Balbir S Bhatia

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EDUCATION

Thapar Institute of Engineering and Technology

Bachelor of Engineering in Computer Science and Engineering (Current CGPA: 9.38)

Mata Gujri Public School

Class XII CBSE (98.2%, PCM+CS), School Topper

Sept. 2022 – May 2026 New Delhi, India March 2021 – July 2022

Patiala, Punjab, India

TECHNICAL SKILLS

Languages: Python, R, C/C++, JavaScript

Data Analytics Tools: Tableau, Power BI, Spreadsheets

Frontend Skills: HTML, CSS, React.js Backend Skills: Node.js, Express.js

Databases: MySQL, PostgreSQL, MongoDB

Libraries: pandas, NumPy, Matplotlib, Seaborn, scikit-learn, NLTK, TensorFlow

PROJECTS

Plant Disease Detection System | Python, TensorFlow, Deep Learning

July 2024

- Developed a **deep learning model** using **TensorFlow**, achieving over **90% accuracy** in classifying plant diseases from leaf images.
- Optimized **convolutional neural networks** (CNNs) to enhance classification accuracy, demonstrating expertise in deep learning techniques.

Movie Recommender System | Python, NumPy, scikit-learn, NLTK, Machine Learning

June 2024

- Designed a **personalized movie recommender** leveraging **vectorization** and **machine learning algorithms**, improving recommendation accuracy based on user preferences.
- Implemented collaborative filtering, reducing recommendation time by 15% and enhancing system performance.

CareHomes | Node.js, Express.js, PostgreSQL, Full Stack Development

Jan 2024 - May 2024

- Optimized backend infrastructure using **Node.js** and **PostgreSQL**, resulting in a **20% improvement** in data retrieval speed and a **15% reduction** in storage footprint.
- Resolved critical frontend issues, leading to a 10% increase in user satisfaction and system reliability.

Volunteering Experience

URJA

Event Management: Assisted in organizing artist nights and fest events, ensuring smooth execution and participant engagement.

Creative Computing Society

Publicity: Contributed to publicity efforts and supported the organization of HackTU 4.0 hackathon, enhancing event visibility

CERTIFICATIONS

- Google Data Analytics Professional Certificate
- Data Science and Machine Learning
- I have completed 12+ self-learning courses from platforms such as Coursera and CodeHelp on Data Science and Machine Learning, DSA and Full Stack Development.
- Complete List of Certifications
 Link

Achievements and Honors

- Received merit scholarship from Thapar Institute of Engineering and Technology for high CGPA.
- Awarded CBSE merit certificate for scoring 100 in Computer Science and Physics.