

## EDUCATIONAL QUALIFICATION

Year	Degree/Certificate	Institute	CPI/%
2018 - Present	B.Tech. Chemical Engineering	Indian Institute of Technology Kanpur	8.2
2017	AISSE	Nalanda Academy, Kota	85.4%
2015	AISSE	S.R. Public School, Kota	10.0/10.0

## SCHOLASTIC ACHIEVEMENTS

- Awarded the **Kishore Vaigyanik Protsahan Yojana (KVPY)** Fellowship by the Department of Science and Technology, GOI
- Achieved an **All India Rank 11** in **Indian National Earth Science Olympiad** conducted by Geological Society of India, GOI

## INTERNSHIP EXPERIENCE

**ZEVI.AI | NLP Engineer Intern | *Advanced AI Team*** **July'21-Ongoing**

<b>OBJECTIVE</b>	• Construct an <b>In-Site search engine</b> solving the <b>conversion problem</b> (increase purchases) for online shopping
<b>STRATEGY</b>	• Accessed user search & store product data of several stores with <b>210-450 variables</b> for <b>exploratory data analysis</b> • Developed <b>ngram</b> queries & labels, embedded them using transformer & tracked <b>10+ ML</b> models for classification • Moved classification search to <b>AWS-Lambda</b> & created <b>autocomplete</b> & <b>spell-checker</b> modules to enhance search
<b>RESULTS</b>	• Reduced <b>latency</b> by over <b>70% to &lt; 200 ms</b> . Improved the <b>test accuracy</b> for machine learning model by over <b>60%</b>

## RESEARCH EXPERIENCE

**Genetic theory of code-switch evolution** (*Prof. Mayank Singh, CSE Dept., IIT GN*) (*Publication awaited*) **Sept'20-Ongoing**

<b>OBJECTIVE</b>	• Generate <b>code-mixed sentences</b> using English and corresponding Hindi sentences using <b>Genetic Algorithm</b>
<b>STRATEGY</b>	• Formulated initial population of <b>19780 code-mixed sentences</b> by <b>transliteration (Devanagari to Roman)</b> & switch • Translation for <b>mutation</b> were incorporated using <b>googletrans</b> , <b>crossover</b> was implemented using a <b>word-aligner</b> • Operated the GA over <b>100 generations</b> for each sentence, <b>LaBSE</b> transformer was used as embedder for <b>selection</b>
<b>RESULTS</b>	• <b>Perplexity</b> of our model came out to be <b>4098</b> , <b>beating the Microsoft April'21 results</b> by a difference of 52 points

**Text-Based Analysis of Financial Constraints** (*Prof. Suman Saurabh, IME Department, IIT Kanpur*) **July'20-Aug'20**

- Objective was to quantise the **financial constraints** and study their impact on small-capital companies in the Indian market
- Used NLP techniques like **tokenisation** and **lemmatisation** to process over **400+** machine-readable annual reports of firms
- Critiqued between the **equity, debt, private-placement** focused delay of investment by finding **180+ specific words** in data

## LEADERSHIP POSITIONS

**Coordinator | Finance & Analytics Club** **April'20-April'21**

<b>LEADERSHIP</b>	• Lead a <b>team of 25 members</b> , managed FB group of <b>2.6K members</b> & a <b>budget of 95K</b> to promote finance • Conducted projects, discussions, competitions and workshops on various fields in finance and analytics
<b>INITIATIVES</b>	• Executed <b>month-long workshops</b> on Algo Trading, ML in Finance & Derivative Markets with <b>650+ participated</b> • Organised <b>5 summer and 2 winter projects</b> ranging from predicting stock prices to the fundamental analysis • Administered <b>FinFest</b> with finance-related clubs of IIT B, K, D, R, G & BHU, which consisted of <b>2 workshops, 2 competitions</b> with prizes worth <b>INR 1.8 lakhs</b> & many talks by financial experts from Angel Broking, AlphaBeta • Associated with <b>10+ organisations</b> like WazirX, CareerBright, Finlatics for market simulation courses & projects • <b>"Demystified Jargons"</b> to simplify complex terms & <b>"Intuitive videos"</b> to explain historical financial episodes
<b>IMPACT</b>	• Encouraged the <b>growth of financial literacy, investing and risk management</b> amongst the campus community • Introduced a <b>Pan-IIT Crypto trading competition</b> influencing the campus community towards crypto-currency

**Student Nominee | Department Undergraduate Committee | Chemical Engineering** **April'20-Ongoing**

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

## EXTRACURRICULAR ACTIVITIES

<b>SOCIAL</b>	• <b>Student Guide:</b> Mentored <b>4 freshman</b> students in acclimatising to the environment of the institute • <b>Tech. Head, Department of Chemical Engineering:</b> <b>Designed</b> and revamped existing <b>website</b> of the dept.
<b>MANAGERIAL</b>	• <b>Secretary, Games &amp; Sports Council:</b> Scheduled, supervised & judged <b>Udghosh</b> & inter-hall badminton matches • <b>Counselling Service:</b> Coordinated orientation program for <b>900+ newcomers</b> along with a team of <b>175 student</b>
<b>SPORTS</b>	• <b>BADMINTON:</b> Won <b>2nd place</b> at inter-hall badminton competition ( <b>Inferno</b> ) at IIT Kanpur, 2019