Animesh Singh Chouhan

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EDUCATION

Qualification	University	Institute	Year	CGPA/ %
B.Tech	IIT Kharagpur	IIT Kharagpur	2021	8.40
Intermediate(AISSCE)	CBSE	Delhi Public School, Ranchi	2017	94.6 %
Matriculation(AISSE)	CBSE	Surendranath Centenary School	2015	10.00

SCHOLASTIC ACHIEVEMENTS

- **Letter of Appreciation** from the Principal, SNCS Ranchi for the performance in **class X**
- **Letter of Appreciation** from the Principal, DPS Ranchi for the performance in **class XII**
- Secured an All India Rank of **1456** in **JEE Mains**, 2017 among **1.4 million** candidates
- Secured an All India Rank of **5493** in **JEE Advanced**, 2017 among **0.2 million** candidates
- Awarded **Kishore Vaigyanik Protsahan Yojana (KVPY)** Fellowship by **DST, Government of India**
- Awarded **National Talent Search Examination (NTSE)** Fellowship by the **NCERT, Government of India**
- Awarded **Certification of Merit** in **NSEC** for being placed in State-wise **top 1% out of 494 candidates** by **IAPT**
- Awarded **President of India Silver Medal** for **best performance** in the department at **IIT Kharagpur**

EXPERIENCE

Software Engineer | JPMorgan Chase & Co. **July 2021 - Present**

- Started out as a Software Engineer

Summer Intern | JPMorgan Chase & Co. **June 2020 - July 2020**

- Built a webapp to help the **deaf and mute people** communicate using the **Indian Sign Language(ISL)**
- Used **Flask** and **OpenCV** for backend, **React** for frontend and **Tensorflow** for machine learning pipeline

SDE Intern | Trell Experiences Pvt. Ltd. **May 2019 - July 2019**

- **Comment Filter and Tagger** *[https://github.com/animesh-chouhan/comment-filter]*
  ➔ Developed a comment filter using **dictionary based filter** to flag profanity, spam and offensive content
  ➔ Used **VADER: A Parsimonious Rule-based Model for Sentiment Analysis** Hutto, C.J. & Gilbert, E.E. (2014) for filtering negative comments and sentiment analysis
- **YouTube Comment Scraper** *[https://github.com/animesh-chouhan/yt-comment-scraper]*
  ➔ Developed a scraper which scrapes **all comments** from **all videos** present in a YouTube channel
  ➔ Used **Puppeteer**, a headless browser to overcome pagination and **ytcomments** comment API

Kharagpur Robosoccer Students Group | IIT Kharagpur **Mar 2018 - June 2018**

- KRSSG works on building autonomous bots and participating in events like F.I.R.A. World Championship
- Built a **PID Demonstrator** using **L293D motor driver** and **Arduino** as a part of the qualification task

Team KART | IIT Kharagpur **Sept 2017 - Jan 2018**

- As a trainee at Team KART, I worked on the electronics subsection and studied the uses and working principles of various sensors present in an automobile

Winter Workshop | IIT Kharagpur **Nov 2017 - Dec 2017**

- Completed Autonomous Robotics workshop (**IEEE Certified**) organised by Technology Robotix Society
- Designed and built an **IoT enabled** bluetooth controlled colour detection bot using **Arduino** and **ESP8266**

PROJECTS

Astria: Intelligent Search Engine for Lawyers and Common people **Mar 2019 – Apr 2019**

- Built a **web-based platform** where users can search for relevant cases based on different criteria: Keyword, Acts, Title as well as natural language queries
- **Semantic search** for queries based on natural language using Google's Pre-trained **NLP Model BERT**
- The backend was developed using mainly **Flask** and a database linked to the frontend using **AJAX**
  Source Code: https://github.com/LLRHall/Astria

Image Processing Term Project **Aug 2018 – Nov 2019**

- Implemented the research paper on Single Image Haze Removal Using **Dark Channel Prior**, by Kaiming He, Jian Sun, and Xiaoou Tang, in CVPR 2009 (Oral, Best Paper Award)
- Used **OpenCV** library to estimate the Transmission and to obtain haze-free images.

Kharagpur Winter of Code(KWoC)

- Built a visualizer for **Facebook-archive** which is an **open source project** written in python to help visualize and analyze Facebook's archive data
- Added a feature to enable the users to plot their location history using the Facebook location history data
  Source Code: https://github.com/kaustubhhiware/facebook-archive

PROJECTS

Wordle Solver

- Wrote a python script to solve a popular word game **Wordle** automatically
- Implemented it using **pyppeteer** a python port of **puppeteer** chrome browser automation library

Source Code: https://github.com/animesh-chouhan/wordle-solver

VCF Creator

- Wrote a python package to ease the process of **importing and saving large contact lists** from spreadsheets
- Published the package to **PyPI** and also implemented **CI/CD** using **Travis** and Code Coverage using **CodeCov**
- Successfully implemented the project with the help of fellow batchmates in LLR Hall of Residence

Source Code: https://github.com/animesh-chouhan/vcf-creator

VCF Creator Web Interface

- Built a webapp to act as the frontend for **VCF Creator** python package
- Used **Flask** for backend and **Bootstrap** for frontend and deployed it to **Heroku**

Website: https://vcf-creator.herokuapp.com/

Youtube Playman

- Wrote a **bash script** which **downloads youtube music playlists** and also **automatically updates** them
- Built With **youtube-dl**: a command-line program to download videos from YouTube

Source Code: https://github.com/animesh-chouhan/youtube-playman

C++ Documentation Printer

- A python script to scrape the **C++ documentation** website and generate printable **PDF documents**
- Used **Requests, WeasyPrint** and **BeautifulSoup4** packages to write the script

Source Code: https://github.com/animesh-chouhan/cpp-docs-printer

My Health Check App

- Built a webapp to detect **heart rates** using a **webcam**
- Used **Flask** and **OpenCV** for backend and deployed it to **Heroku**

Source Code: https://github.com/animesh-chouhan/myhealthcheck

TECHNICAL SKILLS AND EXPERTISE

Programming Languages: C, C++, JavaScript, Python, Bash
Platforms: AVR, Arduino, STM32, RasPi, NodeMCU, ESP32
Software Tools/Packages: Git, Flask, Docker, Jupyter Notebook, SolidWorks, Atmel Studio, LTspice
Online Courses: Control of Mobile Robots (Georgia Tech), Introduction to Marketing (University of Pennsylvania)
Courses: Image Processing, Design and Analysis of Algorithms, Thermodynamics, Economics, Hydrostatics and Stability

EXTRACURRICULAR ACTIVITIES

National Service Scheme(NSS)

- Volunteered in the annual winter camp (2017) alongside 500 volunteers.
- Co-oriented with a team of 27 responsible for construction and repair of village roads.
- Conducted monthly surveys about healthcare and financial condition in the village.
- As an active volunteer of the IIT Kharagpur Wing of the NSS, our team has been working diligently to improve the lives of villagers in Kharagpur.

Case Studies

- **Second runner-ups** in the **Uber Scale It Case Challenge** organized by **Entrepreneurship Cell, IIT Kharagpur**
- Analyzed the Furniture Industry in **Indian Case Challenge 2019** organized by **Business Club, IIT Kharagpur**
- **Bronze medal** in **Open IIT Case Study 2018** organized by **Technology Students Gymkhana, IIT Kharagpur**
- **Silver medal** in **General Championship Case Study 2019** organized by **Technology Students Gymkhana, IIT Kharagpur**
- **Bronze medal** in **General Championship OpenSoft 2019** organized by **Technology Students Gymkhana, IIT Kharagpur**