Introduction to Finance Worksheet 2

Problem 1. Estimate the variance of a non-dividend yielding stock\(^1\) using the exponentially weighted moving average model. Graph the volatility over time. Graph several values of \(\lambda\). What conclusions can you draw?

Problem 2. Choose an exotic option. Assume that a stock evolves via geometric brownian motion and find the value of the option at expiration. Describe your solution clearly. What conclusions can you draw?

\(^1\)You can find historical data at finance.yahoo.com