| EDUCATIONAL QUALIFICATION |                              |                                       |           |  |
|---------------------------|------------------------------|---------------------------------------|-----------|--|
| Year                      | Degree                       | Institution                           | Score     |  |
| Present                   | B.Tech. Chemical Engineering | Indian Institute of Technology Kanpur | 7.6 CPI   |  |
| 2017                      | AISSCE                       | Nalanda Academy, Kota                 | 85.4%     |  |
| 2015                      | AISSE                        | S.R. Public School, Kota              | 10.0/10.0 |  |

### SCHOLASTIC ACHIEVEMENTS

| •  | Achieved a percentile of <b>99.1</b> all over India in JEE-MAINS, (more than 1.2 million candidates)              | 2018 |  |
|----|---|------|--|
| •  | Attended VIJYOSHI CAMP, mentored by Nobel Laureates, conducted by IISc Bangalore                                  | 2016 |  |
| •  | Awarded Kishore Vaigyanik Protsahan Yojana (KVPY) Fellowship, DST, Government of India                            | 2015 |  |
| •  | Achieved <b>11th rank</b> in Indian National Earth Science Olympiad, Geological Society of India, Govt. of India. | 2015 |  |
| •  | National Talent Search Examination (NTSE) first stage qualified, NCERT, Government of India                       | 2015 |  |
| PR | PROJECTS  |      |  |

### PROJECTS

- Text Based Analysis of Financial Constraints (Prof. Suman Saurabh, IME Department, IIT Kanpur)
- Jul'20- Ongoing
- Explored about the Financial Constraints and methods to analyse financial constraint index using cosine similarity
- Used NLP techniques like Tokenisation, Lemmatisation, processed over 400 machine-readable annual reports of firms
   Differentiated between equity, debt, private-placement focused delay of investment by finding specific words in data
- Stock Price Prediction using LSTM network (Self Project)

Jun'20-July'20

- Optimised an LSTM network to predict stock prices using Convolutional 1D layer, Bidirectional LSTM and Dense Layers
- Improved the mean absolute error form 0.94 using only LSTM network to 0.66 working of seven years of data
- RNA Gene Expression Data Analysis using PCA (Self Project)

Jun'20-July'20

Dec'19-Jan'20

- Identified the Adenocarcinoma tumour and removed Neuroendocrine tumour using PCA(Principal Component Analysis)
- Applied K-Means Clustering algorithm to analyse the effect of different variables in dataset on patient's histology
- Trading Strategies & Backtesting (Sachin Angural, Finance Discussion Group, IIT Kanpur)
  - Learnt about various strategies like Momentum & Pairs Trading, various KPIs and Technical Indicators
  - Using historical data, formulated strategies to optimise a portfolio by backtesting using Python
- Website Dev. of Chemical Engineering Dept. (Prof. Rahul Mangal, Chemical Engineering, IIT Kanpur)

  Aug'19-Feb'20
  - Revamped existing Website of Department of Chemical Engineering, IIT Kanpur using HTML and CSS
  - Designed the Front-End keeping in mind the user interactivity with website and hence improving user experience

### **TECHNICAL SKILLS**

Programming: C, C++, Python, MATLAB, R Databasing: MySQL Utilities: Git, AutoCAD, HTML, CSS, Javascript, MS-Excel

| RELEVANT C                 | LEVANT COURSES *online courses   |  |
|----------------------------|--|--|
| Chemical                   | Chemical engineering Thermodynamics, Fluid Mechanics, Process Calculations   |  |
| Engineering                | Computational Methods in Programming, Manufacturing Processes (I and II), Introduction to Electronics  |  |
| Others                     | Fundamentals of Computing, Linear Algebra & Differential Equations, *Practical Time Series Analysis, *Mathematics for ML, *Sequence Models, *NLP in TensorFlow, *Equity Portfolio Management |  |
| POSITION OF RESPONSIBILITY |  |  |

# Coordinator, Finance & Analytics Club (2020-21)

| Leadership  | <ul> <li>Lead a team of 25 members, managed FB group of 2.1K members &amp; a budget of 95K to promote finance</li> <li>Conducted projects, discussion talks, seminars and workshops on various fields in finance and analytics</li> </ul>  |
|-------------|--|
| Initiatives | <ul> <li>Organised month long workshop on Algo Trading, ML in Finance &amp; Derivative Markets, 600+ participated</li> <li>Organised five, 2-month long summer projects on various innovative methods and techniques in finance</li> </ul> |

# **Student Guide, Counselling Service Team** (2019-2020)

- Guided and mentored 4 freshman students in acclimatising to the environment of the institute
- Successfully organised Orientation Program for **900+ freshmen** working in a team of **175 student guides Badminton Secretary, Games & Sports Council** (2019-2020)
- Conducted two badminton leagues and one inter hostel tournaments to promote badminton in the campus

# **EXTRA CURRICULARS**

- Won a Silver Medal at inter hall badminton competition (Inferno), 2019
- Active member of campus badminton team which represents IIT Kanpur at Inter IIT sports meet
- Current #1 on leaderboard in Equity Portfolio Management competition AlphaBeta League conducted by AlphaBeta
- Completed Hacktober Fest 2019, created plugin for personal assistant for macOS/LINUX telling user's current location