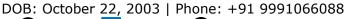


# **ARNAV SINGH**

Roll Number: 2021019 | Email: arnav21019@iiitd.ac.in











## **Education**

Indraprastha Institute of Information Technology, Delhi

B.Tech(CSE) | 2021-2025

(till 6<sup>th</sup> Semester)

SGMS, Delhi

CBSE, Grade 12, PCM + P.E. | 2019-2021

Percentage: 89

CGPA: 7.24

### **Work Experience**

**Indian Oil Corporation Limited** (Summer Intern)

(May,24 - July,24)

Guide: Mr. A.P. Verma, DGM (Strategic Information Systems)

- Part of the High Impact Analytics team for **Project i-Drive** where I used **Qlik Sense** to create dashboards and support decision-making processes, along with consultants from PricewaterhouseCoopers
- Identified 4 critical areas for optimization in the E2E analysis for the e-tender system and conducted **Google Lighthouse**-based audits. **Link to the Certificate**

CloudLabs IIIT Delhi (Software Development Intern)

(Jan, 24 - May, 24)

Guide: Dr. Sumit J. Darak, Dean of Academic Affairs, IIIT Delhi

- JSON Handling and Database Management (Python, SQL, Gspread): Refactored existing code to resolve JSON parsing errors in query submissions and incorrect database calls, reducing system crashes by over 50%.
- Computer Vision (OpenCV) Engineered a live video streaming system utilizing 12 cameras and integrated it with a frontend server and a low-level control program.
- Received funding from the Ministry of Science and Technology under the Prayas scheme and obtained a patent under IoT and hardware-software interaction 2024 Link to the site

### **Projects**

## **Hate Speech Implication Generation**

(Jan, 24 - May, 24)

Guide: Dr. Md. Shad Akhtar, Assistant Professor, IIIT Delhi

Team Size-4

- Implemented tokenization, lemmatization, and vectorization for preprocessing and feature extraction, using LIME for model interpretability on a dataset of 150,000 annotated posts.
- Successfully utilized evaluation metrics, including BLEU, ROUGE-L, and BERTScore, to assess the quality of generated stereotypes, demonstrating effective model performance and text generation capabilities.
- Developed a comprehensive method to detect hate speech using SVM, XGBoost, BERT, GPT-2, and T5. (BERTScore: 0.88) Link to the Repository

# **Geo-Localized News App using Position Sensor Fusion**

(Feb, 24 - May, 24)

Guide: Dr. Arani Bhattacharya, Associate Professor, IIIT Delhi

Team Size-1

- Utilized Kotlin, XML, View Layouts, and JSON Parsing with the News API for real-time updates and comprehensive news coverage.
- Incorporated geo-fencing and position sensor fusion to deliver region-specific news, enhancing user relevance and engagement.
  Link to the Repository

#### **End-to-End Cab Booking System**

(Jan, 23 - April, 23)

Guide: Dr. Vikram Goyal, Professor, IIIT Delhi

Team Size-1

- Used Python and Django frameworks, integrating MySQL for database management and RESTful APIs for seamless communication.
- Implemented transaction management protocols, dynamic ride booking, and fare calculation algorithms, integrating OLAP for real-time analytics and reporting. Link to the Repository

# **Positions of Responsibility**

• Philosoc IIIT Delhi | **Core Member** 

(May, 22 - Present)

o As a core member of the university's Philosophy Society, I organized over 15 events with 50+ attendees each and assisted in allocating resources with the club coordinators.

• 'Eyes\_In\_wEiRD\_Boredom' Newsletter | **Editor** 

(April,24 - Present)

o I recently assumed the role of editor in the newsletter and am currently vetting submissions for articles to be included in the first issue, slated for August 2024.

• Stack Overflow | Review Queue Moderator

(Aug,23 - Present)

o Having impacted 136,000 users on Stack Overflow, I have the privilege of moderating the review queue, daily reviewing up to 80 posts to ensure quality and relevance.

### **Awards and Achievements**

- **GRE General Test**: Scored 327/340 (0-170, V-157).
- IELTS Academic Test: Achieved an 8 Band.
- **Codeforces**: Rated 1329 as of June 2024. [Arnav.Singh]
- IBM Quantum Challenge 2024: Completed the challenge with an 'Advanced' flair.
- IIIT Delhi Wikiracing Contest 2024: Ranked 1st in the university
- ICAR AIEAA 2021: Ranked 3rd out of 1,22,993 participants.

#### **Interests and Hobbies**

- I have been an amateur tennis player for 10+ years and participated in multiple district-level competitions, which helped develop perseverance and teamwork.
- I regularly help organize reading sessions to analyze articles from The Spectator and The Washington Post; honed critical thinking and communication skills.
- I am pursuing a minor in economics. As part of this minor, I worked under former National Statistical Commission member Prof. JV Meenakshi to study the causal relationship between GDP and 13 groundwater quality indicators from 2000 to 2016. Link to the study

Declaration: The above information is correct to the best of my knowledge.

**ARNAV SINGH** Date: July 5, 2024