

Paul Archer

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EDUCATION

Imperial College London, UK <i>MSc Mathematics and Finance</i>	2025 – 2026
• Coursework: Stochastic Calculus, Statistics, Option Pricing, Portfolio Theory, Market Microstructure, ML	
Télécom Paris, France <i>Engineering Degree (Stochastic Modelling & Machine Learning)</i>	2023 – 2026 GPA: 3.95/4.0

Lycée Henri IV, France <i>Classe Préparatoire MP* (Mathematics & Physics)</i>	2021 – 2023 Top 5% Nationally
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EXPERIENCE

Balyasny Asset Management <i>Incoming Quantitative Research Intern</i>	Summer 2026 London, UK
• Joining a L/S Equity pod (Aerospace & Defense); will work on systematic signal research and alpha generation.	
Henri Mondor Hospital <i>Data Science Research Intern - Prof. Étienne Audureau's Team</i>	Summer 2025 Créteil, France
• Developed multivariate time series models (ARIMA, VAR, LSTM) to forecast cancer treatment outcomes on 10,000+ patient cohort; validated via survival analysis (Cox regression, Kaplan-Meier) achieving C-index of 0.81.	
• Engineered an NLP/OCR pipeline to extract structured biomarkers (T-cells, blood counts) from clinical notes.	
VibeMatch (AI Startup) <i>Co-Founder & CEO</i>	2024 – 2025 Paris, France
• Co-founded <i>vibematch.tech</i> , an AI platform connecting creators with sponsors by analyzing social media profiles via integrated Instagram, YouTube, and Twitter APIs, using NLP to compute multi-dimensional compatibility scores 🏆.	
• Secured interest from VC funds (Frst, Continuum) through technical demonstrations and business pitches.	
Sopra Steria <i>Quantum Computing Intern</i>	Summer 2024 Courbevoie, France
• Built a quantum optimization algorithm for network resource allocation on neutral-atom hardware (Pasqal), using SLSQP to minimize congestion under physical constraints 🏆.	

PROJECTS

Multi-Strategy Alpha Engine <i>ML Ensemble + Alternative Data</i> 🏆	Sep. 2025
• Built a systematic equity strategy (140 symbols) using Bayesian Model Averaging over a Transformer/LSTM/XGBoost ensemble, with an NLP/NER pipeline on Bloomberg & Reddit to generate ticker-level and macro sentiment signals.	
• Allocated capital via Black-Litterman with NLP-gated views, HMM regime detection for proactive de-leveraging, and Kelly sizing — achieving Sharpe 1.42 and max drawdown <11% on a 5-year walk-forward backtest.	
JP Morgan Data for Good Hackathon <i>1st Place – Geospatial Analytics</i> 🏆	Oct. 2025
• Built a school expansion platform for a UK charity: geocoded 160+ schools, cross-referenced with UK government deprivation data (FSM%), then applied K-means/DBSCAN clustering to generate 200+ priority-scored outreach leads.	

SKILLS

Programming: Python (NumPy, Pandas, Scikit-Learn, PyTorch, QuantLib), C++, R, SQL, Java, Excel VBA
Quantitative Methods: Monte Carlo, Time Series (ARIMA, GARCH, VAR), PCA, Cointegration, Kalman Filtering
Risk & Models: VaR, Expected Shortfall, Greeks, Black-Scholes, Heston, Hull-White, Cox Proportional Hazards
Languages: French (Native), English (C2), German (B2)

LEADERSHIP

General Secretary <i>Forum Télécom Paris</i>	2024 – 2025
• Oversaw a €300K budget and led a 48-member team to organize one of France's largest student-run career fairs (1,000+ attendees, 80+ companies), achieving a €100K profit and featuring in <i>Forbes</i> .	
Rugby Captain <i>Telecom Paris Rugby Team</i>	2024 – 2025