



Quant Wing - Wall Street Club

2021-22

Agenda

A starter guide to Quantitative Finance. The guide aims to help anyone trying to explore quant and its applications. The collection of resources should help anyone gain knowledge to work on projects irrespective of their technical background.

Algorithmic Trading

Algorithmic trading is a process for executing orders utilizing automated and pre-programmed trading instructions. Helps eliminate human emotions and interactions whilst trading.

1. Python: A must learn programming language to code up your strategies in.
Financial Libraries to be learnt - Numpy, Pandas, Matplotlib, Sci-py
2. Backtesting: Learn to calculate historical performance of any trading strategy
3. Trading: Implementation of automated strategies using APIs

Suggested Resources:

1. Automate the Boring Stuff (Book - Python)
2. Learn Python the Hard Way (Book - Python)
3. Python for Financial Analysis and Algorithmic Trading - Jose Portilla ([Udemy](#)) (Backtesting in Python)
4. Trade Hull - ([Youtube Channel](#)) (Live AlgoTrading in Indian Markets)



Mathematical Finance

Concerned with mathematical modeling of financial markets. Must Learn Concepts: No Arbitrage Theory, Time Value of Money, Futures and Options and respective pricing models

Suggested Resources

1. Intro to Quantitative Finance by Paul Wilmott
2. Options, Futures and Other Derivatives by JC Hull

Time Series Analysis

Understanding components of a financial time series and forecast predictions using them.

Suggested Resources

1. Practical Time Series Analysis by SUNY University ([Coursera](#))
2. Introduction to Time Series Forecasting in Python by Jason BrownLee

Repository

Quantitative Finance Resources mentioned above and more [LINK](#)

Contact for queries

Tanay Sheth - 8976171072

Quant Head - Wall Street Club - BITS Goa 2021-22

