Regression Models & Personal Finance

Project Type: 2 - Comparative analysis

Group Number: 22

Student Name: Dominic Roy-Stang

Project overview

Problem: long-term financial planning is hard.

Goal: Compare three regression methods to approximate future net worth.

- Linear Regression (baseline)
- Time Series Regression
- Gaussian Process Regression

Can we do better than a linear regression?

What was learned?

Challenges & Limitations:

- Data availability & dataset size
- Scoring
- Data is not equally separated
- Inflation is not taken into account

Results

Linear Regression

R²: -4.6

Time Series Regression

R²: -177.5

Gaussian Process Regression

R²: -0.77

When can I retire? 2284 2050 Never

