

# SHREEYA SINGHAL

# Indian Institute of Technology Kharagpur

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		EDUCATION	
Year	Degree/Exam	Institute	CGPA/Percentage
2026	Dual Degree(B.Tech + M.Tech), Electronics and Electrical Communication Engineering	Indian Institute of Technology Kharagpur	8.8/10
2021	Class XII, CBSE	Sachdeva Public School, Pitampura, New Delhi	97.8%
2019	Class X, CBSE	Sachdeva Public School, Pitampura, New Delhi	96.2%
		PROIECTS	

### **Digit Recognizer using CNN**

- Developed a digit recognition model using CNNs on the MNIST dataset. Utilized label encoding, normalization, ReLU activation, max pooling, and dropout regularization and also used RMSprop optimizer for optimizing the model.
- o Achieved a peak accuracy of 98.75% with a two-layered architecture, 32 units per layer, and a dropout rate of 0.25 and kernel seize of 5x5.
- o Implemented data augmentation to expand the dataset and built a confusion matrix for evaluating the model's performance on the test data.

#### **Text Summarizer using NLP**

- o Developed an advanced text summarizer using various libraries, including NLTK, NumPy, and NetworkX, along with diverse NLP techniques.
- The model utilizes sentence tokenization and vectorization, calculating cosine similarity between sentences to create a similarity matrix.
- o By removing stop words and ranking the sentences, it generates a concise summary by selecting the top 5 most relevant sentences.

### **Google Stock Prize Prediction using RNN(Recurrent Neural Network)**

- o Developed an LSTM-based RNN model using Keras and TensorFlow, exhibiting strong accuracy in forecasting future Google stock prices.
- Implemented advanced techniques, including meticulous feature scaling, a carefully chosen timestamp of 60, and thoughtfully applied dropout regularization, all aimed at optimizing the model's performance and effectively combating overfitting.
- o Demonstrated the model's efficacy by visualizing and comparing predicted versus actual stock prices for the year 2017 using matplotlib.

#### **INTERNSHIPS**

#### **Data Analyst | NoQs Digital**

January'2023 - April'2023

- o Developed Django project for candidate selection, generating certificates and letters, and automating email notifications using SMTP library.
- Created insightful dashboards in spreadsheets to track and analyze important internship data to support informed decision-making.
- o Proficient in database management, template customization, and collaborating across teams to deliver comprehensive internship solutions.

### **SKILLS AND EXPERTISE**

- o **Programming Languages:** C/C++/Java, Git, Python, HTML, CSS, Javascript, R
- o **Softwares:** MATLAB/Simulink, LTSpice, TINA TI, FreeCAD, MATLAB Programming, Arduino
- o Frameworks and Libraries: Django, Node, js, React. js, Numpy, Bootstrap, Pandas, Matplotlib, TensorFlow, Keras, CNN, RNN, ANN, scikit-learn

### **COURSEWORK INFORMATION**

- Analog Electronic Circuits
- Network Theory
- Programming and Data structures
- Signals and Systems
- o Linear Algebra and Optimization

- Semiconductor Devices
- Probability and Statistics
- Advanced Calculus
- Digital Circuit Electronics
- Systems and Controls

### **POSITIONS OF RESPONSIBILITY**

### Associate Manager | Entrepreneurship Cell, IIT Kharagpur

December'2022 - May'2023

- o Developed the website for Global Entrepreneurship Summit 2023, an initiative by E-Cell, IIT Kharagpur using DJANGO REST framework.
- o Managed database of 3000+ participants for Entrepreneurship Cell, IIT Kharagpur that participated in GES 2023 using MySQL.

## Associate Member | Entrepreneurship Cell, IIT Kharagpur

May'2022 - November'2022

- o Organized Local Startups' Meet Gurugram 2022 which is a PAN India initiative that provides startups opportunity to connect with venture firms.
- o Managed the Frontend and Backend for various websites of Entrepreneurship Cell, IIT Kharagpur using DJANGO framework. (ecell-iitkgp.org)

### **AWARDS AND ACHIEVEMENTS**

- $\circ \ \ Secured \ 984th \ place (globally) \ in \ Google \ Code \ Jam \ for \ Women \ 2022 \ and \ 3298th \ place (globally) \ in \ Google \ Code \ Jam \ 2022.$
- o Codeforces rating is more than 1400. (Codeforces handle:- https://codeforces.com/profile/shreeya\_08).
- Secured All India Rank of 3072 in JEE Advanced 2021(out of 1,72,000 candidates) and AIR 3075 in JEE Mains 2021(out of 12,00,000 candidates).
- Secured All India Rank of 706 in Kishore Vaigyanik Protsahan Yojana (KVPY SX) 2021 organized by Indian Institute of Science (IISc).
- o Qualified Regional Mathematics Olympiad 2019 which is the regional level of the International Olympiad for Mathematics from Delhi Region.

## **EXTRA CURRICULAR ACTIVITIES**

- o Stood 1st runner up in Inter IIT Sports Meet 2022 in Basketball held in IIT Delhi.
- o Played CBSE Basketball Nationals representing state Delhi in 2015-2016 and 2017-2018 and SGFI Basketball Nationals in 2016-2017.
- o Member of Grimoire of Code, IIT Kharagpur(Competitive Programming Club of IIT Kharagpur) and National Service Scheme(NSS), IIT Kharagpur.