Sanskar Sanjay Shah

Third Year Undergraduate - Department of Civil Engineering

Indian Institute of Technology Kanpur

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Academic Qualifications

Year	Degree/Certificate	Institute	CPI/%
2019 - Present	B.Tech in Civil Engineering	Indian Institute of Technology Kanpur	8.21/10.0
2019	Class XII (CBSE)	Sarvodaya Sr. Sec. School , Kota	89.8%
2017	Class X (CBSE)	St. Joseph's Convent Sr. Sec. School, Jalgaon	10.0/10.0

Scholastic Achievements

- Secured an All India Rank **4105** in **JEE Advanced-2019** examination among 2.45 lakh shortlisted candidates
- Awarded the **Certificate of Merit** by CBSE for outstanding performance comprehensively in CBSE - X examination
- Rank among top 507 students who qualified for **Regional Mathematics Olympiad**, Rajasthan region in 2017
- Conferred with **Silver Medal** - Award in **Dr. Homi Bhabha Balvaidyanik Spardha** among 50k students in 2016

Key Projects

IITK Coin   *May'21 - ongoing*

Programming Club IIT Kanpur | **Golang, SQLite**   ⭘ github

- Developed back-end using Golang for a **pseudo-currency** system for future use among 8000+ IITK students
- Utilized **Hashing** and **Salting** techniques to keep sensitive information like passwords **cryptographically** secure
- Explored and implemented techniques such as **ACID, database locking and concurrency** to keep the transactions safe and quick, maintain the integrity of the database, and used **JSON Web Tokens(JWTs)** to secure endpoints

Yoga Recommendation System   *May'21 - Jul'21*

Faculty Advisor: Prof. Veena Bansal | IIT Kanpur

- Performed web-scraping using python to get information like - benefits, contraindications and steps for yogasanas
- Engineered a **deep learning model** to recommend yoga to users based on diseases, gender, age and level of their practice
- Worked on deploying the model on web, used HTML and CSS for frontend and Laravel and Flask for backend
- Implemented the Relational Database Management System for the site using **MySQL** for userdata and asanas
- Used Tensorflow to make the NLP model, recommending top 5 asanas with an accuracy of 87%

Effect of Immigration on Employment   *Jan'21 - May'21*

Course project: Prof. S.K Mathur | IIT Kanpur   ⭘ github

- Analyzed unemployment in Canada on 3 variables based on the methods and algorithms of previous study on Australia
- Implemented various methods such as **unit root test** , **dicky fuller Test** to assess the time series regression
- Used **Vector auto-regressive model (VAR)** to predict the future values of unemployment in the host country due to the effect of migration by analyzing previous trends and contributed to the term paper

Technical Skills

Programming: C, C++, Python, Javascript, Golang   **Utilities**: Git/Github, Visual Studio Code , LaTeX

Development: HTML, CSS   **Libraries**: Numpy, Pandas, Matplotlib, Scikit-Learn

Relevant Courses   * : ongoing

Applied Probability and Statistics(A)	Fundamentals of Computing	Real Analysis and Multivariate Calculus
Data Structures and Algorithms*	Introduction to Electronics(A)	Linear Algebra and ODE
Partial Differential Equations	Computational methods in Engineering	Introduction to Stochastic Processes*

Positions of Responsibility

Coordinator, Quiz Club IIT Kanpur   *Apr'21 - Present*

- Responsible for managing campus wide club related events, competitions and handling budget of Rs.10,000 for the events
- Managed the **selection process** for a team of club secretaries to **organise** and conduct quizzes in campus
- Co-hosted the Freshers quiz for the Y20 batch and managed **300+** students who participated in the event
- Designed questions and posts for publicity of the club and **posted weekly questions** on social media handle
- Successfully organised the **QuizFest** in which various genres of quizzes were conducted week-long for the campus community
- Collaborated with Anime Society, Astro Club and Literary Society to explore different genres for diversity in quizzes

Secretary, Quiz Club IIT Kanpur   *Jun'20 - Apr'21*

- Tasked with conducting quiz events for freshers and managing social media posts for promoting club events
- Assisted the coordinators during the conduction of the **Quarantine Quiz League(QQL)**

Extra-Curricular Activities

- Secured runner's up position in Aagaz'19 (Freshers Games and Sports competiton) in **Chess events**
- Participated in quizzing events and part of the team that played **finals** in **Gen Quiz** and **HELM Quiz** in Galaxy'20
- Participated in **Aeromodelling** events in Takneek'19 and created an **Ornithopter**, securing 1st pool position