Aditya **Prakash**

Sophomore Undergraduate
Department of Aerospace Engineering
Indian Institute of Technology, Kanpur

adityaap@iitk.ac.in
prakashaditya369
prakashaditya369.github.io
(+91)7294014541

Education

IIT Kanpur
B.Tech, Aerospace Engineering
2019-2023(Expected) **8.60/10.0**

BNS DAV Public School, Giridih
CBSE - XII
2019 **97.6%**

BNS DAV Public School, Giridih
CBSE - X
2017 **10.0/10.0**

Interests

Web Development, Open Source, Deep Learning, NLP, Space Vehicles (SSTOs), Cognitive Psychology, Computational Neuroscience

Technical Skills

Prog. Languages: JavaScript, Python, C, C++

Tools/Frameworks: ReactJS, NodeJS, Flask, HTML5/CSS3, Canvas, Git, Tensorflow, PyTorch, OpenCV, Keras, LaTeX, MongoDB

Relevant Courseworks

Fundamentals of Computing (ESC101), **Data Structures and Algorithms** (ESO207), **Deep Learning Specialization**[1], **NLP**[1]

([1]): Coursera Courses

Workshops

Neuromatch Academy
An online school for Computational Neuroscience. July'20

Positions of Responsibilities

Counselling Service, IITK
Student Guide Nov'20 - Present
– Guiding a group of 5 students into first year of their college life.

Counselling Service, IITK
Academic Mentor Nov'20 - Present
– Guiding first-year students in their academic related problems.

Brain And Cognitive Society, IITK
Secretary July'20 - Present
– Organized introductory lectures and workshops for students interested in Computational Neuroscience.

SIP, E-cell, IITK
Secretary April'20 - Present
– Contacted Start-ups for registration in SIP, E-cell.
– Responsible for smooth conduction of SIP program.

Projects

Algorithm Visualizer Github Website
Self Project Dec'20 - Present
– Built a **React** Website for visualizing various Computational Algorithms.
– Implemented Backtracking, Sorting Algorithms and Pathfinding Algorithms.

Project Ekatra Github Website
Self Project Nov'20 - Present
– Built and deployed a **React** website for sharing freely available online resources.
– Implemented a Recommendation system and Content Filtering. [**Backend- NodeJS**]
– Added User Login and stores user history and likes.

LeibTon Github Website
Self Project Nov'20 - Dec'20
– Designed and Deployed my portfolio website using HTML5, CSS3, Vanilla Javascript.
– Used anime.js and greensockJS for animation in the site.
– Used Canvas and Particles to provide interaction in the site.

Facebook Hateful Memes Challenge Github
Self Project Sep'20
– Used pretrained CNN models like ResNet and Incetionv3 for visual feature extraction.
– Used LSTM and Word Embeddings to learn textual features.
– Implemented different multi-modal models to concatenate textual and visual features. However got a poor test accuracy of 58% due to overfitting.

Facial Emotion Recognition Github
Brain and Cognitive Society, IITK July'20
– Extracts human faces (using OpenCV haar-cascade) from a camera stream.
– Implemented CNN classifier to classify emotions based on trained models.

Small Projects
Self Projects April'20 - Present
– Text Based AI Assistant using Attention Model.
– Gender Predictor for Indian Names using LSTM.
– React website to study Randomness based on AutoRegresive Models.
– HaarCascade Trainer using OpenCV applications.
– Automated Mailing System using **smtplib** Module.
– Tried to discover a relationship between Voxel responses in the visual cortex and semantic features of images using Kay-Gallant Dataset during Neuromatch Academy'20.