

# Rachit Bansal

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## EDUCATION

### DELHI TECHNOLOGICAL UNIVERSITY

B.TECH (ELECTRICAL ENGINEERING)  
2022 (expected) | New Delhi, IND

### BAL BHARATI PUBLIC SCHOOL, DWARKA

CBSE CLASS XII

Percentage: 91.5 agg

### BAL BHARATI PUBLIC SCHOOL, DWARKA

CBSE CLASS X

10 CGPA

## LINKS

Github:// [RachitBansal](#)

LinkedIn:// [RachitBansal](#)

## SKILLS

### MACHINE LEARNING AND DEEP LEARNING

Natural Language Processing:

- Transformer Models • RNNs and LSTMs
- BERT and GLoVe Embeddings

Reinforcement Learning:

- Q-Learning Neural Networks • D-QNNs

Computer Vision:

- RCNNs, Fast RCNNs, Faster RCNNs
- YOLO • CNNs

Frameworks:

- Tensorflow • PyTorch • Keras • Numpy
- Pandas • Matplotlib • Scrapy • Selenium

Languages:

- Python

### FULL-STACK WEB DEVELOPMENT

Front End:

- HTML • CSS

Back End:

- GET and POST • ejs • Express

Database Management:

- MongoDB

Languages:

- JavaScript

## EXPERIENCE

### CODING BLOCKS | TEACHING ASSISTANT

MACHINE LEARNING WITH DEEP LEARNING COURSE

- BUILT PROJECTS AND COURSE QUIZZES IN COLLABORATION WITH MENTORS. - TOOK MACHINE LEARNING WORKSHOPS AND BOOTCAMPS AT UNIVERSITIES ALL OVER THE COUNTRY. - HELD UP CLASSES AND DOUBT SESSIONS FOR A BATCH OF AROUND 60 STUDENTS.

June 2019 - Present | New Delhi, IND

## PROJECTS

### IMAGE CAPTIONING BOT

 LSTMs, CNNs, Transfer Learning, Attention Model

Created an Image Captioning Bot which outputs a relevant description in response to an input image. Used various CNN Architectures and obtained the best results using Inception-Net.

### CHATBOT

 LSTMs, PyTorch, Attention Model

Made a Chatbot in PyTorch from scratch using the Cornell Movie Dialogue Dataset

### ATARI GAME AGENT USING REINFORCEMENT LEARNING

 Double Q-Learning Neural Networks, CNNs, OpenAI-Gym

Made a Python Game Agent which beats the average human performance score on various Atari Games.

### TEXT AND NOVEL GENERATOR

 RNNs, GLoVe

A model that returns text of a specified word count and writing style, given textual data of a particular writer. Used Recurrent Neural Networks.

### NUMBER PLATE RECOGNITION AND TEXT EXTRACTION

 CCA, SVC, OpenCV, Firebase

A model which uses Connected Component Analysis (CCA) and Support Vector Classifier (SVC) to extract the digits on a Number Plate which is further uploaded to Google Firebase to be used in an android application that monitors the vehicle activity in a parking lot. Created at IIT-Delhi's Paytm Hackathon, 2019.

## POSITION OF RESPONSIBILITIES

### CO-FOUNDER

Code To School, an initiative wherein our team collaborates with schools across the country and teach high school students various programming languages and computer science skills.

### CO-VICE PRESIDENT

D-CODER, The Official Technical Society of DTU

### CONTENT HEAD

Sahitya, The Literary and Debating Society of DTU