**Ideas proyecto final**

Variables a estudiar:

1. IPC YoY vs Interest Rates vs DXY
2. Money Supply 🡪 M2 = M1 + marketable securities + other less liquid bank deposits
3. PMI
   1. El Índice del Instituto de Gestión de Suministros (ISM) de fabricación mide la cantidad de pistas de la actividad manufacturera que se produjeron en el mes anterior.Estos datos consideran una muy importante medida económica y de confianza. Si el índice tiene un valor por debajo del 50, debido a una disminución de la actividad, tiende a indicar una recesión económica, sobre todo si la tendencia se mantiene durante varios meses. Un valor por encima de 50 indica un tiempo probable de crecimiento económico. El indice IGS es el resultado de una encuesta mensual de más de 400 compañías en 20 industrias a lo largo de los 50 estados. El IGS líder de calidad ha sido probada en el tiempo. Durante una recesión, la parte inferior de la IGS puede preceder el punto de inflexión para el ciclo económico por algunos meses. Una mayor lectura de la esperada debe ser tomada como positiva / alcista para el dólar, mientras que una lectura inferior a lo esperado debería ser tomada como negativa y bajista para el dólar.
4. ¿10Y-2Y BONDS?
   1. Then why yield on 2 year US trasury bonds touched higher than the yield on 10 year US treasury bonds? This is because the US Federal Reserve is all set to increase interest rate tomorrow. Now with increase in interest rate the value of all assets including financial assets such as bonds go down. Due to this expected interest rate hike, investors who held US 2 year treasury bonds started selling them. This sell-off brought down the price of 2 year US treasury bonds. Decline in price resulted in increase in yield. Sell-off was also there in the 10 year US treasury bonds but to a lesser degree than in the case of 2 year bonds. So the price decline in case of 10 year bonds was lesser. Actually 10 year bonds were selling at a higher price (lower yield) than 2 year bonds (higher yield).  
        
      Investors are expecting that once the Federal Reserve increases interest rate , it will slowdown demand in  the US economy further. This will bring recession. Once recession sets in the Federal Reserve will be forced  to lower interest rate to give a boost to demand in the economy. So the adverse impact of coming increase in interest rate will be more on the short term 2 year bond than on the long term 10 year one. Hence 2 year bonds traded at higher yields than 10 year bonds.
5. VIX
6. Unemployment Rates?

Activos:

1. BTC
2. ORO
3. NASDAQ
4. SPX

Videos que me quiero ver:

Para la primera parte:

Quantitative stock analysis:

<https://towardsdatascience.com/how-not-to-use-machine-learning-for-time-series-forecasting-avoiding-the-pitfalls-19f9d7adf424>

<https://towardsdatascience.com/lstm-for-google-stock-price-prediction-e35f5cc84165>

<https://medium.com/onepagecode/stock-market-forecasting-using-machine-learning-108b819f2dc9>

<https://twitter.com/pyquantnews/status/1593051596769853443?s=48&t=qq3I3Qnyzl0n8zBo0746Qw>

<https://twitter.com/pyquantnews/status/1585606799171928064?s=20&t=1vFcIEi3B__OI4Z2E8hx_g>

<https://twitter.com/pyquantnews/status/1585607295370760192?s=20&t=1vFcIEi3B__OI4Z2E8hx_g>

Para la segunda parte :

<https://thecleverprogrammer.com/2020/05/25/algorithmic-trading-strategy-with-machine-learning-and-python/>

<https://thecleverprogrammer.com/2020/05/23/bitcoin-price-prediction-with-machine-learning/>

<https://www.youtube.com/watch?v=VZQg4KSmpQU>

<https://www.youtube.com/watch?v=VoDTVOJR3Og&t=681s>

<https://www.youtube.com/watch?v=wvmnlIsAzok>