**Research topics**

2822 open/ previous close and relation with current day expected return .(Want to sell on the open if opening high, buy on the day’s open if opening low)

What time the day’s low is reached vs. bull/bear market. (Hypothesis: if low point occurs later (e.g. in the afternoon, more likely to be bear market)

The role of AM return in predicting PM return.

Average return in AM PM in bull and bear markets.

Chance of all day crash and characteristics of it. (high reached, progression)

Latest buying point with probability >50%.

Role of overnight SPX on retOPC and retCC.

Autocorrelation. Partial autocorrelation. Histograms. Kernel.

Baysian: (learn more about machine learning and baysian updating)

From a pattern, how to predict which scenario we are in. Maximum likelihood.

大跌的形态。反弹的概率。

下午创新低的反弹概率。1 to 2, 2 to 3pm.

Technical issues:

Mean retCC by weekday?

Input US close, weekday

Output: probability of going up, going down, mean return (controlling for weekday and not controlling for weekday)