

On-Boarding list

DeFi

- Read two books quickly
 - <https://landing.coingecko.com/how-to-defi/>
 - Some questions needed to be answered
 - What is permanent loss?
 - What is the liquidity pool, and how does it work
 - What is the AMM formula
- Try \$100 over different liquidity pools and swap pools to see how do they work: [Curve](#), [compound](#), [UniSwape](#), etc

CeFi

- **Open an account** over the following cryptocurrency exchanges and try to extract `account balance` via the API for each exchange.
 - Binance
 - Okx
 - Kraken
 - Kucoin
- Learning what is the funding rate.
 - What is the funding rate?
 - How is it calculated?
 - Think up a arbitrage way between the spot and future over the Bitcoin

Quantitative Financial Knowledge

- Learn what is the Black Scholes Model
 - https://www.youtube.com/results?search_query=black+scholes+model+
- Learn Basics for the risk management
 - <https://www.streetofwalls.com/finance-training-courses/quantitative-hedge-fund-training/important-quant-math-topics/>

Backtesting Framework

- Read the doc for the backtrader

- <https://www.backtrader.com/>
- Follow the `quickstart` tutorial, write a script to backtest the [MACD Crossover Strategy](#) over daily Bitcoin

Trading Bot

Read the doc of the following two TradingBot.

- CCXT
A JavaScript / Python / PHP library for cryptocurrency trading and e-commerce with support for many bitcoin/ether/altcoin exchange markets and merchant APIs.
[ccxt - documentation](#)
- hummingbot
Hummingbot is an open-source framework that helps you build automated trading strategies, or **bots** that run on cryptocurrency exchanges.
[Docs - Hummingbot Docs](#)

Watch videos from YouTube to learn deeper about the cryptocurrency

- Some good resources
 - <https://www.youtube.com/@chainlink>
 - <https://www.youtube.com/@CryptomaticsYT>
 - <https://www.youtube.com/@BinanceAcademy>
 - <https://www.youtube.com/@EatTheBlocks>
 - <https://www.youtube.com/@WhiteboardCrypto>