Sourabh Suman

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Department of Chemical Engineering

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Academic Qualifications
*till 7th sem

Year	Degree	Institute	CPI/%
2018 - Present	B.Tech	Indian Institute of Technology Kanpur	6.5*
2017	Class XII (CBSE)	Chinmaya Vidyalaya, Bokaro	94%
2015	Class X (ICSE)	Mount Assisi, Bhagalpur	96.8%

Work Experience

- **QuickSell**, *Frontend Developer Intern* (*Jan'22-March'22*)
  - Setup the Chat API for **WhatsApp API** trigger to run a workflow which integrates with the **Firebase Admin** SDK API
  - Effectively performed **state management** using react hooks and redux to manage app's state in a single place and keep changes made in the app more predictable and traceable
  - Wrote and deployed **features** in collaboration with the engineering team and worked on **bug fixes** and improvements
- **KhetiPoint**, *Developer and UI/UX Intern* (*June'20-Sept'20*)
  - Setup a **schemaless** crop library on **Cloud Firestore** supporting entries in 3 different languages involving several collections and subcollections of varying complexity and **employed queries** for handling them
  - Developed and deployed an **admin portal** with secure login using **Firebase Auth**, varying level of access defined by admin roles and a user friendly dashboard allowing consistent **CRUD operations** to the crop library
  - Designed the logo and created user flows, wireframes, mockups and prototypes for the **KhetiPoint** mobile application

Key Projects

- **Sudoku-Playground** (*May'21-July'21*)
  Interactive sudoku puzzle solver with different sizes and levels. Self-Project Website Github
  - Devised a randomised **Las Vegas algorithm** and utilised diverse **hole digging strategy** with equivalent propagation to form sudoku puzzles in Javascript with varying levels of difficulty
  - Employed **backtracking algorithm** for solving the puzzles, designed an interactive interface and provided the users with an option to watch the algorithm solve the puzzle in realtime
- **Freedom-Blogging** (*March'20-May'20*)
  Designed and developed a community blogging platform as a Self-Project Website Github
  - Implemented **CRUD** functionality using **REST API** built on express framework for NodeJS with MongoDB as the database
  - Created secure user authentication with password encryption resulting in persistent sessions and facilitating user permissions
  - Ranked several blogs in the top 5 google search results with the **SEO friendly** web design
- **Sorting-Fun** (*Dec'20-Jan'21*)
  Built and deployed a comprehensive sorting visualiser as a Self-Project Website Github
  - Employed **merge sort algorithm** using an **auxiliary array** with copying data eventually saving memory and sorting huge arrays quicker than the conventional divide and conquer
  - Designed comprehensive and intuitive comparison animations for the sorting visualiser, built using **React** and **Express** and deployed on Netlify via Github

Positions of Responsibility

- **Coordinator, Fine Arts Club IIT Kanpur** (*Apr'19-March'21*)

Leadership	- Recruited and led a team of **25 secretaries** for conducting events throughout the year
	- Guided the secretaries for successful conduction of events during Fresher's Orientation and **Antaragni'19**
Management	- Collaborated with **6 IITs** to organise Inter Institute Art Competition which witnessed **270+ participants**
	- Handled an annual budget of **INR 1,00,000** for club ventures and expenditures
Achievements	- Represented IIT Kanpur and **led** the club at **Inter IIT Cultural Meet 4.0** held in IIT Bombay
	- **Led** a **digital expansion** expedition reaching a milestone of **4k+ likes** on the official club page

Technical Skills and Relevant Coursework
*online course

- **Programming Languages:** C, C++, Javascript
- **Software and Utilities:** Git, MATLAB, AutoCAD, LaTeX
- **Web Development:** NodeJS, MongoDB, React, HTML5, Express, Firebase
- **Relevant Coursework:** Fundamentals of Computing, Computational Methods in Engineering, Data Structures and Algorithms*

Extra Curriculars

Sports	- Represented and **captained** the Junior Institute Volleyball Team in **Udghosh '19**
	- Secured **Gold Medals** in 100m sprint (Track event) and Long Jump (Field Event) in the Institute Intramurals'18
Cultural	- Represented IIT Kanpur in the Inter IIT Cultural Meet '18 held in IIT Roorkee
	- Selected in the **top 10 entries** for Inter Institute Art Contest'20 among **100+ entries** from 6 participating IITs