# AMAN JAIN

Junior Year Undergraduate - Civil Engineering Indian Institute of Technology Kanpur

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## **EDUCATIONAL QUALIFICATIONS**

Year	Degree	Institute	Performance
2019 - Present	B.Tech Civil	Indian Institute of Technology Kanpur	7.61/10
2019	Class XII (CBSE)	DAV Public School, Kota	92.8%
2017	Class X (CBSE)	DAV Public School, Kota	10/10

#### SCHOLASTIC 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 All India Rank 8898 in JEE Main 2019 among the 1.2 million aspirants

#### WORK EXPERIENCE

## SURGE IIT Kanpur | Yoga Recommendation System 🗘

Jun 2021 - Aug 2021

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 and user details and implemented it using MySQL
- Created a website using HTML, CSS and JavaScript for the frontend and Laravel for the backend
- Built an NLP Model using Tensorflow that recommends the top 5 asanas with an accuracy of 87%

#### **PROJECTS**

Stock Price Prediction () Mar 2021

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

## Model Zoo 🗘

*May* 2021 – *July* 2021

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

## **Escaping The Caves**

Jan 2021 - May 2021

Course Project under Prof Manindra Agrawal

- Decrypted classical ciphers such as Substitution and 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

#### 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, Git, LATEX

#### 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 2020 - Apr 2021

- 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