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| **KAUSTAV DASGUPTA** | | [**kaustavd21@iitk.ac.in**](mailto:kaustavd21@iitk.ac.in) **| +91 9892139344** | | |
| **EDUCATIONAL QUALIFICATIONS** | | | | |
| **Year** | **Qualification** | **Institute** | | **Performance** |
| 2021-2025 | B.Tech - Mechanical Engineering | Minor - Literature | Indian Institute of Technology Kanpur | | **8.1/10.0** |
| 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 session *2021* | | | | |
| * Selected for SMSS Lab Summer Internship 2023 under Dr. Bishakh Bhattacharya, HAL Chair Professor *2022* | | | | |
| **WORK EXPERIENCE** | | | | |
| **Product Development Intern | *Medantrik*** | | | *May’24-Jul’24* | |
| *Received Pre Placement Offer(PPO) for exceptional performance* | | |  | |
| *Objective* | * To study asymptotic behaviour of **Reynolds stresses** at the walls in unforced compressible turbulent channel flows | | | |
| *Strategy* | * Collaborated with other members of the research team to conduct a **literature survey** of similar published research papers * Performed **Direct Numerical Simulations (DNS)** on domain with a grid size of **512x512x256** cells with **hyperbolic “y” sizing** * Modelled and plotted the relationship between flow variables and wall distance to capture **near wall turbulence effects** | | | |
| *Impact* | * Analysed the behaviour of Reynolds stresses by fitting 2 different **power series laws** for different regimes of flow * Identified relevant changes in the asymptotic trend to **improve turbulence modelling** for various Reynolds Numbers | | | |
| **LEADERSHIP EXPERIENCE** | | | | |
| **Overall Placement Coordinator | *Students’ Placement Office, IIT Kanpur*** | | | *Mar’22-Mar’23* | |
| *Felicitated with a* ***Certificate of Exemplary Leadership*** *by* ***Director, IIT Kanpur*** *for recognition as Overall Placement Coordinator*  *Previously Core Team Member as* ***Assistant******Placement******Coordinator*** *in 2021-22 and recorded* ***highest number of offers (1490+)*** *ever at IIT Kanpur* | | | | |
| *Leadership* | * Spearheading a **4-tier team** of **150+ members** to conduct placement, internship drive for **1,600+ & 1000+ students** * Representing students’ interests in **Students’ Placement Committee (SPC)**, common **faculty body of 23 departments** | | | |
| *Initiatives* | * Ideated and deployed an **in-house portal** to cater to the placement and internship processes for **2500+ students** * Collaborated with **Prepleaf** & **MyAnalyticsSchool** for sector wise placement preparation frameworks helping **1,300+ students** * Coordinated with the **Alumni Association of IIT Kanpur** for identification and conversion of opportunities in the industry * Established the **Toastmasters Club at IIT Kanpur** through sponsorship from IIT Kanpur alumni worth over **1.5 crore INR** | | | |
| *Impact* | * Firms such as **Bain**, **BCG**, **Finmechanics** and **Morgan Stanley** registered for the **first time** during the internship drive 2022-23 * Recorded **highest number of offers** made till date with **170+** offers & **130** acceptances on Day 1 of internship drive 2022-23 * Observed a **6-fold increase** and a **50% Y-o-Y growth** in internship and placement offers in phase II drive of 2021-22 | | | |
| **Students’ Senate Nominee | *Department Undergraduate Committee (DUGC), AE, IIT Kanpur*** | | | *Aug’20-Aug’22* | |
| *Leadership* | * Represented **300+** students of Aerospace Engineering and presented their requests to a committee of 8 professors | | | |
| *Key Highlights* | * Organized **open houses** regularly to enable students to voice their concerns and doubts regarding the academic curriculum * Sketched out an **alternate** **academic roadmap** impacting **300+** students across 3 batches in light of the pandemic * Defended **termination case appeals** and processed dual degree and double major requests on an ongoing basis * Collaborated with the **Academics and Career Council** to establish teams of **Academic and Career Department Mentors** | | | |
| **KEY PROJECT** | | | | |
| **Yoga Pose Prediction and Feedback Generation | *Dr. Tushar Sandhan, EE, IIT Kanpur*** | | | *Jan’24-May’24* | |
| *Objective* | * Build a high-accuracy yoga-pose recognition system, providing real-time precision-guided feedback to users | | | |
| *Strategy* | * Developed a deep learning model, combination of CNNs and LSTMs using 88 video dataset to classify 6 yoga asanas * Applied mediapipe for joint location identification in human pose, employed training with one-hot encoded labels using the adam-optimizer, and implemented frame pooling techniques to enhance accuracy, conducting thorough model analysis | | | |
| *Result* | * Achieved high accuracy with val-acc of 98.94% and generates periodic quantitative feedback per 10 frames. | | | |

**Forecasting using time-series Analysis | *Stamatics, IIT Kanpur***

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| *Objective* |  |
| *Strategy* |  |
| *Result* |  |

**Image processing *(Course Project)* | *Dr. Tushar Sandhan, EE, IIT Kanpur***

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| *Objective* |  | |
| *Strategy* |  | |
| *Result* |  | |
| **LEADERSHIP EXPERIENCE** | | |
| **Coordinator, Dance Club (KOS) | *IIT Kanpur*** *First team in the history of all IITs, selected for finals of ’India’s Hip-Hop Championship’ in Mumbai* | | *May’23-May’24* |
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| **EXTRA-CURRICULAR ACTIVITIES** | | | | |
| **Category** | **Competition** | **Achievements** | **Level** | **Year** |
| *Performing Arts: Dance* | *Awarded with* ***Token of Appreciation*** *for immense contribution as a Senior Member of Dance Club, IIT Kanpur* | | | *2023* |
| **Inter-IIT Cultural Meet** | *Led the contingent which secured,*   * **3rd position** in dance battle category at IIT Madras * **3rd position** in group dance category at IIT Madras | **Inter-IIT** | *2023* |
| **Antaragni, IIT Kanpur** | * **2nd position** out of **30+** teams in group dance category * **3rd position** out of **10+** teams in dance battle category | **National** | *2023* |
| **Antaragni, IIT Kanpur** | * **1st position** out of **30+** teams in group dance category * **1st position** out of **30+** teams in dance drama category * **3rd position** out of **10+** teams in dance battle category | **National** | *2022* |
| **Thomso, IIT Roorkee** | * **3rd position** out of **30+** teams in dance drama category | **National** | *2022* |
| *Social Work* | • Tutored 20 underprivileged children in Math and English of class 5th and 6th through Prayas | | | *2022* |
| *Networking* | • Campus Ambassador of Acmegrade*(E-learning platform),* spearheaded 6+ impactful campaigns which brought 100+ clientele | | | *2022-23* |