

## SUMMARY

I am Om, a dedicated B.Tech IT student at Walchand Institute of Technology with a strong foundation in mathematics and a deep interest in machine learning and deep learning. Skilled in building predictive models and deriving actionable insights from complex datasets. Passionate about applying data-driven techniques to real-world problems and continuously expanding technical expertise.

## EXPERIENCE

17 Feb - 18 April 2025

The Esther Analytical Data Systems Pvt. Ltd

### Data Engineering Intern

- Processed 50k+ records using Pandas/NumPy, improving data handling efficiency by 30%. Optimized MySQL queries and maintained relational databases for faster retrieval.
- Built interactive Power BI dashboards, enhancing reporting efficiency by 40%. Completed an EDA project on cricket data showcasing end-to-end data engineering workflow.

## PROJECTS

### Credit Card Fraud Detection Using ANN - [Link](#)

- Developed an ANN model on 284k+ transactions with extreme class imbalance (0.17% fraud). Used SMOTE and Random Search tuning (neurons 32–128, dropout 20–60%, LR 0.0001–0.01). Achieved 99.64% accuracy with 82.3% precision, 80.6% recall, and 81.4% F1 in fraud detection, balancing false positives/negatives to reduce financial risk.
- Tech Stack: Python, Pandas, NumPy, scikit-learn, TensorFlow/Keras, Keras Tuner.

### EV Battery Thermal Runaway Risk Predictor - [Link](#)

- Built an XGBoost-based Battery Thermal Runaway Predictor with 95% accuracy and 0.94 ROC-AUC on EV battery data. Engineered features from voltage, current, temperature, resistance, and SOC for reliable predictions. Developed a Streamlit UI for real-time classification and risk scoring, achieving a regression RMSE of 0.027 and enabling ~15% hazard reduction.
- Tech Stack: Python, scikit-learn, XGBoost, Pandas, NumPy, Matplotlib, Seaborn, Streamlit, Pickle.

## EDUCATION

- Walchand Institute of Technology Solapur**, B.Tech in Information Technology Nov 2023-2026  
**GPA:** 7.58
- Karmaveer Bhaurao Patil Mahavidyalaya, Pandharpur**, PCMB March 2022  
**HSC %** 56.17
- Arihant Public School, Pandharpur** March 2020  
**SSC:** % 74.80

## SKILLS

- Programming Languages:** Python, Java, JavaScript, SQL, HTML, CSS.
- Frontend:** Streamlit, JavaScript, HTML, CSS.
- Data Analysis & Visualization:** Pandas, NumPy, Matplotlib, Seaborn, Plotly, Power BI.
- Machine Learning & AI:** Scikit-learn, TensorFlow, Keras, PyTorch, Deep Learning.
- Databases:** MySQL.
- Tools & Platforms:** Git, GitHub, Google Colab, Jupyter Notebook.
- Mathematics:** Strong foundation in Statistics, Probability, Linear Algebra, and Calculus.

## CERTIFICATIONS

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| • Python Programming Language. <a href="#">Link</a>     | Career Essentials in Generative AI. <a href="#">Link</a> |
| • Supervised Machine Learning. <a href="#">Link</a>     | Data Analysis Using Python. <a href="#">Link</a>         |
| • Data Visualization Using Python. <a href="#">Link</a> | SQL Language (Intermediate). <a href="#">Link</a>        |