Prosperity Prognosticator: Machine Learning for Startup Success Prediction

Project Overview

Prosperity Prognosticator is a machine learning project designed to predict the likelihood of a startup's success based on business, financial, market, and founder features.

Problem Statement

Most startups fail due to poor market fit, weak financial planning, inexperienced founders, and insufficient funding.

Core Idea

Input startup data → ML model → Success Probability Score

Dataset Features

- Funding amount
- Number of funding rounds
- Industry
- Founder experience
- Team size
- Location
- Revenue
- Burn rate
- Market size

Machine Learning Models

Beginner:

- Logistic Regression
- Decision Tree

Intermediate:

- Random Forest
- Support Vector Machine

Advanced:

- XGBoost
- Neural Network

Tech Stack

Python, pandas, numpy, matplotlib, seaborn, scikit-learn, xgboost, streamlit

Folder Structure

prosperity-prognosticator/

data/

notebooks/

src/

models/

app/

requirements.txt

README.md

Workflow

1. Data Collection
2. Data Preprocessing
3. Train Model
4. Evaluate
5. Save Model
6. Prediction

Advanced Ideas

- Success probability score
- Feature importance graph
- Dashboard
- Risk score

- Startup ranking system

Resume Project Title

Machine Learning Model for Startup Success Prediction using Random Forest and XGBoost

Author

Your Name