

# Amratanshu Shrivastava

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## EDUCATION

### BITS PILANI

B.E. (HONS.) IN COMPUTER SCIENCE

Jul 2021 | Pilani, Rajasthan

GPA: 7.54/10.00 (after 7 semesters)

### CLASS XII | HIGH SCHOOL

DELHI PUBLIC SCHOOL

CBSE Board | Ahmedabad, India

95.6% - in top 0.1% of candidates

## LINKS

Github:// @amratanshu

LinkedIn:// @amratanshu

## COURSEWORK

### UNDERGRADUATE

Data Structures and Algorithms

Object Oriented Programming

Operating Systems

Computer Networks

Database Systems

Compiler Construction

Information Retrieval

Image Processing

Principles of Economics

(Teaching Assistant for over 900 sophomores)

## SKILLS

C • C++ • Python • Javascript

Tensorflow • Keras

NodeJS • ReactJS

Familiar:

Java • Assembly • Prolog

MongoDB • GraphQL

## ACHIEVEMENTS

Final round - Microsoft CodeFunDo 2019

All India Rank 5530 - JEE Advance 2017

All India Rank 5365 - JEE Main 2017

(more than 10,00,000 candidates)

BITSAT 2017 - 388/450

## CO-CURRICULAR

Member - Photography Club

Marketing Associate - TEDx BITSPilani

## EXPERIENCE

### ROBERT BOSCH RESEARCH AND TECHNOLOGY CENTRE (RBEI)

| NLP RESEARCH INTERN

Sept 2020 - Present | Bangalore, India

- Working under Mr. Rao Rajesh N, head of Text Analytics Group, RBEI on Semantic Cleansing
- Optimising the current Semantic Cleansing technique by reducing the number of Word2Vec training runs required for eliminating irrelevant sentences
- Developing a novel Word2vec algorithm where certain anchor terms can be infused within the context window during the calculation of word vectors to mark relevant sentences
- Observing results on a web-complaint database in the automobile domain by NHTSA
- Tech Stack - Python, Tensorflow, Keras

### SERVICENOW IDC | PLATFORM ENGINEERING INTERN

May 2020 - June 2020 | Hyderabad, India

- Developed Social Media Analytics tools for Instagram and Youtube aimed at SMBs
- Made several workflows to automate tasks on the ServiceNow Platform using Facebook Graph/Youtube APIs
- Offered FTE (Full Time Employee) role based on performance
- Work featured on ServiceNow [Blog://interns-launch-new-app-from-home](#)
- Tech Stack - Javascript (RhinoJS Engine, REST APIs)

## PROJECTS

### FILE TRANSFER SYSTEM | COMPUTER NETWORKS - CS F303

- Built a file transfer system to upload a file from client to server
- Incorporated Multi-Channel Stop-and-Wait protocol
- Experimented with different packet drop rates at Receiver side while ensuring that packets are delivered in order
- Tech Stack - C, Socket Programming | Github://file-uploader

### VECTOR-SPACE IR SYSTEM | INFORMATION RETRIEVAL - CS F469

- Built a Ranked Retrieval system based on cosine scores between documents and search queries
- Two improvements were implemented - considering only high idf terms and rigorous multiple-word query checking
- Tech Stack - Python, NLTK | Github://Vector-Space-Model

### REVIEW PAPER | INFORMATION RETRIEVAL - CS F469

- Wrote a review of the paper "Compositional Vector Space Models for Improved Bug Localization" (2014 IEEE International Conference on Software Maintenance and Evolution)
- Github://review-paper

### CUSTOM COMPILER | COMPILER CONSTRUCTION - CS F363

- Built a compiler for a custom language (ERPLAG) consisting of lexer, parser, AST Generator, Semantic Analyzer and Type Checker.
- Tech Stack - C | Github://toy-compiler