

# AMAN JAIN

Third Year Undergraduate - Civil Engineering  
Indian Institute of Technology Kanpur

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## ACADEMIC QUALIFICATIONS

| Year           | Degree           | Institute                             | Performance |
|----------------|------------------|---------------------------------------|-------------|
| 2019 - Present | B.Tech Civil     | Indian Institute of Technology Kanpur | 7.6/10      |
| 2019           | Class XII (CBSE) | DAV Public School, Kota               | 92.8%       |
| 2017           | Class X (CBSE)   | DAV Public School, Kota               | 10/10       |

## ACADEMIC ACHIEVEMENTS

- Received **Summer Undergraduate and Graduate Excellence (SURGE) fellowship** among **200 students** across **India** in **2021**
- Secured **All India Rank 3812** in **JEE Advanced 2019** among the 0.2 million shortlisted candidates
- Secured a position in the **top 1%** in **JEE Mains 2019** among 1.2 million aspirants

## WORK EXPERIENCE

### SURGE IIT Kanpur | Yoga Recommendation System

June'21 – Ongoing

With **Prof Veena Bansal**, Department of Industrial & Management Engineering, IIT Kanpur

- Worked in a team and developed an **ML-Based Recommendation System** for yoga asanas based on user's medical conditions
- Designed the **Relational Database Schema** for storing asanas & other medical details and implemented it using **MySQL**
- Created a fully functional website using **HTML**, **CSS** & **JavaScript** for the frontend and **Laravel** for the backend
- Built a **DL Model** using **Tensorflow** that recommends top 5 asanas based on medical conditions with an accuracy of 87% on training set

## PROJECTS

### Stock Price Prediction | 🌐 amanjain252002/Stock-Price-Prediction

March'21

Self Project

- Implemented an **LSTM Model** to predict the stock prices of Apple, Google, Tesla, Microsoft and Amazon for the following week
- Web Scraped stock price data using **Selenium** and **BeautifulSoup** and performed exploratory data analysis
- Utilized **ARIMA** for baseline predictions and improved them using **Deep Learning**, which reduced **RMSE by 30%** on average

### Escaping The Caves

Jan'21 - May'21

Course Project under **Prof Manindra Agrawal**

- Decrypted **classical ciphers** such as **Substitution** & **Permutation Ciphers** using frequency analysis methods
- Studied and designed **chosen plain-text attacks** on weaker forms of **modern cryptographic methods** such as **DES** and **EAEAE**

### Model Zoo | 🌐 pclubiitk/model-zoo

May'21 – Ongoing

Programming Club, IIT Kanpur

- Studied and implemented **Deep Learning Models** using **PyTorch** and **Tensorflow** from research papers
- Models include **ResNet34**, **Inception-V1** and **Inception-V3** for Image Classification and **ESRGAN** for Super-Resolution

## TECHNICAL SKILLS

**Programming:** Python, C++, C

**Machine Learning:** Tensorflow, PyTorch, Pandas, Scikit-Learn, Matplotlib, NumPy

**Development:** Laravel, PHP, JavaScript, MySQL, HTML/CSS

**Miscellaneous:** BeautifulSoup, Selenium, L<sup>A</sup>T<sub>E</sub>X

## RELEVANT COURSEWORK

\*: COURSERA

Modern Cryptology  
Deep Learning Specialization\*  
Real Analysis

Fundamentals of Computing  
Linear Algebra & ODE  
Partial Differential Equations

Natural Language Processing Specialization\*  
Applied Probability and Statistics  
Introduction to Political Philosophy

## POSITIONS OF RESPONSIBILITY

### Secretary, Entrepreneurship Cell, IIT Kanpur

May'20 - April'21

- Worked as a part of the **Business Development team** in conducting various workshops and events
- Assisted in the organization of the first edition of **Entrepreneurial Extravaganza - India's biggest virtual event (8000+ footfall)**
- Co-organized the first edition of **Entrepreneurial Bootcamp** with the participation of over **500+ enthusiasts**

## EXTRA-CURRICULAR ACTIVITIES

- Built an **ornithopter** in **Aeromodelling Club's** event in **Takneek'19**, the Intra-IITK Science and Technology Championship
- Participated in **Photography Club's** event in **Galaxy'20**, the Intra-IITK Media and Cultural Championship