

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, L^AT_EX

RELEVANT COURSEWORKS

**Fundamentals of Computing (ESC101), Data
Structures and Algorithms (ESO207)*, Deep
Learning Specialization¹, NLP¹**

(*): Ongoing Courses, (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

Self Project **Dec'20 - Present** [Github](#) [Website](#)

- Built a **React** Website for visualizing various Computational Algorithms.
- Implemented Backtracking, Sorting Algorithms and Pathfinding Algorithms.

Project Ekatra

Self Project **Nov'20 - Present** [Github](#) [Website](#)

- 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

Self Project **Nov'20 - Dec'20** [Github](#) [Website](#)

- 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

Self Project **Sep'20** [Github](#)

- Used pretrained CNN models like ResNet and Inceptionv3 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

Brain and Cognitive Society, IITK **July'20** [Github](#)

- 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 AutoRegressive 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. [↗](#)