# **Daily Return Mean Reverting Strategy**

# Background:

During my time as a research assistant under the guidance of Prof. Ben Charoenwong, Assistant Professor at NUS, I observed that both volatility and returns exhibit mean reversion in equities. This observation led me to hypothesize that, on a daily level, stocks experiencing losses are likely to become future winners, and vice versa. Based on this hypothesis, I developed a strategy that involves shorting the previous day’s top five winners and going long on the previous day’s top five losers, assuming high liquidity and significant investor attention in these stocks within the Dow Jones Index.

# Underlying Logic:

1. No Constant Direction: As the price varies daily, the price of top companies in a particular sector does not move only in a single direction for a long period.

2. Absorption of Information: Any information available in the market is absorbed in the price very fast due to high liquidity with a potential for overreaction.

# Findings:

A graph of a stock market

Description automatically generated

# Risk Factors:

In a trending market, mean reversion might not occur quickly, as strong trends can cause winners to continue winning and losers to continue losing. In our strategy we still see the sharpe ratio of 0.87 but by merging this strategy with macro-signals, I believe there seems a higher alpha and consistency .