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Configure model parameters and view analytics

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[View Source Code on GitHub](#)

Made with ❤️ by Shiv Sharan

Student Performance Analytics

Advanced prediction platform with ML ensemble techniques

👋 Welcome to Student Performance Analytics 🔗

This advanced analytics platform helps educators and students predict academic performance using state-of-the-art machine learning techniques. The application integrates multiple models and provides detailed analyses to help improve student outcomes.

🌟 Key Features

- **Interactive Data Visualization**: Explore the relationships between different factors affecting student performance
- **Advanced ML Models**: Utilize ensemble methods combining Linear Regression, Random Forest, and XGBoost
- **Detailed Performance Breakdown**: Understand how each factor contributes to the predicted performance
- **Personalized Recommendations**: Get tailored suggestions for improvement based on individual profiles
- **Model Comparison**: Compare different machine learning models and their prediction accuracy

🚀 Getting Started

1. Explore the **Data Analysis** tab to understand the patterns in student performance data
2. Check out the **Model Training** tab to train and evaluate different prediction models
3. Use the **Prediction** tab to get personalized performance predictions and recommendations

Select a section from the sidebar to begin!

✨ Feature Highlights

📊 Interactive Analytics

Explore student data through interactive visualizations that help identify key performance factors.

🤖 Ensemble Prediction

Utilize multiple machine learning models combined through a weighted ensemble approach for higher accuracy.

🧠 Smart Recommendations

Receive AI-generated, personalized recommendations to improve academic performance.

Ready to Get Started?

[Explore Data Analysis]   [Train Models]   [Make Predictions]