Purpose:

Stock Portfolio optimization for future investment based on three models of mean-variance (MV), mean-variance-skewness-kurtosis (MVSK) and mean-variance-skewness-kurtosis-entropy (MVSKE).

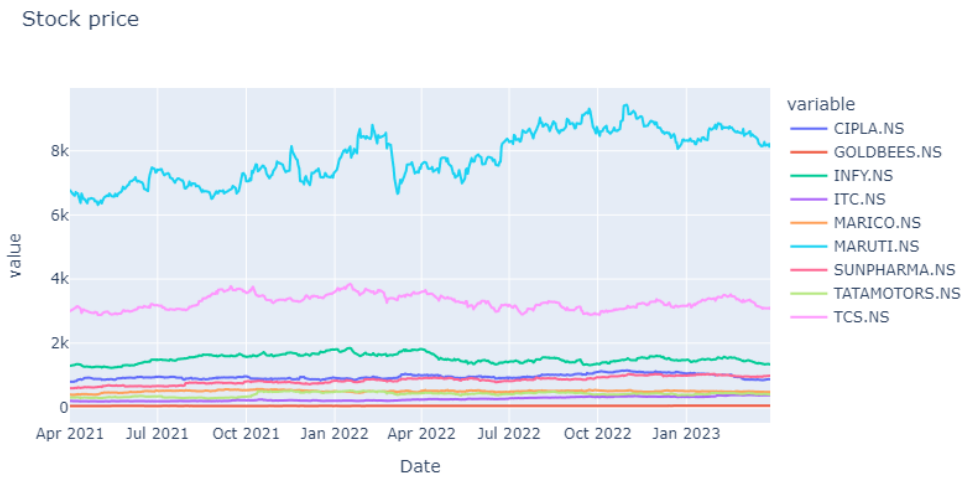
Challenges:

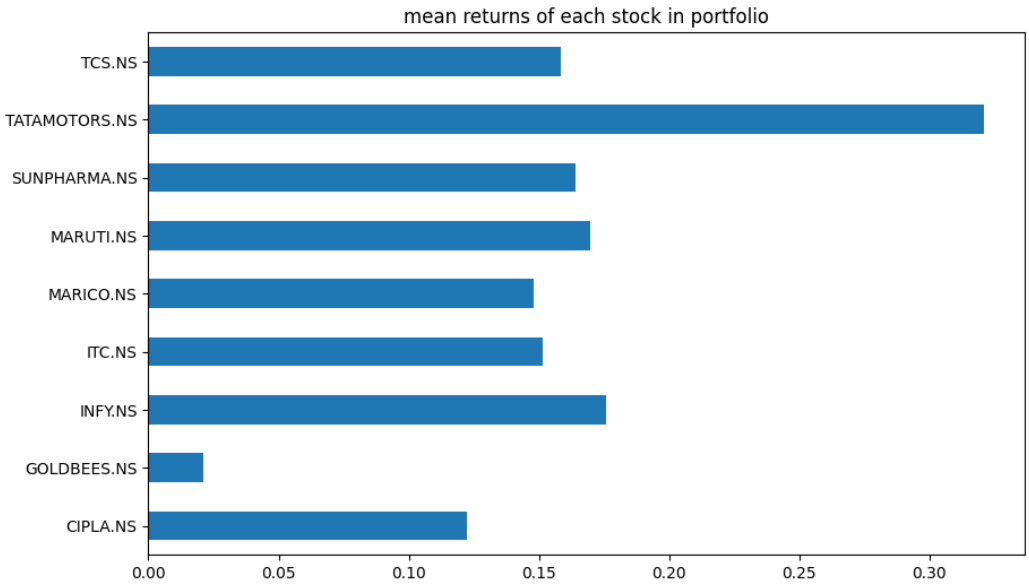
MVSKE and MVSKE model need mathematical optimization for finding the optimal solution.

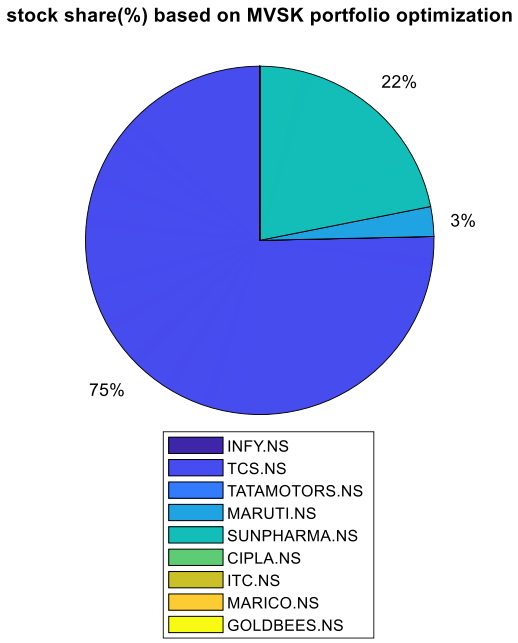
Approaches:

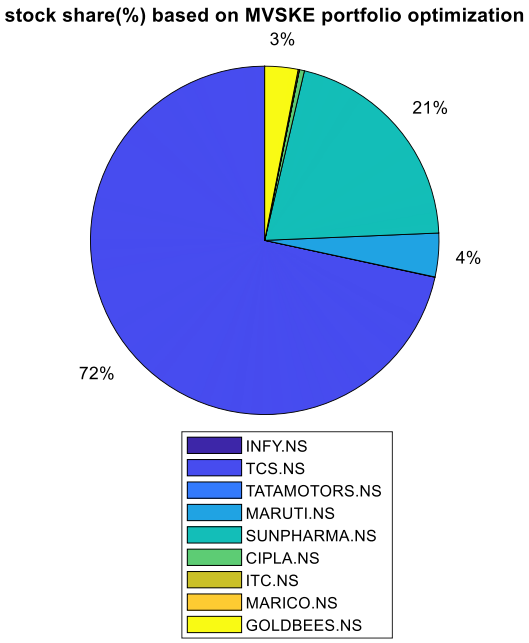
We implement polynomial Goal Programming for our model optimization.

Result:









Requirements:

MATLAB

Python packages:

- Pandas
- Numpy
- Matplolib
- Seaborn
- Pypfopt
- yfinance