

GitHub Demonstration README

Repository Title: AI-KPI-VC-Analytics-Demo

Purpose This repository demonstrates how genetic algorithms (GA) and fuzzy logic can be applied to venture capital decision-making, improving prediction of startup performance and monitoring portfolio health.

Background The venture capital ecosystem faces challenges such as: - ~90% early-stage startup failure rate - Asymmetric information between investors and founders - Inefficient monitoring of capital deployment

This demonstration illustrates a methodology to address these challenges.

Demo Features - Synthetic dataset of startup KPIs (financial, operational, growth) - Basic GA optimization loop - Example fuzzy-rule for interpretability: IF revenue growth is HIGH and burn rate is LOW THEN success likelihood is HIGH - Visualization of prediction results and calibration

Example Output - ROC curve & AUC comparison baseline vs. GA+Fuzzy - Early-warning alert chart for KPI deviation - Lift chart showing improved identification of successful startups

Disclaimer This is a simplified demonstration for educational purposes. The production platform uses advanced proprietary methods not included here.

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