

Théo VERDELHAN

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EDUCATION

Paris Dauphine University - PSL

MSc in Financial Engineering – Quantitative Finance Track (Program 272)

Paris, France

Sep 2025 – Jun 2026

- Coursework: Stochastic Calculus, Derivatives Pricing, Volatility Modeling, Interest Rate Products, Quantitative Portfolio Management, Algorithmic Trading (Python/C++), Machine Learning, Time Series.

EPF Graduate School of Engineering

Master in Computer Science – Data & AI Track – Rank: 8/157

Paris, France

Sep 2020 – Jun 2025

- Coursework: Probability & Statistics, Linear Algebra, Numerical Optimization, Algorithms & Data Structures, Time Series Analysis, Databases, Machine Learning.

PROFESSIONAL EXPERIENCE

MYR - Private Investment Fund

Quantitative Researcher

Montpellier, France

Aug 2024 – Jul 2025

Active market maker on Hyperliquid (DeFi LBO), developing proprietary quantitative strategies in digital asset markets.

- Designed and deployed short-horizon market-making strategies using L1/L2/L3 order book data, microprice signals, order book imbalance and FIFO queue dynamics to optimize execution probability and spread capture across 12 liquid crypto order books.
- Developed microstructure-driven alpha signals from depth imbalance, order flow autocorrelation and spread dynamics, supported by event-time backtesting on 5+ years of tick-level data.
- Implemented inventory risk control (Avellaneda–Stoikov inspired) and low-latency execution systems (<100ms), optimizing quote refresh, queue positioning and mitigating adverse selection.
- Modeled limit order book event arrivals using stochastic intensity frameworks (Poisson-type limit/market/cancel flows) to estimate short-term price pressure and fill probabilities while analyzing competing algorithmic trader behavior.

La Valériane - Investment Branch

Quantitative Developer

Montpellier, France

Sep 2023 – Jan 2024

Designed and built an end-to-end delta-neutral statistical arbitrage strategy between Binance (CEX) and dYdX (DeFi DEX), targeting cross-venue microstructure inefficiencies.

- Reconstructed full L2 order books and built 2-year tick-level datasets to analyze cross-exchange price formation, latency asymmetries and liquidity distribution.
- Developed arbitrage signals based on microprice deviations and depth-adjusted fair value estimators, incorporating slippage modeling and execution constraints.
- Implemented, backtested and deployed the trading bot under realistic latency and partial-fill assumptions, achieving ~8% annualized returns with \$800k–\$1M daily volume while maintaining strict market neutrality.

PROJECTS

GDP Forecasting with MIDAS Regressions – Paris Dauphine University

Nov 2025 – Jan 2026

- Replicated and extended MIDAS regressions with separate lag/lead dynamics for GDP nowcasting using daily financial data; research-grade Python implementation with OOS evaluation.

Trinomial Tree Option Pricer – Paris Dauphine University

Sep 2025 – Dec 2025

- Implemented a trinomial-tree pricing engine in Python (European & American options) with early-exercise and Greeks, validated against Black–Scholes convergence benchmarks and exposed via lightweight APIs for pricing and diagnostics.

Algorithmic Trading Systems – EPF Capstone Project

Jan 2024 – Jun 2024

- Led a team of 6 to develop an Avellaneda–Stoikov market-making framework with volatility-adaptive spreads and risk controls.
- Backtested 10M+ trades on Hyperliquid (DeFi DEXC), reducing adverse selection by ~9% and stabilizing PnL variance by 7%.

SKILLS

Programming: Python, C++, SQL.

Libraries: NumPy, Pandas, SciPy, Statsmodels, Scikit-learn, PyTorch.

Tools: Git, Docker, Linux.

Languages: French (Native), English (Fluent), Spanish (Intermediate).

Entrepreneurship: Founded MASSEEO, a white-label electrostimulation brand with several thousand euros in revenue.