

Pulkit Bhardwaj

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Academic Qualifications

| Year | Degree/Certificate | Institute | CPI/% |
|-----------|-----------------------------|---|-------|
| 2023-2027 | B.Tech-Chemical Engineering | Indian Institute of Technology Kanpur | 7/10 |
| 2023 | CBSE(XII) | Dev Samaj Vidya Niketan School, Gurgaon | 94.4% |
| 2021 | CBSE(X) | Dev Samaj Vidya Niketan School, Gurgaon | 93.2% |

Scholastic Achievements

- Secured **All India Rank 5649** in JEE Advanced 2023 among the 1.9 Lakh shortlisted candidates across India. 2023
- Secured the **First** rank in academics among **120+ students** for **8 consecutive** years in DSVN School. 2016-2023

Work Experience

Optimizing DELM via Small-World | Winter Intern
Mentor: Prof. R.M. Hegde, Dept. of Electrical Engineering, IIT Kanpur (Nov'24 - Jan'25)

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| Objective | Developed a high-speed DELM model as a scalable alternative to backpropagation-based neural networks. |
| Approach | Implemented small-world architecture with randomized inter-layer connections to boost model efficiency. Enhanced accuracy via optimal node selection using weight analysis and activation value analysis . Experimented with learning methods , number of nodes and implemented iterative weight storage solution. |
| Impact | Achieved 100% stability on Concrete dataset with 15x lower training time and reduced RMSE compared to traditional backpropagation models; delivered similar results on Parkinson and Energy datasets. |

Key Projects

CycleGANs: Translating Images | IITK Consulting Group | IIT Kanpur 📍 (May'24 - Jul'24)

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| Objective | Built a CycleGAN model to perform unpaired , high-quality image-to-image translation across domains. |
| Approach | Used GAN architectures like Pix2Pix , PatchGAN , and DCGAN to improve translation quality and stability. Applied ML techniques such as PCA , k-means , regression, ANN , and CNN to optimise model performance. |
| Results | Achieved Realistic image translation in domains like (day ↔night, horse↔ zebra), without paired datasets . |

Mutual Fund Return Prediction & Portfolio Suggestion System | Self Project 📍 (May'25 - Jul'25)

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| Objective | Developed a TFT model to predict Mutual Fund returns and optimal investment distribution . |
| Approach | Scraped and cleaned monthly and annual return data for 80+ Mutual Funds from ETmoney and AMFI . Built a TFT , and implemented allocation strategy to suggest portfolio in top-performing and stable funds. |
| Result | Achieved 8% return on test data with portfolio suggestions balancing growth and risk stability in 2 months. |

Forecasting using Time Series | Stamatics society | Dept. of Mathematics, IIT Kanpur 📍 (May'24 - Jul'24)

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| Objective | Built time series forecasting models to predict future trends leveraging ML and statistical techniques. |
| Summary | Implemented ARIMA , LSTM , and GARCH -based models to capture short-term and volatile data patterns. Applied data preparation and model tuning to improve forecast reliability on real-world datasets. |

Positions of Responsibility

Core Team Member, Chemineers Society | Dept. of Chemical Engineering, IIT Kanpur (Apr'25 - Present)

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| Leadership | Leading a three-tier team of 40+ to drive academic, skill-based and cultural growth for 700+ students . |
| Management | Managing INR 7.2 Lakh budget, targeting INR 10+ Lakh this year ensuring efficient resource allocation. Recruited 15 secretaries out of multiple application received through two-stage elimination process. |
| Intiative | Led initiatives like Intern Marathons , alumni talks , and fresher sessions, enhancing career readiness. Collaborated with 10 IITs to organise ChemBlitz, an inter-IIT E-sports Tournament featuring 6 games. |

Secretary, Sponsorship | EXERGY'25, IIT Kanpur (Jun'24-Jan'25)

- Raised **INR 5L+** in funds from alumni and industry partners like **Evonik**, **Kanopy Techno Solutions** and **Red FM**.
- Organised talks with industry leaders including **founders** and **directors** from reputed firms like **HPCL** and **Vedanta**.
- Conducted **competitions** and technical **workshops** with global firms like **MathWorks** to enhance industry exposure.
- Impact:** Propelled Exergy to **300k+ reach**, with about **140% growth** engaging **100+ colleges** in various events.

Extra-Curriculars

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| Managerial | Actively Helped in organizing events of EXERGY'25, served as POC of M.B. Lal , former C&MD , HPCL |
| Volunteer | Volunteered in Antaragni'25 Hospitality ; conducted outreach calls for participation for event fundraising. |
| Leadership | Served as Head Boy in Class 12th, leading 800+ students and representing the school in competitions. |
| Cultural | Participated in Wall painting in Freshers'23 and in Acrylic Painting in Galaxy'24 reflecting creativity . Participated in Galaxy'24 and Mentored Freshers for Galaxy'25 in events of Hindi Sahitya Sabha . |