Mohd Khizir Siddiqui

M +91 7065892579
E f20180439@goa.bits-pilani.ac.in
W khizirsiddiqui.github.io
gh khizirsiddiqui
in khizirsiddiqui

Education

Birla Institute of Technology and Sciences, Pilani,   **2018–2022**
B.E. (Hons.) Electronics and Instrumentation Engineering,
Goa, India.

Experience and Projects

KD Lib, *OpenSource*.   **May'20 – Present**
- Implementation of various Knowledge Distillation Methods.
- Code available on github - here

Student Welfare Division, BITS Goa Website, *django*.   **Feb 2019 – Present**
- Replaces the entire existing website with better interface and functionalities.
- Hosted here - Link

Emotion Detection using ML and Graph Network Analysis.   **Oct'19 – May'20**
- Under Prof JK Sahoo in collaboration with Cognitive Neuroscience Lab (BITS Pilani, Goa).
- Identify the emotional response of different regions of the brain using a small number of parameters.
- Uses graph theory and network analysis with Machine Learning.

Car Speed Challenge, *pytorch*.   **May'20' - Jun'20**
- Detect per frame speed of the car from dashcam view.
- Fine-tuned VGG19 to compensate for smaller dataset.
- Achieves a 2.57 MSE on validation set.

Neural Style Transfer, *pytorch*.   **May'20 - Jun'20**
- Art Generation by Transfer Learning on VGG-19.
- Uses Gram Matrix differnecs to calculate cost.
- Code available on github - here

Image Super Resolution, *keras*.   **Apr'20 - May'20'**
- Increase resolution of the low-res images.
- Uses Autoencoders.

Food Recommender, *scikit-learn*.   **Apr'20**
- Scraped several recipes and develop model to recommend them.
- Developed to solve everyday problem of what-to-cook for housemakers.

Sleep Sort, *pytorch*.   **Sept'19 – Dec'19**
- Sleep Stage Scoring from raw single channel eeg data.
- Uses 2 Convolutions Nets in parallel to embed the spatial and temporal features.
- Addressed various medical problems associated with change in eeg data.
- Course Project Part of BITS F315 Intro to Cognitive Neuroscience.

LyricMe, *pytorch*.   **Oct 2019**
- Character level-RNN to write lyrics based on single word input.
- Code available on github - here

CopyCat - Text Editor, *C*.   **Mar'19 – Apr'19**
- Text Editor in C without any external dependencies.
- Supports syntax highlighting for multiple languages.
- Code available on github - here

Kobe Shot Selection, *C*.   **Sep'18 – Dec'18**
- Part of CTE - Introduction to Machine Learning, BITS Goa.
- Stood first in in-class leaderboard of more than 100 students.

OpenSource Contribution

MLPack: C++ Library for Machine Learning: Link - Contributing occasionaly since December 2019

Technical skills

Languages: Python, C++, C, SQL, JS, Bash, MATLAB, Java

Frameworks: sklearn, Tensorflow, Pytorch, Keras, Flask, Django, ReactJS

Other: AutoCAD, git   **OS**: Ubuntu, Windows

Courses

- Intro To Cognitive Neuroscience (BITS F315)
- Machine Learning (Stanford, AndrewNg - Online)
- CS231n Convolutional Neural Networks for Visual Recognition (Stanford - Online)
- Deep Learning Specialization (5 Courses) (Coursera, deeplearning.ai)
- Linear Algebra, Probability and Statistics, Differential Calculus

Miscellaneous

Volunteering: Abhigyaan - Teaching underprivildged people since 1st semester.

Hobbies: Badminton, Swimming, Chess, Poetry

Languages: English, Hindi, Urdu