

Celian Fabas

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PROJECTS

Trading Algorithms | *Python and C++*

- Crypto statistical arbitrage trading algorithm for cointegrated pairs.
- Options trading algorithm for earnings volatility trading.
- Twitter, news and earnings report sentiment analysis ANN for guiding manual trading.

Deployed CMS | *Python using Django*

- Created a customer management system for a luxury spa in Django with a custom built API and a web interface.
- Automated reporting via PDF generation and excel integration.

Patient X-ray Anomaly Detection | *Python - Tensorflow*

- CNN algorithm to detect whether a patients' x-ray presents signs of COVID-19 or Pneumonia

Various Low Level Projects | *C*

- Multi-threaded C web server.
- C language interpreter and garbage collector.

FRAMEWORKS AND SKILLS

Languages | *Python, C/C++, OCaml*

Frameworks | *Python, C/C++*

- **User Interface Applications:** DearImGui, Qt/PySide6
- **Web Frameworks:** Django, FastAPI, uWebSockets, Boost
- **Machine Learning:** Tensorflow
- **Data Manipulation:** Numpy, SciPy, Pandas, Polars, Dataframe
- **Finance:** QuantLib, PyFolio CCXT, Backtrader

Skills | *General Concepts*

- **Databases:** MongoDB, PostgreSQL, MySQL, REDIS
- **Information Transfer Protocols:** TCP, UDP, FTP, HTTP, SMTP, IMAP, Sockets, Restful APIs, gRPC
- **Architectures and Systems Design:** Model View Controller, Microservices, Client-Server, Concurrency

AREAS OF KNOWLEDGE AND PERSONAL PURSUITS

Areas of Knowledge |

- **Languages Spoken:** French (Fluent, learned in France), English (Fluent, learned in Australia)
- **Computer Science:** Computability, Algorithms, Databases, Information Theory
- **Mathematics:** Statistics, Number Theory, Real/Complex Analysis, Graph Theory, Group Theory
- **Physics:** Classical Mechanics, Quantum Mechanics
- **Finance:** Security Analysis and Modeling, Ito Calculus, Black-Scholes Model, Algorithmic Trading

Personal Pursuits |

- **Philosophy:** Camus, Nietzsche, Loytard, Deleuze and Guattari, Land, Hermes, Geberi, Lucretius, etc. ...
- **Literature and Poetry:** Yukio Mishima, Dostoevsky, Dante, Baudelaire, Goethe, Kafka, Lovecraft
- **Art:** Rembrandt, Jacques Louis David, Michelangelo, Matisse, van Gogh, Raphael, Caravaggio
- **Physical Activities:** Body building

ACEDMIC EXPERIENCE

Sorbonne Université | *University - "License de Physique (Théorique)"*

Sept 2025 - Jun 2028

- Courses undertaken: Physics (Mechanics, Quantum), Mathematics (Algebra 1/2, Analysis 1/2), Electronics

Ecole 42 | *Software Engineering*

Apr 2024 - Sept 2024

- Low Level Software Engineering and Systems Designs (mainly in C and C++).

Lycée Buffon | *High School*

Sept 2020 - Jun 2023

- Selectives in NSI (Comp-Sci), Physics and Chemistry, Mathematics and Advanced Mathematics