Aditya Kumar

www.github.com/arch-raven
www.kaggle.com/adityak80
(+91) 97830 41889
aditya.kumar.cer19@iitbhu.ac.in

Education

Indian Institute of Technology (BHU), Varanasi — **July 2019– Current**
IDD in Ceramic Engineering (Current CGPA: 8.05)

Shivam International School, Patna, Bihar (Class 12 th) — **2019**
Central Board Of Secondary Education (Percentage: 88%)

Sainik School Sujanpur Tira, Hamirpur ,HP (Class 10 th) — **2017**
Central Board Of Secondary Education (CGPA: 10)

Skills And Interests

- **Languages**: Python · C
- **Areas of Interest**: Natural Language Processing · Generative Modeling · Data Science · Computer Vision
- **Technologies & Platforms**: · Pytorch · Keras · openCV · FastAI · Git · Linux Shell · Web Scraping

Projects

Automated Headline and Sentiment Generation for multi-lingual and code-mixed data — **March 2021**
- Built a binary classifier to identify tweets/articles belonging to Mobile-Tech theme
- Built an Aspect Based Sentiment Analysis model to extract sentiments associated with each individual brand mentioned in a tweet/article
- Exposure: TF-IDF · Transformers · mBERT · Subword Tokenizers · PyTorch

Automated License Plate Reader — **Apr 2021**
- Noise removal, histogram equalization and perspective transform to account for irregularities in image
- Rule based character segmentation using contours and used a CNN classifier to identify labels for the segmented characters
- Exposure: openCV · CNN · Keras

Google Quest Challenge — **February 2021**
- Built model to predict ratings for subjective aspects (like #question_asker_intent_understanding) of question answering on StackExchange Q&A pairs
- Used MLP on BERT-Embeddings, tried different schedulers and differential learning rates
- Exposure: Transformers · PyTorch · PyTorch Lightning

Simultaneous Multitasking Agent — **Dec 2020- Jan 2021**
- Conducted a sweep of experiments and explored the use of Deep Reinforcement Learning for simultaneous activity by robots in a group of four as part of Robotics Research Group (RoboReG) IIT BHU
- open sourced the openai gym environment built with PyBullet simulator
- Exposure: Stable Baselines · Autoencoders · RL

Technical Experience

Data Analysis Intern at Shot sports Analysis — **10 Sep- 9 Nov 2020**
- Wrote python scripts for Data Wrangling and pipelines
- Performed web scraping using bs4 and automated process using selenium

Achievements / Extra Curricular Activities

Inter IIT Tech Meet 2021 — **March 2021**
Represented the college in InterIIT Tech Meet 9.0 and our team bagged a **Silver Medal** in Bridgei2i's Automated Headline and Sentiment Generation **NLP** event

ShARE I-Batch presentation — **January 2021**
Finished among **Top 4** teams in Asia Inter-College consulting presentation competition organized by ShARE org on the topic 'Can e-Learning help speed up education revolution in developing countries?'

Hult Prize Regional Finalists — **Dec 2020**
Our team, The Scientists, bagged **3 rd position** in the campus round and presented our idea at Asia conference for the social entrepreneurship event organized by HULT prize foundation on the theme 'Food for Good'

Hobbies & Interests:
Reading fiction novels & animations · Music · Basketball