Report (ML Fin Data - Project 1)

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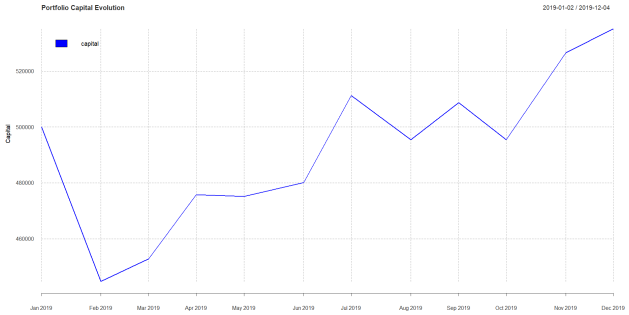
Strategy Description

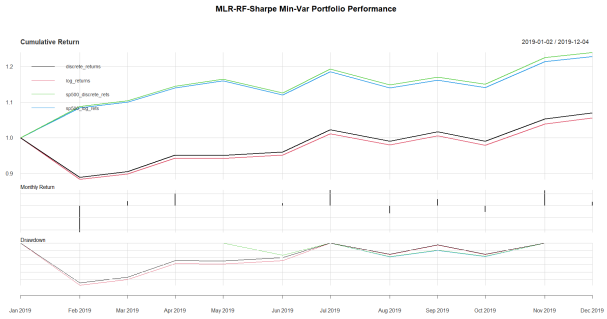
$$N^{runs} = \left\lfloor \frac{N_{months} - N_W}{s} \right\rfloor + 1$$

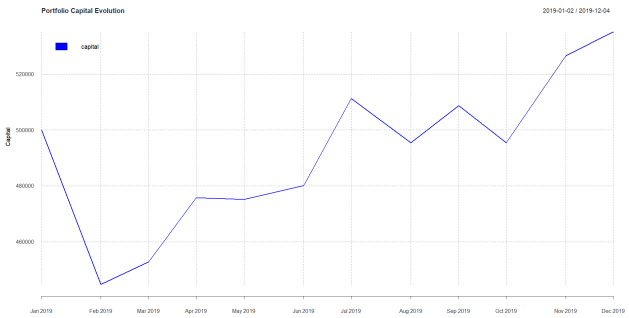
τ and window logic

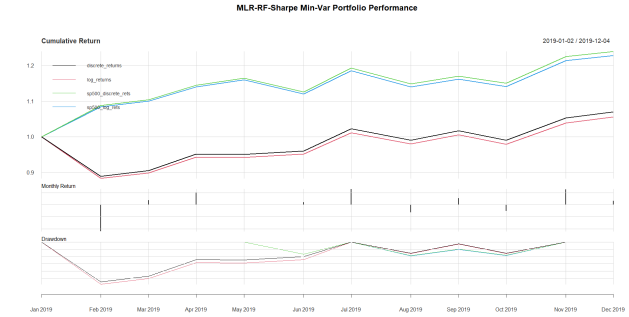
1. Sector G contains tickers $\{S_1, S_1, \ldots, S_{|G|}\}$, where $|G|$= number of stocks per sector (before selection).
2. For each ticker, want to calculate **current window:**

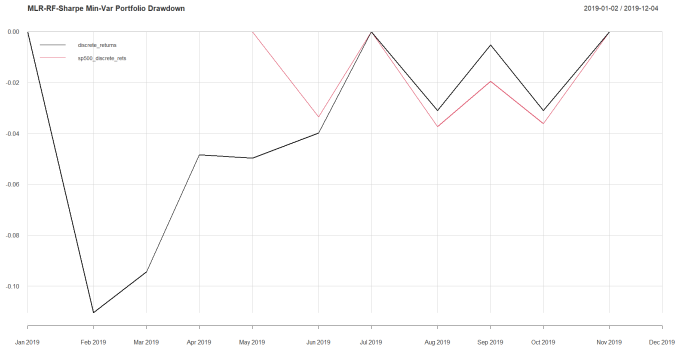
$$[t_1 = \text{week } W_{s\times\tau} \ , \ t_{12} = \text{week } W_{s\times\tau+11}]$$











Machine Learning Components

$$\mathcal{L}(\beta) = \frac{1}{2}\sum_{i=1}^{n}(y_i - x_i^T\beta)^2 + \lambda\left[\alpha||\beta||_1 + (1-\alpha)||\beta||_2^2\right]$$

Pros, Cons, and Comments