SHUBHAM GUPTA

Junior Undergraduate | Department of Chemical Engineering
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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

- 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 **11th rank** 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

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*
  - 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*) *Dec'19-Jan'20*
  - 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 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	• Lead a team of **25 members**, managed FB group of **2.1K members** & a **budget of 95K** to promote finance • Conducted projects, discussion talks, seminars and workshops on various fields in finance and analytics
Initiatives	• Organised **month long workshop** on Algo Trading, ML in Finance & Derivative Markets, **600+ participated** • Organised **five, 2-month long summer projects** on various innovative methods and techniques in finance

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