MORL - Detailed View

Feature Selection

Filter Methods

- Evaluate **usefulness** of features
- **Eliminate** Features at Some Threshold
- **Run RL** with Features
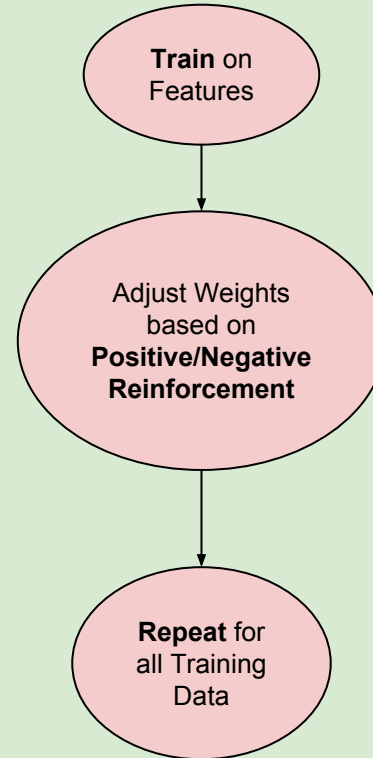
Genetic Algorithm

- Randomly Select **Features**
- **Evaluate Features** by Running **k-Folds RL**
- **Evaluate Features** By **Filter Methods**
- **Select** top *n* feature sets and **Repeat**
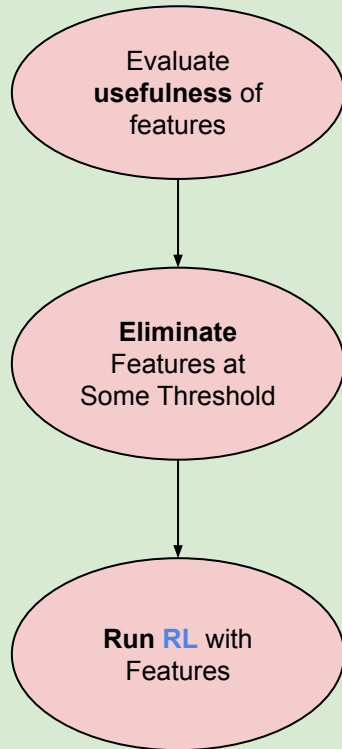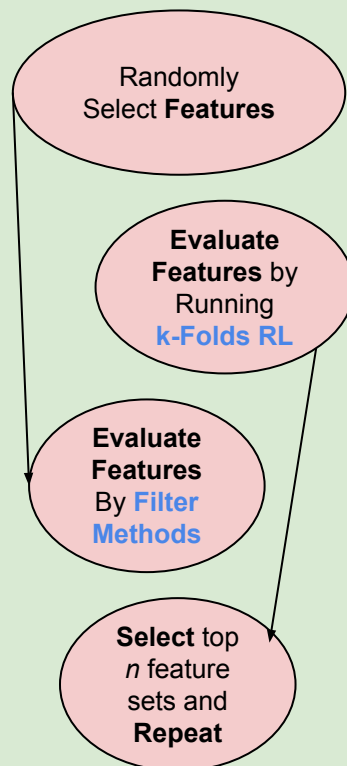
Reinforcement Learning

Tensor Flow RL

- **Train** on Features
- Adjust Weights based on **Positive/Negative Reinforcement**
- **Repeat** for all Training Data

K-folds Validation

- **Shuffle** the data.
- **Split** into k parts
- **Select** k-1 parts for training
- **Select** 1 part for testing
- **Evaluate** Results of **RL** model
- **Repeat and summarize** for k different testing parts.
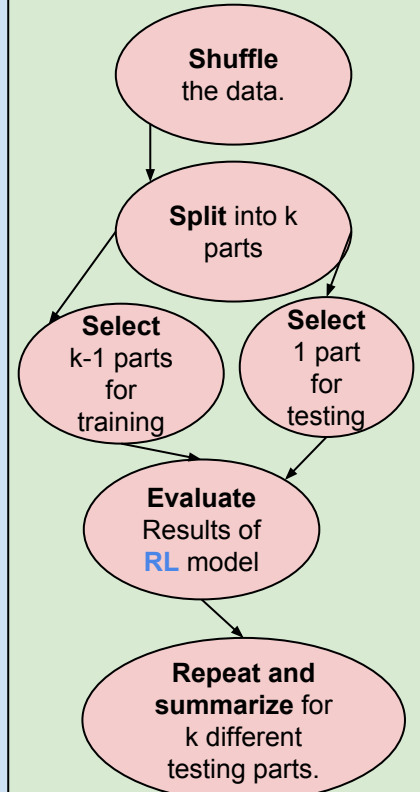
Problem Statement: We seek to find a novel method of multi-objective optimization for reinforcement learning.