Live Algorithmic Trading Using EMA Cross Analysis

Algorithmic Trading

Algorithmic trading is an automated trading strategy that use computers. Algrithmic trading consist to program a bot with instructions to trade. The instructions are based on timing, price, quantity or any **mathematical model.**

Technical Analysis

Technical analysis is the analysis that evaluates stocks by identifying opportunities through analyze statistically the price of the stock. This includes stock trends and activity, that could be volume and price of the stock.

EMA CROSS

EMA Cos is a trading strategy that trades stocks when their fast exponential moving average overtakes slow exponential moving average. This trading strategy helps traders to detect trending.

Live trading environment

To test technical analysis we decided to use Quant Connect Algo Lab. Algo Lab is a trading platform, which provides traders with a lot of trading tools to create bots.
Quant Connect works with:Interactive brokers, FXCM, Oanda,and GDAX

Moving Average Formula

$$MA_n = \frac{\sum_{i=1}^{n} D_i}{n}$$

Where,

n = number of periods in the moving average

D_i = demand in period i

Trading Example

By: Esteban Limón and Alfonso Aguilar
Profesor:Francisco Muñoz
ITESO A.C.