

ANIMESH GUPTA

✉ agupta33_be19@thapar.edu | 💻 animesh-007.github.io | 🐙 animesh-007 | 🌐 animesh721

EXPERIENCE

Minus Zero

Research Engineer (Part-time)

Patiala, India

Oct. 2020 – Present

- Worked on the road segmentation problem.
- Used FChardnet as base architecture and trained on the *Indian driving dataset*.
- Worked on creating and preprocessing the initial dataset.
- Modified and improved the base architecture to make it work according to our use-case.

Indian Institute of Information Technology

Research Intern

Allahabad, India

Nov. 2020 – Jan. 2021

- Explored scene text detection problem.
- Doing literature review showed that unlike existing text detection approaches, arbitrary shape text detection in natural scenes is an extremely challenging task.
- Worked with the state of the art model Textfusernet. Experimented with DCT (direct cosine transform) compressed images and then finetuned the model on the compressed images.

EDUCATION

Thapar University

Bachelor's in Electronics and Computer Engineering

Patiala, India

CGPA: 8.0/10

Aug. 2019 – June 2023 (expected)

PUBLICATIONS

1. Double-Hard Debias: Tailoring Word Embeddings for Gender Bias Mitigation [[code](#), [pdf](#)]
H. Aekula, S. Garg, A. Gupta
ML Reproducibility Challenge 2020

ACHIEVEMENTS

- Top 6.5% in JEE Mains 2019

OPEN SOURCE CONTRIBUTIONS

pyprobml

- Added new figures in python for Kevin Murphy's book "*Probabilistic Machine Learning: An Introduction*". [[PRs](#)]

OpenStreetMap-iD

- To make new geo-locations accessible to new mappers added several new presets. [[PRs](#)]

CircuitVerse

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

Face-X

- Added NasNet and Xception model architecture for the face recognition. [[PRs](#)]

CoinShift-Imaging-Box

- Added YOLOv5 example for the object detection. [[PRs](#)]

d2l-study-group

- Maintainer of the study group with daily discussions with the students of our college on the book "*Dive into deep learning*". [[PRs](#)]

DSC (Thapar University OfficialWebsite)

- Improved repository readability for new user navigation. [[PRs](#)]

Mini-Conf

- Virtual conference toolkit. Added video links and issue tracker bots. [[PRs](#)]

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 optimizing the hyperparameters. [\[Link\]](#)

I'm Something of a Painter Myself (Kaggle Challenge)

- Developed a GAN that generates 7,000 to 10,000 Monet-style images.
- Won Bronze medal for the notebook. [\[Link\]](#)

AI for Blind (College Hackathon)

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

TECHNICAL SKILLS

- **Languages:** Python, C, C++
- **Frameworks:** PyTorch, TensorFlow, TensorFlow.js, ml5.js
- **DevOps:** Docker, Heroku, FloydHub, Weights & Biases

RELEVANT COURSEWORK

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