# Markos Terzidis

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## Work Experience

**Investment Strategist & Portfolio Manager**, Private Investment Advisor — Mar 2020 – Present

- Grew capital from $30,000 to $400,000 in crypto, timely move to stable assets before market decline
- Shorted EURUSD from 1.15 to 1 based on fundamentals, protecting clients' purchasing power. Traded RUB similarly
- Developed a sophisticated backtesting framework in collaboration with programmers for strategy evaluation
- Provided customized guidance to clients on investment strategies across stocks, bonds, crypto, forex, and real estate
- Traded Australian lithium mining companies using lithium carbonate spot price data in lieu of futures market

**Quantitative Financial Advisor**, EKP Consultants Inc - Boston, MA — Oct 2021 – Aug 2023

- Reduced processing time by 50% vs. excel by automating data cleaning and analysis with Pandas and Numpy in Python
- Boosted model accuracy by 30% using XGBoost (classifier & regressor) to forecast real estate market trends
- Used sklearn mutual information to assess feature importance, encompassing intricate factors in the feasibility study
- Visualized model results with Matplotlib and Seaborn, integrated into an actionable report for senior management

**Operations Director & Financial Strategist**, A Terzidis & Co - Athens, Greece — May 2018 – Apr 2022

- Achieved a 15% cost reduction through streamlined financial management, encompassing cash flow analysis, investment pricing, and financial statement analysis, facilitated by an efficient expense tracking system
- Founded collaborative manufacturing facilities in Tunisia, Morocco, Turkey, and Vietnam
- Enhanced lead time by 20% through a cloud-based order tracking system, with real-time insights into order status
- Minimized downtime by deploying a linear programming manufacturing model, to track material & time requirements

## Skills

**Programming**: Python, SQL, R, VBA Excel, Jupyter, LUA, Java, C++ — **Front-end**: HTML, CSS, JS
**Other software**: Git, G Suite, MATLAB, Linux Server Administration, COMSOL, SolidWorks, Aspen, Polymath
**Languages**: English, Greek (Native) • French, Russian (Proficient) • Spanish (Elementary)
**Operations Management**: Demand Forecasting, Six Sigma, Lean Manufacturing, JIT
**Financial APIs & Software**: MQL5, PortfolioVisualizer, IBKR API, ToS API

## Projects

**Asset Allocation Analysis** - Python, SQL — Nov 2023 – Present

- Determined asset weightings that maximize a portfolio's Sharpe ratio at half-Kelly. This results in lower risk and higher risk-adjusted return cf. full-Kelly (75% the expected growth rate and 50% of the drawdown risk)
- Analyzed yfinance and FRED historical data in SQL database for future volatility, correlation, and return modeling
- Modeled the daily empirical instantaneous geometric excess returns, resembling a fat-tailed Laplace distribution

**Time Series Trend Following** - MQL5 (resembles C++), MetaTrader — Oct 2021

- Algorithmic trading strategy using moving averages crossover to capture momentum factor (potential source of alpha)
- Mitigated idiosyncratic risk by diversifying time periods in line with profitable managed futures strategies
- Leveraged trend strength, MA crossovers, and candle patterns for entry/exit, adjusting positions during consolidations
- A powerful portfolio diversification tool with near-zero correlation to the stock market and positive expected return

## Education

**BS - Chemical Engineering**, Rowan University - Glassboro, NJ — May 2018

- Recipient of Full-Ride Merit-Based Scholarships
- Audited courses (MIT-OCW): Topics in Mathematics with Applications in Finance