Project Proposal

STAT 447C

Caden Hewlett

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Overview: Basic Requirements

(Verdugo 2024) (Gunn and Guluche 2024)

Team: The team will contain me (and nobody else.)

Project Themes: From the List

The project will be investigating the "Bayesian vs Frequentist" paradigm, specifically with the context of Reinforcement Learning.

This comparison will be conducted by writing a posterior inference-based method from scratch. The proposal includes a "Toy Example" of this process for the data type in question. Effectively, this also tackles Bayesian inference method over a non-standard data type.

So, in short, the project themes being addressed are "Bayesian vs Frequentist," "Bayesian inference method over a non-standard data type" with the implementation being an idea I had inspired by some similar works in the field. The "baseline" to which it will be compared is a standard frequentist reinforcement learning method. I have already implemented this in `R` as a weekend project to be better-prepared. In addition I have developed some Python scripts for parsing the data type in question into a utilizable structure.

Repository

There is a working link to a public repo containing commits from all team members.

Click here for the link to my entire 447 Repository.

Bibliography

Gunn, Aaron, and Tyler Guluche. 2024. "For Sale/Lease - Freestanding Building at 635 36 Avenue NE, Calgary AB." NAI Advent.

Verdugo, Manny. 2024. "I-c Zoned / Flex Retail Space for Sublease at 711 - 48 Avenue SE Unit 11, Calgary AB." NAI Advent.