patiala, India*
Supervisor: CEO & CTO Gagandeep Reehal   *Oct. 2020 – Present*

- Worked on road segmentation problem with the **Indian driving dataset**.
  1. In this project, I have applied transfer learning for segmentation model with state of the art results on cityscapes dataset.
  2. Implemented code in the data pipeline to train the model on less number of classes.
  3. Also worked on creating masks for the ground truth of the Indian dataset from the labels.

INTERNSHIPS

Research Intern, Indian Institute of Information Technology   *Allahabad*
Supervisor: Dr. Mohammed Javed   *Nov. 2020 – Jan. 2021*

- During the Internship, I explored various deep learning models and effective training techniques for solving scene text domain problems.
- Worked with state of the art model **Textfusenet**. In this, I have worked by applying DCT (direct cosine transform) compression to the images and trained the model on the compressed images.

PROJECTS

Google Landmark Recognition 2020

- Developed a classification model for predicting landmark labels using the GLDv2 dataset.
- Improved accuracy of the Google DELG model by optimising the hyperparameters. [Link]

I'm Something of a Painter Myself

- Developed a GAN that generates 7,000 to 10,000 Monet-style images. [Link]

AI for Blind

- Developed a classification model for predicting seven emotions (angry, disgusted, fearful, happy, neutral, sad, and surprised) using the FER-2013 dataset. [Link]

VAE and GAN on MNIST

- Implemented basic GAN and different types of autoencoders in PyTorch on the MNIST Dataset.[Link] [Link]

OPEN SOURCE CONTRIBUTIONS

OpenStreetMap-iD
- To make new geo-locations accessible to new mappers added several new presets. [PR]

CircuitVerse
- Added improvements (like modals, dark mode bugs) for enhancing the use of GUI interface.[PR]

d2l-study-group
- Maintainer of the study group with daily discussions with the students of our college on the book **Dive into deep learning**. [PR]

DSC (Thapar University)-officialWebsite
- Improved repository readability for new user navigation. [PR]

Mini-Conf
- Virtual conference toolkit. Added video links and issue tracker bots. [PR]

ACHIEVEMENTS

- Top 42% in Google Landmark Recognition Challenge *2020*
- Top 6.5% in JEE Mains *2019*

TECHNICAL SKILLS

- **Languages:** Python, C, C++
- **Frameworks:** Pytorch, Tensorflow, Tensorflowjs, ml5.js
- **DevOps:** Docker, Heroku, FloydHub
- **Frontend:** Javascript, React, p5.js

RELEVANT COURSEWORK

- **Mathematics:** Linear algebra *(Gilbert Strang's 18.06)*
- **Courses:** Machine Learning (Coursera Certificate), Neural Networks and Deep Learning (Coursera Certificate)

REFERENCES

Gagandeep Reehal *Patiala, India*
CEO & CTO, Minus Zero, Patiala
Email: gagandeep@minuszero.in

Dr. Mohammed Javed *Allahabad, India*
Associate Professor, Department of IT, IIIT Allahabad
Email: javed@iiita.ac.in