

# Executive Summary: Diabetes Prediction App

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- Full-stack web app with ML & Tableau for diabetes prediction
- Used Pima Indian Heritage dataset
- Preprocessed with imputation, scaling, and SMOTE for balance
- Tested multiple models; Random Forest chosen for deployment
- Built Flask app with ML inference and embedded dashboards
- Dashboard 1: Demographics & outcomes
- Dashboard 2: Health metrics and correlations
- App helps answer questions on diabetes risk patterns
- Limitations: class imbalance, no male patients, limited features
- Future Work: add more features, explainability, user auth, better UI