Installations
Financial Data Sources and APIs
Necessary Statistics in Finance
Regression
Time Series
Time Value of Money

#### Python for Finance-I

Abdullah Karasan Senior Financial Data Scientist

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     Abdullah Karasan Senior Financial Data Scientist
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# Intro to Python IDE

- Installation on Mac
- Installation on Windows
- Brief Introduction to Jupyter
- Brief Introduction to Google Colab

### Python Libraries

- Introduction to Pandas
- Introduction to Numpy
- Introduction to Matplotlib
- Introduction to Scipy
- Introduction to Seaborn

#### Main APIs

- Yahoo Finance
- FRED
- Quandl
- WRDS
- World Bank Database

#### Main Concepts

- Population and Sample
- Central Tendency Measure
- Dispersion Measures
- Distributions
- Random Number Generation
- Exercises

# Linear Regression Application

- Application of Linear Regression
- Interpretion of Regression Result
- Assumptions of Linear Regression
- Exercises

## Main Concepts and Models

- Stationarity and Random Walk
- Moving Average
- Autoregressive Model
- Autoregressive Moving Average Model
- Autoregressive Integrated Moving Average Model
- Seasonal Autoregressive Integrated Moving Average Model
- Python Applications
- Exercises



#### Main Concepts

- Net Present Value
- Internal Rate of Return
- Python Applications

Net Present Value and Internal Rate of Return

# Thank You