

DHARAMBIR SINGH SIDHU

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Professional Summary

Software engineer with expertise in Python, Java, SQL, and Data Science. Proficient in Machine Learning and Deep Learning, with a strong foundation in Data Structures and Algorithms. Experienced in developing scalable and optimised Machine Learning models. Committed to leveraging technology for impactful solutions using my Data Analytical skills.

Education

- **VIT Bhopal University, Bhopal, Madhya Pradesh**
Bachelor of Technology (B.Tech) in Computer Science | Expected May 2026 | GPA: 9.02/10.0
- **Delhi Public School, Bathinda, Punjab**
Class 12 – CBSE | June 2022 | Percentage: 95.20%
- **Euro International School, Uchiyarda, Rajasthan**
Class 10 – CBSE | May 2020 | Percentage: 93.80%

Projects

Detecting Deception: Hybrid Deepfake Detection Model

- Built a hybrid model using DenseNet121 CNN and entropy analysis, achieving 99.41% accuracy on a 140,000-image dataset, outperforming baseline CNNs by 1.91%.
- Reduced error rates by 71% (FDR: 3.96% to 1.13%) using TensorFlow, OpenCV, and attention mechanisms for robust feature extraction.
- Optimized inference time by 15% via hyperparameter tuning, enhancing real-time deepfake detection reliability.

Krishniti AI - Sustainable Farming AI System

- Engineered a multi-agent AI system using Python, Scikit-learn, and SQLite, leveraging Random Forest Regressor to predict crop yields with 96% accuracy, integrating predictive analytics and modular OOP design to optimize sustainable farming decisions.
- Designed a normalized SQLite database with optimized queries and conducted statistical analysis (95% CI, ± 0.13 variance) to reduce fertilizer and pesticide usage by 18%, enhancing eco-friendly agricultural practices globally.

Skills

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|--------------------|------------------------------|
| • Python | • Data Science |
| • Java | • Data Visualization |
| • Machine Learning | • SQL |
| • Deep Learning | • Statistics and Probability |
| • Data Analytics | |

Certifications

- Problem Solvers- Mastering Data Structures and Algorithms, FACE Prep, (April 2025)
- Marketing Analytics (Elite Certificate), NPTEL, (May 2025)
- Cloud Computing (Elite Gold Certificate – Top 1%), NPTEL, (May 2024)

Achievements

- Ranked top 10 in CodeClash – IEEE TEMS, VIT Vellore
- Achieved 21st rank in the intra-college chess competition, among 200+ participants

Extracurricular Activities

- Creating artworks, content creation, and graphic design
- Playing cricket and chess