

AI-Based Early Dropout Risk Prediction & Intervention System

Team Name: CODE ALCHIMIST

PROBLEM STATEMENT

The Challenge

- Rising dropout rates in engineering institutions
- Massive student data exists
- But data is unused and isolated
- Counselors act only after academic decline

Why Dropout Prediction Matters

Cost of dropout



For Students

- Academic discontinuity
- Financial stress
- Career instability

For Government

- Wasted public resources
- Policy inefficiency
- National skill-gap impact



For Institutions

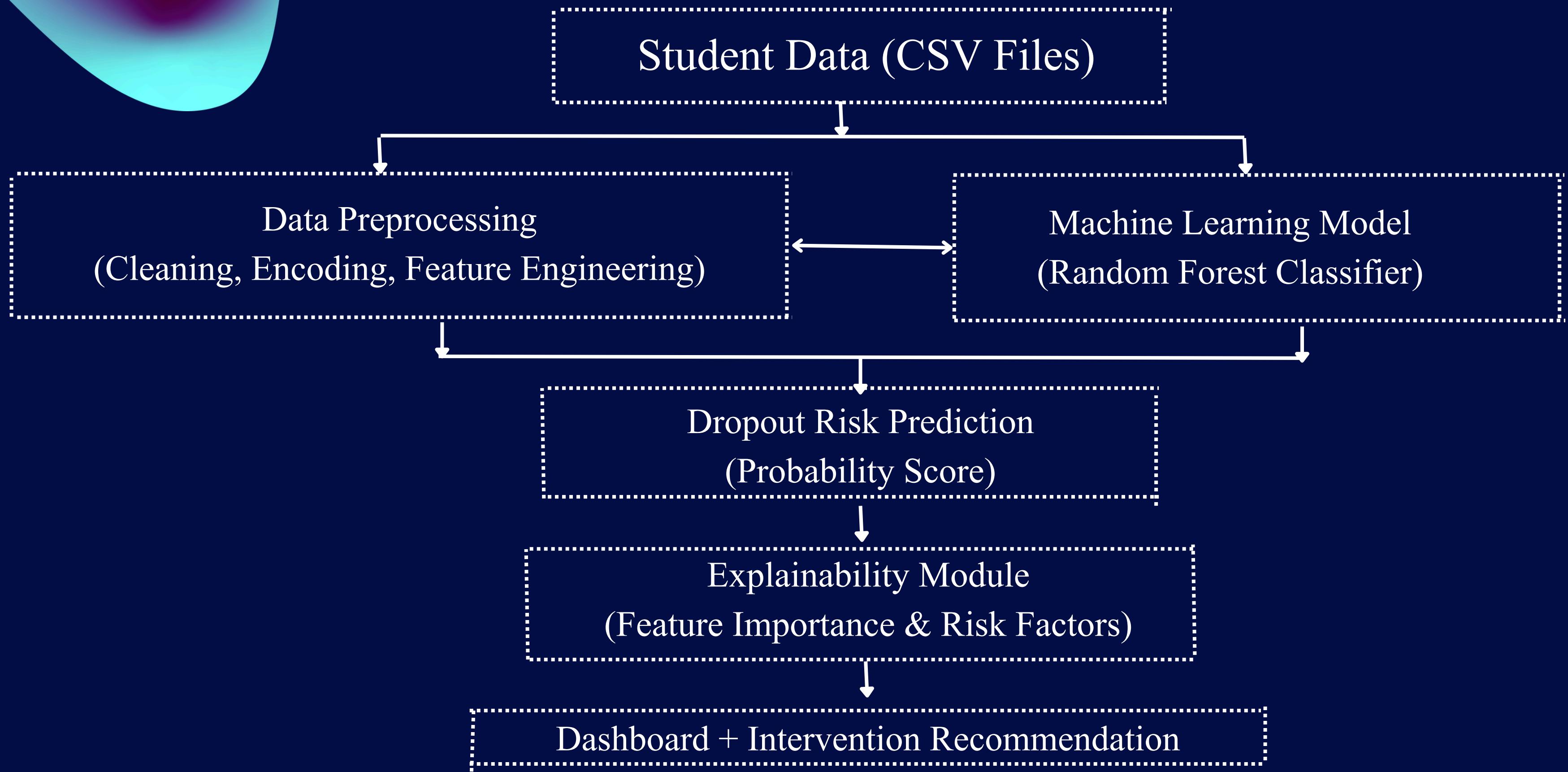
- Reduced graduation rates
- Lower accreditation scores
- Reputational damage

Need of the Hour:

AI-driven early warning system for proactive intervention.

Our AI Solution

AI-Based Early Dropout Risk Prediction System



Future Scope

Scalability & Enhancements

- prediction using available data records.
- Advanced model (CatBoost)
- Mobile app for counselors
- State-wide or national deployment
- Predictive trend analysis across semesters

Vision: AI-powered national student retention framework.

Impact on Education System

Transforming Education Through AI

Impact on EduShort-Term Impact

- Early identification of at-risk students
- Improved academic support
- Reduced dropout rates

Long-Term Impact

- Higher graduation rates
- Improved institutional rankings
- Data-driven policy decisions
- Stronger national workforce development

Our solution transforms raw academic data into

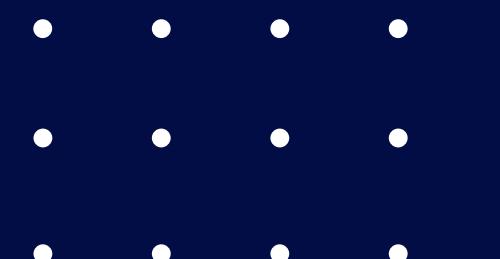
 Predictive Intelligence

 Explainable Insights

 Actionable Interventions

From Reactive Counseling

→ To Proactive Student Success Management



Thank you