

Agrim Verma

+91 88470 46566 | masteragrim11@gmail.com | Patiala, Punjab

linkedin.com/in/agrimverma11 | github.com/AgrimVerma11 | agrimverma.dev

Summary

ML Engineer and Full-Stack Developer. Built and deployed Firasa, a behavioural reflection platform with 260+ organic users across 10+ countries. Currently leading a 5-member geospatial AI research team and mentoring 220+ students through Google Developer Groups (GDG).

Education

Thapar Institute of Engineering and Technology (TIET)

B.E. Computer Engineering — CGPA: 7.82

2023 – 2027

Patiala, Punjab

Projects

Firasa – Behavioural Reflection Platform firasa.agrimverma.dev

June 2026 – Present

React.js, Flask, Python, XGBoost, SHAP, LIME, Vercel, Render, Cloudflare

- Built a four-layer ML pipeline for behavioural clustering, score prediction, risk classification, and personalized interventions, trained on **31,000+ student records** across four independent datasets.
- Shipped a no-login, no-data-storage architecture across Vercel, Render, and Cloudflare; reached **260+ organic users in 10+ countries**.

AI-Based Pre-Harvest Wheat Crop Yield Prediction, Punjab

2026 – Present

Python, Sentinel-2 Imagery, NDVI, LSTM, Scikit-learn, NumPy, Pandas

- Lead a **5-member team** building a geospatial ML pipeline for pre-harvest wheat yield prediction, covering satellite data preprocessing, NDVI band extraction, LSTM sequence modeling, and performance evaluation.

Opportunity Quest – Campus Opportunity Discovery Platform

2026 – Present

React.js, Node.js, Express.js, MongoDB, JWT, REST APIs

- Built a MERN opportunity board for research, internships, projects, and paid opportunities, with JWT authentication and RBAC across student, faculty, and administrator roles, plus a student-faculty appointment scheduler.
- Currently exploring a **pilot deployment with the Department of Computer Science and Engineering (DCSE), TIET**.

Experience

Google Developer Groups (GDG), TIET

June 2025 – Present

Executive Board — AI/ML Mentor

Patiala, Punjab

- Led the AI/ML Bootcamp track at GDG DevFest (400+ attendees) for 220+ participants, covering machine learning fundamentals, CNNs, explainable AI, and NumPy-based model implementation.
- Co-organized the SatHack hackathon and judged BUILD SPACE at HELIX x GDG, reviewing 30+ student ML and software projects on model design, system architecture, and real-world applicability.

Google Developer Student Club (GDSC), TIET

May 2024 – June 2025

Core Team Member — AI/ML, Full Stack

Patiala, Punjab

- Co-hosted a 5-day AI/ML bootcamp for 200+ students on end-to-end ML workflows using reusable Jupyter notebooks.

Technical Skills

Languages: Python, C++, C, JavaScript, SQL, HTML5, CSS3

ML & Data Science: Scikit-learn, XGBoost, TensorFlow, Keras, LSTM, NumPy, Pandas, Streamlit, EDA, Hyperparameter Tuning, Model Evaluation, Optimization, Backpropagation, Gradient Descent, Explainable AI

Geospatial: Sentinel-2 Satellite Imagery, NDVI Band Processing, Geospatial ML Pipelines

Web & Backend: React.js, Node.js, Express.js, REST API Design, JWT, RBAC, MongoDB, MySQL

Tools: Git, GitHub, VS Code, JupyterLab, Google Colab, Linux

Certifications

Machine Learning Specialization — DeepLearning.AI (Andrew Ng): regression, classification, clustering, and neural networks from mathematical foundations.