Course link: <https://www.udemy.com/course/ai-finance>

Get a coupon at: <https://lazyprogrammer.me>

# Financial Basics

Understanding Financial Data

<https://colab.research.google.com/drive/17gj0qsGARnpNEA8JPvHGC-68CvSlYa6x>

Adjusted Close

<https://colab.research.google.com/drive/1891k1J8JEYF-G3DdaMOKhXyS-OBRhNsz>

Financial Data Statistics

<https://colab.research.google.com/drive/197NegI0893WUrLsTc2l6qp_P5JVjXPVe>

Alpha and Beta

<https://colab.research.google.com/drive/1KNCiKmilCHCxim8MfAlDJ0ZnEr4shv9P>

# Time Series Analysis

SMA

<https://colab.research.google.com/drive/1xzV9700UvaoRkCD1QoL6R8_XdX1tW1In>

EWMA and Holt-Winters

<https://colab.research.google.com/drive/1oCx4z3cNu7r0GxUYrojfknZMJbnsjQxr>

ARIMA

<https://colab.research.google.com/drive/1wHr16MEr4rxSDAihxxeTNFod1oTpBESI>

Stationarity

<https://colab.research.google.com/drive/1Ujf_QN2CvL6pu4UllW-12ORN54TF5dZO>

PACF and ACF

<https://colab.research.google.com/drive/1ZPJdPT8m6cDehzfAXbYdOmUMH2x8xy9J>

ARIMA 2

<https://colab.research.google.com/drive/1jlCrCmJjVNylpToAXkLEVkky1IN3PRUN>

ARIMA 3

<https://colab.research.google.com/drive/11f0w_ab57kBoVbI46BT025t5S5TtT63g>

ACF/PACF Stock Returns

<https://colab.research.google.com/drive/1QAHS72_JOhtcnKBYUlZ6xMvHBWu4LeZS>

# Portfolio Optimization

2 Stock Portfolio

<https://colab.research.google.com/drive/1d0qmkxR3fwcBmLi4v0-zNOVNwYOk65J2>

Portfolio Optimization

<https://colab.research.google.com/drive/1CADi8vj-NXfsM93kmVba8i22wJObUkOQ>

# Algorithmic Trading

Trend Following Strategy SMA

<https://colab.research.google.com/drive/14abCXVL2SXJG2ip0uyIccnW8eRJU3qrP>

Regression-Based Strategy 0-1

<https://colab.research.google.com/drive/1O6NuN4Gp8pLf7pGeRCf73QzSHGMPtopc>

# Reinforcement Learning

Trend-Following Revisited

<https://colab.research.google.com/drive/1I5zO3kxjrPjZMx6vW9IhC-7OIYUbOA5I>

Q-Learning Trader

<https://colab.research.google.com/drive/1l0Ruzbpoj542YWoFv_sz4uR5It3ScPmg>

# Statistical Factor Models

PCA

[https://colab.research.google.com/drive/1vX1T-0HtAvEIDTcI9aBABi1GwftpGD8e](https://colab.research.google.com/drive/1vX1T-0HtAvEIDTcI9aBABi1GwftpGD8e?usp=sharing)

# Regime Detection and Sequence Modeling with Hidden Markov Models

Hidden Markov Model

[https://colab.research.google.com/drive/1mL0jTLXawavvdP5\_TviB0NnRwN1v1ejE](https://colab.research.google.com/drive/1mL0jTLXawavvdP5_TviB0NnRwN1v1ejE?usp=sharing)