Alessio Cianini

Msc. Mathematical Engineering - Financial Engineering **GPA: 3.87/4** **Bsc.** Industrial Engineering
+33 769534915 cianinialessio@gmail.com github.com/CianiniAlessio Born: 12/09/1996

Technical Skills

Programming Languages: C#, C++, Python, SQL, MatLab, Excel/VBA
Languages: English (C1), French (B1), Italian (Mothertongue)

Education

University of Padua
*Master of Science in **Mathematical Engineering**, **Financial Engineering GPA: 3.87/4*** *Padua, Italy*

ESILV - Ecole Supérieure d'Ingénieurs Léonard de Vinci
Exchange student in Quantitative finance *Paris, France*

University of Padua
*Bachelor of Science in **Aerospace Engineering*** *Padua, Italy*

Working Experience

Quantitative Developer **01/2023 – Now**
Natixis Corporate & Investment Banking, Paris

- Responsible for maintaining and enhancing the Quantitative Library in **C++**, ensuring its reliability and efficiency in meeting the organization's needs
- Updated legacy code to improve its efficiency.
- Developed in **C#** application usefull for the structurer team and for the traders.

Freelancing - Low Latency Trading **09/2022 – 01/2023**
Hercle Financial *Milan, Italy*

- Developed a Low-Latency C# multi-threading application for a trading strategy.
- The algorithm was based on a multi-socket connection with an Exchange for cryptocurrencies.
- The multi-threading approach was needed to be able to manage the order book events coming from one socket, the tickers information from another one, and a third thread consuming the information produced by the other 2 threads.

Algorithmic Trader Projects **01/2018 – Now**

- Develop in **C++** and **C#** a market making algorithm following the **Avellaneda-Stoikov market making model** for cryptocurrencies and stock market.
- **C++** Master Thesis on Order Flow Toxicity in the microstructure of Cryptocurrency market.
- Backtested on NinjaTrader strategies for Futures and Stock using **Volumetric Analysis** (Order flow analysis) using **C#**.
- Developed and Backtested **trading algorithms** for different exchange such as : Interactive Broker, IGLabs, FXPro, Binance, FTX Pro, Ctrader, Bitmart
- Developed in **C++** a **Market Making** bot for newly cryptocurrencies in Latoken and Bitmart.
  The aim of the bot was to manage the requirements imposed by the exchange to avoid the de-listing of the coin. Some of these requirements where about: daily volume, spread under a certain percentage and managing the liquidity in the orderbook.
  I created a **virtual machine** in Azure in which I put my executable and made it run for months.
  The software was also connected with an **SQL database** in which were saved the filled orders, the corrispective weighted average price and quantity.
- Developed a **BackTest** application in **C++** for **option** trading strategies based on Black & Scholes model.
- Crypto trading bot capable of **trading simultaneously** more than 30 cryptocurrencies at the same time on Binance and FTX.
- **Machine Learning project** in **C#** to predict if an individual is eligible for a certain amount of loan.

Teacher reps **09/2016 – 09/2019**
Teacher for University students

- Programming - Explain basics and advanced concepts of the object-oriented programming.
- Advanced Mathematics - Explain advanced concepts of Numerical Analysis, Geometry, Numeric Series, Integrals and functions.
- Physics - Make students capable to elaborate complex situation and transform them in a simplified system.