

EDUCATIONAL QUALIFICATIONS

Year	Qualification	Institute	Performance
2021-2025	B.Tech - Mechanical Engineering   Minor – Eng Literature	Indian Institute of Technology Kanpur	8.0/10.0
2021	Class XII, Maharashtra State Board	Pace Junior Science College, Nerul	95.2%
2019	Class X, CBSE Board	D.A.V Public School, Nerul	94.0%

ACHIEVEMENTS

- Secured **All India Rank 2666** in JEE Advanced 2021 and **All India Rank 5044** in JEE Mains 2021 amongst **9.2 lakh candidates**2021
- Secured **All India Rank 102** in All India Open Mathematics Scholarship Examination by IPM among **50K+ candidates**2020
- Received the **Academic Excellence Award** for exceptional academic performance in the **2020-21** academic session2021

WORK EXPERIENCE

Product Development Internship | Medantrik (MedTech Start-Up)May'24-Jul'24

Received Pre-Placement Offer (PPO) for exceptional performance

Objective	• Develop algorithm for <b>portable lung health device</b> , cost-effective spirometry test and lung exercises( <b>₹6K vs. ₹2K/hospital test</b> )
Approach	• Calibrated device to map RPM to breath flow rate using prototype at <b>National Wind Tunnel IITK</b> , informed <b>5+research papers</b> • Integrated hospital data ( <b>SQL Server</b> ) with GLI metrics, applying <b>RandomForest</b> to predict ideal lung health parameters • Oversaw marketing and design for health camps with <b>1K+ footfall</b> and <b>represented team</b> for <b>ASEAN-India ScaleHub 2024, Bali</b>
Impact	• Co-invented patent-pending device; projected sales of <b>₹30cr revenue (50K units)</b> by Apr, launch expected; <b>Sept</b> (Delhi-NCR) • Generated lung report ( <b>19 parameters+4 graphs</b> ) via proprietary algo, classifying lung health into <b>4 categories (96% accuracy)</b>

Product Management Internship | Foruppo (Autonomus Start-Up EcoSystem)May'24-Jul'24

Objective	• Develop innovative products like 'Wizoona' and 'Urrban Tailor'; deliver impactful solutions through strategic planning
Impact	• <b>Co-creator</b> of 'Wizoona', built <b>India's first community-led holistic education startup</b> and set-up pre-launch activities • Created <b>Value Proposition, Customer Segmentation, GTM strategy</b> of 'Wizoona' ensuring <b>customer acquisition</b> and retention • Launched 'Urrban Tailor,' a <b>SaaS platform</b> , on <b>Product Hunt</b> , leading an <b>8-member team</b> from product ideation to execution

KEY PROJECT

Yoga Pose Prediction and Feedback Generation | Dr. Tushar Sandhan, EE, IIT KanpurJan'24-May'24

Objective	• Enhance self-guided yoga practice with a <b>deep learning model</b> , classifying yoga asanas and providing <b>real-time feedback</b>
Strategy	• Engineered hybrid <b>CNN-LSTM model</b> capturing spatial and temporal features, trained on <b>88 videos</b> from diverse datasets • Utilized <b>OpenCV</b> for video processing, <b>MediaPipe</b> for pose landmark extraction, <b>Keras with TensorFlow</b> for model training • Conducted <b>angular vector analyses</b> to compare user poses with ideal poses, and implemented a feedback mechanism
Result	• Reached <b>99.05%</b> accuracy, boosted to <b>99.66%</b> with polling, classifying videos into <b>6 asanas</b> and providing <b>effective feedback</b>

Forecasting using time-series Analysis | Stamatics, IIT KanpurMay'23-Jul'23

Objective	• Develop and compare predictive models for <b>air quality and stock prices</b> using time-series analysis to optimize accuracy
Strategy	• Applied <b>ADF, ACF test, Box-Cox transformation</b> for the stationarity, normality, homoscedasticity on <b>7+time series</b> datasets • Decomposed a time-series into its trend, seasonality, cyclicity using <b>HP filter</b> and tested stationarity using <b>ADF statistical test</b> • Conducted statistical normality tests and utilized <b>ACF and PACF</b> analysis to determine order of <b>AR and MA models</b>
Result	• Achieved a <b>MAPE of 0.0153</b> and <b>98.5% accuracy</b> in predicting Apple INC. stock prices using <b>Auto ARIMA</b> on <b>1405 observations</b> • Reduces prediction errors with <b>ARIMA, SARIMAX models</b> , achieving <b>97.1% accuracy</b> in Beijing air quality forecasting

JP Morgan Chase Co.— Investment Banking (by Forage)Jul'24

Key Highlights	• Analysed and provided targets for <b>Mergers &amp; Acquisition</b> targets a US-based Brewing firm for expansion over a new market • Performed Data Analysis with a summary of target based on <b>financial statements, bidding process, estimated valuation</b> • Formulated a <b>DCF Model</b> to finalize the offer price to value a target based on financial forecasts and assumptions provided • Revised the Model for a new bid due to change in circumstances and compared it with <b>competitive bidder</b> for the final price
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Chat With Multiple-PDFs (Self Project)Aug'24

Objective	• Develop <b>contextually responsive chatbot</b> to answer user queries, extracting and processing text from <b>multiple PDFs</b>
Strategy	• Leveraged <b>PyPDF2, LangChain, FAISS</b> for text extraction, embedding, and retrieval, with <b>OpenAI and Hugging Face models</b> • Designed an <b>interface with Streamlit</b> to support file uploads, handle user queries, and responses generated by the chatbot
Result	• Achieved a <b>90% accuracy</b> rate in query responses across PDF document types, processing up to <b>200 pages per document</b>

LEADERSHIP EXPERIENCE

Coordinator, Dance Club (KOS) | IIT KanpurMay'23 – May'24

Felicitated with Certificate of Appreciation by the **Director, IIT-K** for recognition as Coordinator, Dance Club, IIT Kanpur

Leadership	• Directed a <b>3-tier team of 50+</b> in <b>4 national-level competitions</b> and coordinated <b>7 campus events</b> with <b>2K+ average footfall</b> • Managed club finances of <b>INR 1.2L</b> and generated over <b>INR 30K</b> in additional revenue by organizing diverse workshops
Initiatives	• Organized a <b>7-day Summer Workshop</b> by tier-1 artist separately in two shifts for <b>50+ beginners</b> and <b>30+ team members</b> • Collaborated with Antaragni on a climate awareness campaign, reaching an audience of <b>1K+</b> in Kanpur's biggest mall
Impact	• Achieved a <b>historic milestone</b> by becoming the <b>1st dance team</b> from any IIT to qualify for <b>Indian HipHop Championship finals</b> • Garnered over <b>12 million+ views</b> and amassed an impressive <b>40K+ subscriber</b> base on the official Dance Club, IITK YT channel

TECHNICAL SKILLS

- **Programming Languages:** C++, Python, HTML, CSS, LaTeX, SQL
- **Software & Utilities:** Illustrator, Photoshop, LightRoom, Excel, Canva
- **Data Science & ML:** TensorFlow, Keras, NumPy, Pandas, Matplotlib, Scikit-learn, Statsmodels, OpenCV, LangChain, Streamlit

EXTRA-CURRICULAR ACTIVITIES

Performing Arts	Inter-IIT Cult Meet	• <b>3rd position</b> in group dance category	• <b>3rd position</b> in dance battle category	Inter-IIT	2023
	Antaragni, IITK	• <b>1st position</b> in group dance category	• <b>1st position</b> in dance drama category	National	2023
Social Work	• Tutored <b>20 underprivileged children</b> in Math and English of class 5th and 6th through <b>Prayas, IITK</b> • Mobilized funds to support children's education at <b>Muskurahat Foundation (NGO)</b> earning a <b>merit certificate</b>				2022

