

Daniel Finnан

RESEARCH

THEMES

Decentralised finance, cryptocurrencies, blockchain, trading venues, liquidity, arbitrage, order books, quantitative analysis, econometrics, machine learning



EDUCATION

Since October 2024, **PhD candidate in Finance**, Lirsa laboratory, Conservatoire National des Arts et Métiers, Paris, France

Full time doctoral contract, thesis : "*Changing the paradigm with decentralised finance (DeFi)*"

Goal : The main objective is to improve the understanding of new, innovative financial services which are swiftly evolving. This thesis by article uses a quantitative approach and data extracted from the blockchain.

Supervisors : Iryna Veryzhenko & Elisa Darriet

Working paper - "*Cross-exchange liquidity dynamics : decentralized and centralized crypto platforms during the US banking crisis*", accepted and presented at :

- 9th International Workshop on Financial Markets and Non-linear Dynamics (FMND), June 2025, Paris, France
- 4th PhD Student Research Day (PSRD) in Finance, June 2025, IAE Lille University School of Management, France

2021 – 2023, **Master's degree in Economics**, with specialisation in Economic, Digital & Data Strategies, Conservatoire National des Arts et Métiers, Paris, France

Grade : with distinction

Dissertation : Liquidity connectedness between decentralised cryptocurrency exchanges and their centralised counterparts during US banking crisis

Dissertation committee : Sébastien Jean & Elisa Darriet (grade : 19/20)

September 2021 — March 2022, **Full stack developer training**, O'Clock School *distance learning*, leading to a professional qualification certified by the French Ministry of Labour (August 2022), equivalent to BAC+2 (associate's degree)

Web application development including front and back-end, with chosen specialisation in back-end, data and APIs.

2021, **Programming in C for beginners**, Dartmouth College & Institut Mines-Télécom on edX platform, *distance learning*

2003, **BA Honours Philosophy**, University of Sheffield, United Kingdom

PROFESSIONAL EXPERIENCE

Since 2023, **Freelance developer**

- Development of web application for tracking and analysing stock short sales using data sourced from the French Financial Markets Authority (AMF), using Node.JS, Python and PostgreSQL.
- Contributions to streaming data project based on Directed Acyclic Graph (DAG), notably responsible for programming websocket adapter, with a proof-of-concept based on crypto exchanges, using Rust.

2007 – 2021, **Journalist**, English service, Radio France Internationale

- Wrote and edited articles, produced podcasts, radio programmes and reports.
- Specialised in international news, with a focus on politics, economics and technology.
- Investigated stories, undertook interviews with experts, analysts and politicians.
- Researched contacts, presented information in a fair, balanced, and precise manner.
- Pushed forward stories with new ideas and angles, whilst working under pressure during foreign assignments in dozens of countries.
- Worked at the heart of a tight-knit team at RFI, and liaised with other language services.

TECHNICAL SKILLS

Programming languages : JavaScript, Python, R, Rust

Libraries : NumPy, Pandas, Polars

Databases : GraphQL, InfluxDB, PostgreSQL

Modeling and methodology : Agile (User Stores, Backlog, Sprint, Wireframes), Merise

Server : Node.JS (including Express framework)

Cloud platforms : AWS, Azure

Front-end : AJAX, CSS, DataTables, HTML, JQuery, Vue.JS.

Tools : Git, Insomnia, pgAdmin

OS : Linux notably Ubuntu

LANGUAGES

English - native

French - fluent