# Ripunjay Sharma

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Degree	Board / University	Completion Year	CGPA/%	
Bachelor of Technology(B.Tech) Major in ECE; Minor in CS	Guru Gobind Singh IP University	2025	8.2/10	
Class XII	CBSE	2021	87%	
Class X	CBSE	2019	85%	

#### Internship

### Video Editor, Rising India

(July 2022-August 2022)

- Independently composed video for the occasion of Independence Day using DaVinci Resolve 18 for Rising India consisting of 100+ clips
- The video was posted on the LinkedIn Page of Rising India (44K+ followers) and Treeandhumanknot (9K+ followers) as well as Youtube
- Co-ordinated with multiple leaders to understand the requirements and delivered the video in a short span of 20 days

#### **Key Academic Projects**

#### **Neural Network Predictive Modeling:**

- Used tensorflow and tensorflow hub to build an end-to-end multi-class image classifier on unstructured data to predict dog breed
- Trained sequential neural network with 10000+ images; Evaluated the performance based on accuracy and prediction probabilities

#### **API-Based Malicious Activity Detection:**

- Used IPv4 Reputation API based on blacklist score to detect whether the IPv4 address is involved in spam/malware
- Used JSON data to detect valid IPv4 addresses and fetch corresponding blacklist score; Successful demonstration for 1000+ addresses

## Blockchain Technology using Zero Knowledge Proof:

- Developed a secure blockchain-based system that enables users to give personal details without exposing any sensitive information
- Used Fernet and RSA encryption algorithms with Zero Knowledge Proof in the backend and Voila to implement user interactive interface

#### **Hackathons**

#### **Smart India Hackathon**

- Competed with 80+ internal teams for qualification; Developed a terrain recognition model for the Ministry of Defence
- Performed comparative analysis on various architectures of convolutional neural networks with 83% accuracy through the MobileNetV2
  model

## **BVCOE Confluence Hackathon (16 hour)**

- Secured 4th Rank out of 300+ participants for prediction of future career options and respected path along with required courses
- Developed user interface using Mongodb, and ReactJS; Developed Decision Tree as challenger model for prediction

#### **BVEST Hackathon (24 hours)**

- Secured 9th Rank out of 200+ teams; Prepared prototype of an online platform for small-scale vendors to promote traditional items
- Used JavaScript, HTML, CSS, and ReactJS to create a user interface and NodeJS, and Java for backend system development

#### IEEE BVCOE Hackathon

- Competed with 70+ teams to predict the stock prices of SENSEX using a machine learning model analyzing 10000+ data points
- Developed a Long short-term memory (LSTM) model to predict stock prices with an accuracy of 87%

#### Research Paper

## Cryptographic Algorithms in Blockchain: A Comparative Analysis

- o Compared multiple cryptographic algorithms such as RSA, Fernet, and Zero-Knowledge proof in a secured blockchain network
- o Conducted comparative analysis of the algorithms based on time consumed, system power, RAM, and ROM
- Used Matplotlib to construct the bar charts and assess the performance of the algorithms under review;
- Presented the project to the blockchain expert from IIT Delhi as part of the academic event conducted by Veeyotech

# Positions of responsibility

- Conducted the college flagship hackathon as part of the core team, "EduHack"; Featured on the "Bharati News" channel and magazine
- Captain of the basketball team in Annual sports fest **Randbhumi**, with 40+ teams competing across departments; Secured 3rd position
- Led the team in the Smart India Hackathon (SIH) held at all India levels; the Project is sponsored by the Ministry of Defense.

## **Certifications / Scholastic Achievements**

## • Blockchain Course (Veeyotech)

Properties of **blockchain, bitcoin, and cryptography**, learning about encapsulation, design, implementation, and deployment Covered details about blockchain construct using Python modules such as **RSA**, **Fernet**, **and pub-sub** 

- Machine Learning and Data Science Bootcamp (Udemy)
  - Covered supervised learning techniques including regression models, classification models, and neural networks
- C++ Data Structures and Algorithms: Introduction and Data Structure course provided by Coding Ninjas

#### **Extra Curricular Activities**

- Content Creator: Owner of a YouTube channel with more than 300 subscribers on YouTube (70k + views) on 10+ videos
- Secured State Rank Six and Olympiad Rank Eleven in International Olympiad of English Language by Silver Zone
- Represented RDPS in a Donation Camp conducted for an NGO; Secured a donation of more than INR 50k
- Conducted rallies and activities for 50 students in Heritage Club every quarter along with a year-end presentation
- Won multiple Gold Medals competing with 500+ students in an athletics event organized on Annual Sports Day

#### Skills

- Programming: C, C++, Python, HTML, Java, PHP, MySql, CSS, Solidity, Matlab
- Framework / Library: Scikit-learn, TensorFlow, OpenCV, Numpy, Pandas, Heatmap, MatPlotLib
- Languages Known: Proficiency in English and Hindi, Basic German