

SAMUEL VASILIS

PROFILE

CONTACT ME | samuel.vasilis25@imperial.ac.uk | <https://www.linkedin.com/in/samuel-vasilis/>

Engineer @ Imperial, seeking to build with high utility or conceptually crazy companies with a thirst for innovation. Experienced in algorithmic execution, predictive modelling, agentic reasoning and looking to apply those on the most challenging projects, amongst a team of greats, serving clients and solving the hardest problems. Driven to relentlessly build, ship high-impact products and learn.

KEY SKILLS

Languages & Libraries: Python (NumPy, Pandas, SciPy, Scikit-Learn), C/C++, SQL, R

Core Competencies: Data Pipeline Architecture, AI, APIs, Machine Learning, Automation, Leadership, Problem Solving, Teamwork

EDUCATION

Imperial College London, MSc, General Structural Engineering with Data Science *September 2025 - September 2027*

- Grade Awarded: Distinction (Predicted)

City St George's, University of London, BEng Civil Engineering (Upper 2nd Class Honours) *September 2022 - May 2025*

- Independent Research: Awarded First-Class for high fidelity numerical modelling and accepted for academic publication

ACADEMIC & RESEARCH EXPERIENCE

Data Engineering Market Analysis Lead Engineer

London, United Kingdom

Imperial College London - Competitive Engineering Consultancy

January - April 2026

- Engineered a Medallion pipeline integrating large datasets and API signals to generate systematic, trusted market insights.
- Tested hypotheses using PCA, K-Means, and Random Forest models (pandas, scikit-learn) to extract key business drivers.
- Deployed RAG pipeline to translate quantitative research outputs into actionable optimisation analysis for decisions

Machine Learning Engineer

London, United Kingdom

Imperial College London - Legacy Data Predictive Model

January - March 2026

- Engineered a high-precision MLP Neural Network ($R^2 > 0.95$), outperforming peer research benchmarks.
- Constructed a full data pipeline encompassing cleaning, exploratory data analysis, and Markov validation.
- Extrapolated predictions 40% beyond training data, outperforming baseline models by accounting for stochastic volatility.

Structures and Data Science Engineer

London, United Kingdom

Imperial College London - Solar Plant ML Optimisation

November - December 2025

- Optimised solar efficiency via a time-series classifier to predict energy yields.
- Analysed power and weather datasets to classify the operating conditions of solar farm inverters.
- Earned top peer-review scores for technical rigour and independent research execution.

Data Science Researcher

London, United Kingdom

City St George's - Professional LLM Pilot Study

April - July 2025

- Applied Python and Large Language Models to generate and validate biology lab protocols in a novel research study
- Conducted wet-lab experiments guided by AI-generated instructions, producing daily data reports & empirical feedback
- Demonstrated the feasibility of AI-driven lab workflows, contributing to a forthcoming academic publication

TECHNICAL PROJECTS & LEADERSHIP

Developer, Local AI (Low latency translation) | HackEurope, Paris

February 2026

- Engineered a real-time earphone translation app using Google DeepMind APIs, securing a highly selective travel scholarship

Project Lead and Algorithmic Developer | Quant Club UK, London

December 2025

- Led weekly quantitative finance discussions & directed hardware-accelerated trading research using C/C++ on FPGA boards.

President & Founder | City & Imperial Habesha Society, London

September 2025

- Founded and scaled a university community to 200+ students, driving professional development and stakeholder networking.

INTERESTS: Quant Club Lead, Algorithmic Trading Society, Volunteer Chef for homeless, Hackathons, Building, Sport