Manisha Chaurasia

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Academic Qualifications

Year	Degree/Certificate	Institute	CPI/%
2022 - Present	MSc	Indian Institute of Technology, Kanpur	7.8/10
2022	BSc-BEd Integrated	Regional Institute of Education, Ajmer	79.2%
2018	CBSE(XII)	Jawahar Navodaya Vidyalaya, Gyanpur	90.0%
2016	CBSE(X)	Jawahar Navodaya Vidyalaya, Gyanpur	9.8/10

Scholastic Achievements

- Secured **All India Rank 225** in **JAM 2022**.
- Received the **Certificate of Achievement** , **50k Cash & Google pixel buds** for securing **First Position** in the **#HackTheFuture** Hackathon conducted by **Google Cloud and New Jagran Media Company**.
- Secured **Rank 6** in "Generative AI Hackathon" conducted by **Monotype Company** and **Google Developer Student Club IIT Kanpur**.

Key Projects

- **Long term Fog Prediction Using Machine Learning (PHY501A)** (*Aug'23- Nov'23*)
  Mentor: Prof. Mahendra K. Verma, Department of Physics.
  - Handling the Null values dataset.
  - Successfully implemented all **Machine Learning models** and then selected well-performing ones.
  - Observed that the inclusion of previous data affects the Output.
  - **Article link -** https://drive.google.com/file/d/1EBcPy3WjIID9kWAQ1kt3uyKKovFkRc_X/view?usp=drivesdk
- **NLin Schrodinger Equation Solver By using MPI (Message Passing Interface) (IDC606A)** (*Aug'23- Nov'23*)
  Mentor: Prof. Mahendra K. Verma, Department of Physics.
  - The **RK4** method is used to solve the equation.
  - The whole code from the series is converted to parallel for the general number of ranks.
  - Code testing was performed on the **Benard server** of IIT Kanpur.
  - Performance of the **parallel code (MPI)** is compared with the series code.
  - **GitHub link-** https://github.com/ManiChauras/HPC_MPI_Project
- **Portfolio project-**
  - Designed my portfolio website in **HTML and CSS**.
  - Hosted the website on Github Pages.
  - **GitHub link-** https://github.com/ManiChauras/Portfolio

Technical Skills

- **Programming Languages:** C, C++, Python, SQL
- **Libraries:** Pandas, Plotly, OpenCV, NumPy, SciPy, Matplotlib, Seaborn, Tensorflow, Scikit-learn, Keras
- **Other:** Google Cloud platform (GCP), MySQL, HTML, CSS, Mpi4Py , OpenACC, numba_CUDA, Cupy

Online Courses

- **Machine learning A-Z (Python in Data Science Course):** Include basic machine learning models and introductory deep learning.
- **Google Cloud Study Jam:** Including courses Google Cloud Fundamentals and Generative AI Module.
- **Computer Vision:** Computer vision nano degree by Udacity.
- **Data Science:** Course by PadhAI Platform.
- **Azure AI fundamentals:** AI-900 Challenge.
- **Google Cybersecurity:** Course by Coursera (Ongoing).

Positions of Responsibility

- **Academic Captain in Class XI** (*2016-17*)

  - Organized and anchored multiple **educational events**.
- **Volunteer, Green Club and SUPW (Socially Useful Productive Work)**
  - Handled rallies, marches, and street plays at public places to create awareness about the importance of the environment.

Relevant Courses

High Performance Computing with Applications	Electronics
Computational Physics	Mathematical Methods I
Quantum Mechanics I	Statistical Mechanics
Quantum Mechanics II	Mathematical Methods II*(ongoing)
Advanced Topics in Machine Learning*(ongoing)	

Extra-Curricular Activities

- Received the highest grade, A*, in the course CHM606A
- Can converse fluently in English and Hindi
- I received a National Graduate Physics Examination (NGPE) certificate.
- Awarded a certificate for being selected to present a paper at the National Conference of Language Pedagogy.
- Received a certificate for being selected to present a paper, "Analysis of Indian National Education Policy -2020 Assessment in Secondary Mathematics Classroom", at the 9th National Conference on Mathematics Education.