Ranjeet Singh

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Objective

Analytical and detail-oriented aspiring Data Scientist with a solid foundation in Python, SQL, and Power BI, seeking a full-time opportunity in data-driven roles. Experienced in building machine learning models, developing data pipelines, and creating actionable visualizations. Passionate about turning complex data into clear insights and eager to contribute to innovative solutions in data science and analytics.

Experience

- **Auribises Technologies Pvt Ltd** *May 2024 - July 2024*
  Data Science Intern Ludhiana,India
  - Built a data pipeline to automate the process of wrangling application data and converting it to time series.
  - Developed a time series forecasting model to predict parking sales for Finlo, improving data-driven decision-making.

Education

- **Indian Institute of Technology, Ropar** *Dec 2021 - May 2025*
  B.Tech in Electrical Engineering Rupnagar, India
  - CGPA: 7.92/10.00
- **Central Board of Secondary Education** *2020*
  Senior Secondary Education Delhi, India
  - Grade: 95.0%

Projects

- **Plant Leaf Disease Detection Application : Capstone Project for B.Tech** *Jan 2025 - Apr 2025*
  Tools: Python, React Native, Flask [GitHub]
  - Trained diseased and healthy leaf images using MobileNet V2 achieving testing accuracy of 70%.
  - Designed user friendly frontend of the application using React-Native
  - Integrated the model and weather forecasts API calls in the backend to get the results for the input image alongwith confidence score.
- **Collaborative Filtering-Based Book Recommendation System** *August 2024*
  Tools: Python, Flask [GitHub]
  - Built a recommendation engine using collaborative filtering with cosine similarity to suggest 4 similar books based on user ratings and input titles
  - Integrated the model into a Flask web application to provide real-time recommendations through a simple user interface
  - Designed the homepage to showcase the top 50 most popular books, enhancing discovery for new or casual readers
- **Laptop Price Prediction using Specifications** *July 2024*
  Tools: Python, Pandas, Flask, Scikit-learn [GitHub]
  - Developed a machine learning model to predict laptop prices based on technical specifications including RAM, CPU, GPU, and storage
  - Trained and evaluated multiple regression models, achieving the best results with Random Forest Regressor (MAE: 1.25, R^2: 0.85)
  - Built the solution as a dynamic Flask web application to allow real-time price predictions based on user input
- **Real-Time Synchrophasor Data Compression Using Singular Value Decomposition** *March 2024 – May 2024*
  Tools: Python, NumPy, Pandas [GitHub]
  - Implemented a real-time data compression method using SVD, achieving high compression ratios with maintained accuracy
  - Designed a dimensionality reduction technique factoring in PMU measurement uncertainty to enhance compression fidelity
  - Applied Progressive Partitioning for data segmentation, improving accuracy and compression efficiency in real-time

Skills

- **Programming Languages:** Python, C++, SQL, R
- **Web Technologies:** HTML, CSS, Bootstrap, Flask, Django
- **Data Science & Machine Learning:** Tensorflow, Scikit-Learn, Pytorch, Numpy, Pandas, Matplotlib
- **Version Control:** Git, GitBash
- **Softwares:** RStudio, MATLAB, Microsoft Excel, Power BI
- **Languages & Proficiency:** English (Professional), Punjabi (Native), Hindi (Intermediate)