Aarush Gupta

Second Year Undergraduate | Computer Science and Engineering
Indian Institute of Technology Roorkee
✉ aaraush98.ucs2016@iitr.ac.in | 📞 +91-82840-36675 | ⌂ aarushgupta | 🐦 @c414driu5

EDUCATION

IIT ROORKEE
B.Tech. in Comp. Sci. & Eng.
2016-2020 | Roorkee, India
CGPA: 8.58/10.0

DAV SR. SEC. SCHOOL
Senior Secondary Education
2014-16 | Chandigarh, India
Secured 90.4% in 12th standard
(Examination conducted by CBSE)

NAVY CHILDREN SCHOOL
Secondary Education
2012-14 | Port Blair,India
Secured 10.0/10.0 CGPA in 10th standard
(Examination conducted by CBSE)

COURSEWORK

UNDERGRADUATE
• Object Oriented Programming
• Computer Systems & Architecture
• Data Structures
• Discrete Structures
• Computer Architecture & Microprocessors
• Object Oriented Analysis & Design

ONLINE COURSES
• Intro to Machine Learning by Udacity
• Machine Learning by Andrew NG
• CNNs for Visual Recog. by Stanford

PROGRAMMING SKILLS

Languages:
C • C++ • Python
Operating Systems:
Windows • Linux
Tools:
Keras • Tensorflow • Anaconda • Git
Familiar with:
Java • HTML • CSS • JavaScript

LANGUAGES

English • Hindi

INTERESTS

DEEP LEARNING
Computer Vision, Natural Language Processing and related applications.

PROJECTS

UNSUPERVISED HUMAN ACTION DETECTION IN VIDEOS
Aug 2017 – Present | Prof. Biplab Banerjee, IIT Roorkee
Developing a model which divides a video into clusters of video frames based on the human actions depicted by the frames.

- Implemented Spectral Clustering, using the Normalized Cuts Algorithm, for unsupervised clustering of video frames which constitute a common human action.

- Currently working on improving the model by incorporating temporal features of the frames using Conditional Random Fields.

HANDWRITING GENERATOR
Sept 2017 – Present | ArIES, IIT Roorkee
Developing a model which learns a person's handwriting style to generate handwritten text according to the textual input provided.

- Currently developing a handwriting prediction model based on LSTM Networks and Mixture Density Networks (link to related paper) .

SENTIMENT ANALYSIS
Aug 2017 - Oct 2017 | Prof. Balasubramaniam Raman, IIT Roorkee
Applied various Deep Learning model architectures on the Twitter Dataset (link) to predict the sentiments of the Tweets. Also developed a Keras-based Ensemble model for generalized multiclass textual classification.

ACHIEVEMENTS

2016	JEE Advanced	Cleared with **AIR 363** out of nearabout 2 lakh candidates
2016	JEE Mains	Cleared with **AIR 3436** out of nearabout 10 lakh candidates
2015	KVPY Fellowship	National fellowship holder of one of the most prestigious fellowships in India(link)

EXTRACURRICULAR ACTIVITIES

- **Sports:** Badminton (Completed one year of training under NSO in 1st year), Squash, Swimming.

- Associate member of **Soft Skills Program** (an initiative by IIT Roorkee to help students improve their communication skills).