

SHUBHAM GUPTA

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EDUCATIONAL QUALIFICATION			*after 6th semester
Present	B.Tech. Chemical Engineering	Indian Institute of Technology Kanpur	8.2* CPI
2017	AISSE	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 (KVPPY) Fellowship, DST, Government of India			2015
• Achieved 11th rank in Indian National Earth Science Olympiad, Geological Society of India, Govt. of India.			2015
• Attended Training Camp of Indian National Earth Science Olympiad, Geological Society of India, Govt. of India			2015
PROJECTS			

- **Code-Mixed Text Generation using Genetic Algorithm** (Prof. Mayank Singh, CSE Dept, IIT Gandhinagar) Sept'20-Ongoing
 - Adapted with the state-of-the-art technologies used in **Sentence Simplification** to later work on code-mixed data
 - Utilised Grammar Correction Model, Sentence alignment tool and LaBSE(sentence embedder) to run the algorithm
 - Improved evaluation metrics like WER, TER, NIST, and BLEU score comparing to the baseline experiments
- **Text-Based Analysis of Financial Constraints** (Prof. Suman Saurabh, IME Department, IIT Kanpur) Jul'20-Aug'20
 - Objective was to quantise **Financial Constraints** and study its impact on small-cap companies in Indian market
 - 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
- **Portfolio Optimisation using Markowitz Model** (Prof. Suman Saurabh (Course Project), IME Dept, IIT Kanpur) Feb'21-Mar'21
 - Identified the distribution and time-series char. of NIFTY50 data using **Shapiro Wilk Test** and **Chi-Square Statistics**
 - Created a **Markowitz Portfolio** to give weights to these stocks and generated the **Efficient Frontier** for the stocks
 - Used **SML** to determine under/overpriced stocks, built a portfolio based on **Sharpe Ratio**, currently testing it virtually
- **Stock Price Prediction using LSTM network** (Self Project) Jun'20-Jul'20
 - Optimised an LSTM network to predict stock prices using Convolutional 1D layer, Bidirectional LSTM and Dense Layers
 - Improved the mean absolute error from **0.94** using only LSTM network to **0.66** working on seven years of data
- **Website Development of Chemical Engineering Dept.** (Prof. Rahul Mangal, CHE Department, IIT Kanpur) Aug'19-Feb'20
 - Revamped existing **Website of Department of Chemical Engineering**, IIT Kanpur using HTML, CSS and Javascript
 - 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	
Engineering	Data Structures & Algorithms, Financial Engineering, Introduction to Electronics
Others	Fundamentals of Computing, Linear Algebra & Differential Equations
Online	Mathematics for ML, Sequence Models, NLP in Tensorflow, Equity Portfolio Management

POSITION OF RESPONSIBILITY

Coordinator, Finance & Analytics Club (2020-21)

Leadership	<ul style="list-style-type: none">• Lead a team of 25 members, managed FB group of 2.6K members & a budget of 95K to promote finance• Conducted projects, discussion talks, seminars and workshops on various fields in finance and analytics
Initiatives	<ul style="list-style-type: none">• 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 Nominee, Department Undergraduate Committee, Chemical Engineering (2020-2021)

- Advised students about their curriculum and monitored progress of academically weak students of the department

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**

EXTRA CURRICULARS

- Won a **Silver Medal** at inter hall badminton competition (Inferno), 2019
- Completed **Hacktober Fest 2019**, created plugin for personal assistant for macOS/LINUX telling user's current location