

EDUCATIONAL QUALIFICATIONS

| Year      | Qualification  | Institute                             | Performance |
|-----------|--|---------------------------------------|-------------|
| 2021-2025 | B.Tech - Mechanical Engineering   Minor – English 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 <b>All India Rank 2666</b> in JEE Advanced 2021 and <b>All India Rank 5044</b> in JEE Mains 2021 amongst <b>9.2 lakh candidates</b> | 2021 |
| • Secured <b>All India Rank 102</b> in All India Open Mathematics Scholarship Examination by IPM among <b>50K+ candidates</b>                 | 2020 |
| • Received the <b>Academic Excellence Award</b> for exceptional academic performance in the <b>2020-21</b> academic session                   | 2021 |

WORK EXPERIENCE

Product Development Internship | *Medantrik (MedTech Start-Up)* Jun'24-Aug'24

Received Pre-Placement Offer (PPO) for exceptional performance

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| Objective | • Engineered cost-effective <b>portable lung diagnosis device</b> , driving technical solutions with <b>CTO</b> for successful market launch   |
| 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><br>• Built a hospital prototype and interface, collecting <b>10+ datapoints</b> from <b>200+ patients</b> , boosting algorithm <b>accuracy by 12%</b><br>• Oversaw marketing and design for health camps with <b>1K+ footfall</b> and <b>represented team for 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)<br>• 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-Jun'24

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| 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<br>• Created <b>Value Proposition, Customer Segmentation, GTM strategy</b> of 'Wizoona' ensuring customer acquisition and retention<br>• 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 PROJECTS

Yoga Asana Prediction and Feedback Generation | *Dr. Tushar Sandhan, EE, IIT Kanpur* Jan'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<br>• Utilized <b>OpenCV</b> for video processing, <b>MediaPipe</b> for pose landmark extraction, <b>Keras with TensorFlow</b> for model training<br>• Conducted <b>angular vector analyses</b> to compare user poses with ideal poses, and implemented a feedback mechanism |
| Result    | • Classified videos into <b>6 asanas</b> , achieving a framewise accuracy of <b>99.05%</b> , with polling improving accuracy to <b>99.66%</b><br>• Enabled <b>precise feedback</b> by demonstrating the closest intermediate poses from input videos; comparing them to ideal poses  |

Brand Repositioning Strategy (Course Project) | *Prof. Amit Shukla, IME, IIT Kanpur* May'24-Jul'24

|           |  |
|-----------|--|
| Objective | • Redefine and strengthen <b>boAt's brand positioning</b> to better align with emerging markets and evolving consumer preferences  |
| Strategy  | • Examined boAt's value chain and conducted competitive analysis of <b>4 competitors</b> to identify the current positioning<br>• Generated insights with <b>4P, PESTEL, and SWOT</b> framework and prioritised them using <b>RICE</b> and <b>MoSCoW</b> frameworks              |
| Result    | • Crafted strategic <b>video advertisement</b> that elevated brand perception, validated through insights from <b>80+ survey responses</b><br>• Formulated a <b>brand extension</b> concept for boAt, launching a <b>musical instrument product line</b> to tap untapped markets |

Machine Learning Mini Projects | *Dr. Purushottam Kar, CSE, IIT Kanpur* Jan'24 – May'24

|         |  |
|---------|--|
| XORRO   | • Derived a <b>linear mathematical simplification</b> modeling a <b>XORRO PUF</b> with <b>8 multiplexers</b> , using Khatri-Rao product<br>• Developed a linear ensemble model built from <b>SVC</b> and <b>logistic regression</b> methods, achieving highest <b>accuracy of 99.33%</b> |
| Hangman | • Implemented information-theoretic algorithms <b>greedily</b> maximizing the number of nodes, resulting in <b>entropy reduction</b><br>• Trained a <b>100% accurate decision tree</b> model on a dictionary with <b>6K+ data points</b> , effectively simulating Hangman gameplay       |
| Sensor  | • Developed a <b>ridge linear model</b> calibrating the voltages recorded by the ozone and nitrogen dioxide sensors accurately<br>• Reduced the MAE by using <b>Kernel Ridge non-linear model</b> with an adaptive learning rate & $\epsilon$ -insensitive loss function                 |

LEADERSHIP EXPERIENCE

Coordinator, Dance Club (KOS) | *IIT Kanpur* May'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><br>• 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> series by tier-1 artist separately in two shifts for <b>50+ beginners</b> and <b>30+ team members</b><br>• Crafted a dynamic <b>10-minute showcase</b> at the PG Orientation that successfully drew <b>1.8x more</b> PG students in the club                           |
| Impact      | • Achieved a <b>historic milestone</b> by becoming the <b>1<sup>st</sup> dance team</b> from any IIT to qualify for <b>Indian HipHop Championship finals</b><br>• Garnered over <b>12 million+ views</b> and amassed an impressive <b>40K+ subscriber</b> base on the official Dance Club, IITK <b>YT channel</b> |

EXTRA-CURRICULAR ACTIVITIES

| Category               | Competition  | Achievements  | Level     | Year |
|------------------------|--|---|-----------|------|
| Performing Arts: Dance | Inter-IIT Cultural Meet  | Led the contingent which secured,<br>• <b>3<sup>rd</sup> position</b> in group dance category at IIT Madras<br>• <b>3<sup>rd</sup> position</b> in dance battle category at IIT Madras  | Inter-IIT | 2023 |
|                        |  | • <b>2<sup>nd</sup> position</b> out of <b>30+</b> teams in group dance category<br>• <b>1<sup>st</sup> position</b> out of <b>30+</b> teams in group dance category<br>• <b>3<sup>rd</sup> position</b> out of <b>10+</b> teams in dance battle category | National  | 2023 |
|                        | Antaragni, IIT Kanpur  |   |           | 2022 |
|                        | Thomso, IIT Roorkee  | • <b>3<sup>rd</sup> position</b> out of <b>30+</b> teams in dance drama category  | National  | 2022 |
| Social Work            | • Mobilized funds to support children's education at <b>Muskurahat Foundation (NGO)</b> earning a <b>merit certificate</b><br>• Tutored <b>20 underprivileged children</b> in Math and English of class 5th and 6th through <b>Prayas, IIT Kanpur</b><br>• Conducted <b>Flashmob</b> with sapling distribution on <b>World Environment Day</b> to spread environmental awareness |   |           | 2022 |
|                        |  |   |           | 2023 |

