

## Videos & Courses



### [Quantiacs YouTube Channel](#)

Presentations from experts on quantitative trading. Includes example strategies, concepts, machine learning introduction, and introduction to trading. Tailored towards beginners with no prior experience.



### [Developing and Testing Quant Strategies Podcast](#)

Chat with Traders sits down with quant expert and author Ernie Chan, who gives a breakdown of how quant trading strategies are developed, tested, and executed on the market.



### [Computational Investing Course](#)

Learn from Georgia Tech Professor Tucker Balch the basic principles and algorithms used by hedge funds to maximize returns and reduce risks. The course goes through market mechanics, analyzing data with Python, and technical analysis techniques. Great online course for beginners.

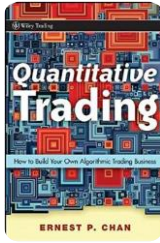


### [Financial Engineering Course Part 1](#) | [Part 2](#)

Columbia University's renowned quant introductory course that's perfect for getting beginners up to speed with financial engineering. Part 1 focuses on derivatives, financial instruments and the math behind them while Part 2 dives into analyzing more complex instruments.

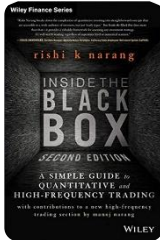
## Books

### Introductory



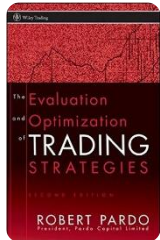
#### **Quantitative Trading: How to Build Your Own Algorithmic Business** [↗](#)

Ernie Chan provides the best introductory book for quantitative trading and walks you through the process of creating trading algorithms in MATLAB and Excel. Aimed at complete beginners, this book covers all the main aspects of algorithmic trading.



#### **Inside the Black Box** [↗](#)

Rishi Narag presents a straightforward, math-free guide into the world of quant hedge funds. It shows you how professional quants work and outlines the requirements of and hallmarks of lucrative algorithmic strategies. A highly approachable tutorial on quant best practices for beginners.



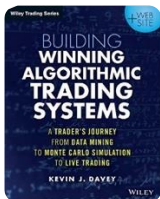
#### **Evaluation and Optimization of Trading Strategies** [↗](#)

Automated trading expert Robert Pardo provides a practical guide on developing, evaluating, and testing quantitative strategies. This book is both a key introductory primer on optimization and a detailed expose of trading strategies, making it applicable for any beginner.



#### **Algorithmic Trading and DMA** [↗](#)

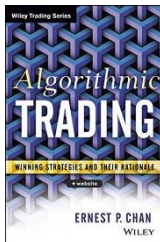
Barry Johnson gives you the basic elements of market microstructure and algorithmic trading. It bridges the gap between trading theory and practice concrete examples. Great straightforward guide for beginners that avoids too much extraneous economic theory.



#### **Building Winning Algorithmic Trading Systems** [↗](#)

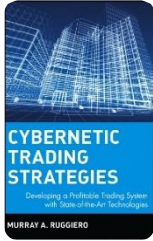
Written by accomplished trader Kevin Davey, who walks you through concrete rules and processes for generating and executing profitable quant strategies. One of the few books to provide original trade ideas and helps anyone get started with algorithmic trading.

### Advanced



#### **Algorithmic Trading: Winning Strategies and Their Rationale** [↗](#)

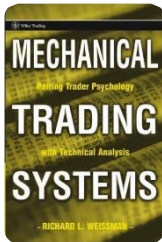
Ernie Chan's sequel to Quantitative Trading with a more in-depth breakdown of trade analysis techniques and the math behind them. He extensively teaches the strategies by implementing them in MATLAB, making this a practical albeit slightly more complex approach to becoming a quant.



### Cybernetic Trading Strategies 🔗

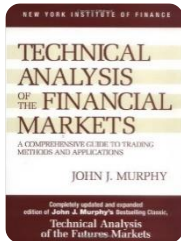
Introductory analysis of neural nets and genetic algorithms, this book is a primer on using machine learning methods for trading. Murray Ruggiero provides concrete trade ideas that go beyond just technical analysis.

## General Trading & Strategies



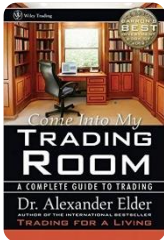
### Mechanical Trading Systems 🔗

Richard Weissman gives an in-depth tutorial of how to trade with optimal mix of risk management and limited emotional exposure. Weissman presents the discipline and guidance needed to profitably execute short-term trades.



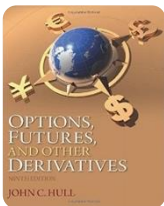
### Technical Analysis of the Financial Markets 🔗

Fantastic reference for using technical analysis in trading. Provides clear descriptions of all types of technical indicators and remains a great read although intended as a semi-exhaustive reference.



### Come Into My Trading Room 🔗

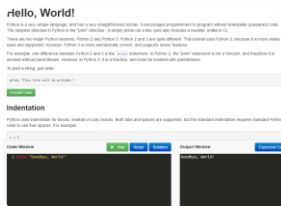
Fantastic first book for anyone new to trading. Dr. Alexander Elder bridges the gap between market fundamentals and becoming profitable from exploiting technical indicators.



### Options, Futures, and Other Derivatives 🔗

Great first book for entering quantitative finance, and approaching it from the mathematics side. John C. Hull has created the bible for financial mathematics taught across all college courses.

## Python Coding



### Learn Python 🔗

An interactive Python tutorial intended for anyone to learn the programming language. Live examples of code can be executed and tested right in your browser.



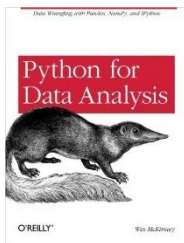
### **Intro to Python for Data Science** [↗](#)

An interactive Python course from Datacamp that introduces you to all the toolkits and libraries used for data analysis. The online coding environment and video introductions keep you engaged.



### **Think Python** [↗](#)

A free online book that's aimed at teaching beginners how to become python programmers. More in-depth and thorough introduction than the interactive courses above.



### **Python for Data Analysis** [↗](#)

Practical introductory book to scientific Python. Shows you all the tools and problem-solving methods available for Python.



### **Python Data Science** [↗](#)

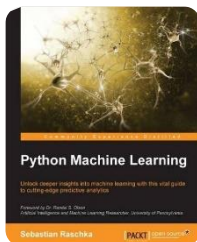
Dataquest.io online course for learning Python as it applies to data science. Great introduction to scientific/quant programming in Python. Also has interactive in-browser code examples like LearnPython and Datacamp.



### **Python for Beginners** [↗](#)

Official Python links and documentation, not as intuitive as the options above but gets the job done.

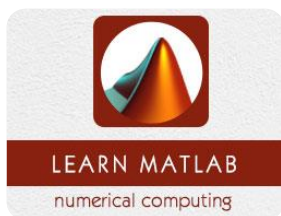
## Advanced Material



### **Python Machine Learning** [↗](#)

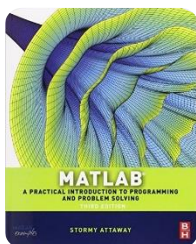
Great for those starting on their machine learning journey, this book is packed with coding practice and examples to get you comfortable with using Scikit-learn and Python.

## MATLAB Coding



### [MATLAB Quick Start Guide](#)

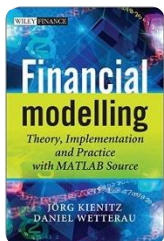
Quick and thorough online introduction to MATLAB with plenty of code examples to get your footing. Most intuitive and straightforward MATLAB intro available.



### [MATLAB: A Practical Introduction](#)

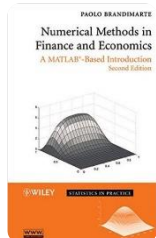
Perfect guide for learning MATLAB if you have no programming background. Systematic step-by-step approach makes this ideal for beginners to MATLAB and programming.

## Advanced Material



### [Financial Modelling: Theory, Implementation, and Practice](#)

Great book for those already familiar with statistics and financial engineering. Beginners should stay away while researchers may find a lot of unexpected value from it.



### [Numerical Methods in Finance and Economics](#)

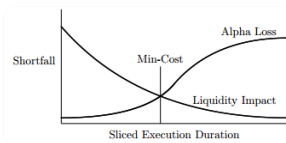
Great MATLAB book, especially for quants. Code examples are in-depth and instructive. Will require some math background, especially experience Linear Algebra.

## Papers



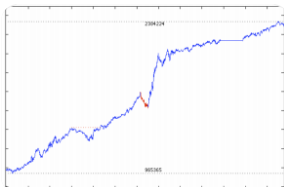
### [Most Popular Recent Quant Research Papers](#)

Catalog of the most popular quantitative finance papers of the past year. Great resource for researchers and those that want to expand that quant knowledge.



### [Max Dama on Automated Trading](#)

Considered one of the best introductions to algorithmic trading, a densely packed 60 page paper.



### [Algorithmic Trading of Futures via Machine Learning](#)

A 5-page breakdown of applying a simple machine learning model to commonly used technical analysis indicators.

## Getting Help



### [Automated Trading Forum – Elite Trader](#)

Great online community for posting beginner questions and finding answers to common quant issues when just getting started.



### [Elite Automated Trading Forum – futures.io](#)

Another great online community that can be useful to beginners, but generally has a varied mix of users with more experienced quants.



### [Quant StackExchange](#)

Q&A site for quants with programming, financial math, and automated trading help.

## Finding Trade Ideas



### [Wilmott Forums](#)

Founded by the quant Paul Wilmott, the forums are a great place to find direction for new trade ideas.



### **Forex Factory** [↗](#)

Good website for staying update on events in currency trading, and the forums are another good source of trade strategies.



### **Steve Hopwood's Forex Forums** [↗](#)

Another forum with a bustling community around Forex automated trading systems.



**Traders**  
Laboratory

### **Traders Laboratory** [↗](#)

Active trading forum with space for beginners and sections dedicated to technical analysis.



### **TheLion** [↗](#)

Online trading community focused on all things Wall Street for traders and investors, good place to learn about the markets.