Alexandros Chortis

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Profile

Data Engineer at Bloomberg specializing in scalable pipelines and microservices for fixed income data systems. I focus on automating complex financial workflows—transforming manual, high-stakes processes into reliable, production-grade event-driven systems. With a strong foundation in Statistics and Data Science, I bridge the gap between financial product logic and engineering, specifically optimizing data movement across Kafka-based architectures and secure ETL flows.

Education

MSc in Data Science (Distinction Award),
University College London (UCL), London, UK 09/2024 - 2025
Bachelor of Statistics, Athens University of Economic and Business (AUEB),
Athens, Greece **(Highest GPA graduate)** 09/2019 - 09/2023

Awards

Undergraduate: Highest GPA award for each year of my studies, Highest GPA Scholarship from IKY
Postgraduate: Latsis Foundation Scholarship, Ship Owners Union Scholarship

Professional Experience

Data Engineer – Fixed Income Corporate Bonds Team
Bloomberg, London, UK 02/2026 - Present

- Automate manual, high-stakes financial workflows by shipping production-grade, event-driven **ETL** pipelines and streaming **microservices** over a **Kafka**-based architecture, orchestrated through workflow scheduling equivalent to **Apache Airflow**.
- Build data quality and validation services over a distributed **columnar store** (**HBase**-equivalent) and **search index** (**Solr**-equivalent), running rule-based derivations and anomaly detection across corporate actions and bond reference data.
- Collaborate with core product teams to translate complex corporate actions logic into clean, scalable backend architecture.

Personal Projects

wiki-pulse — Real-Time Streaming Data Platform

- Built an end-to-end streaming platform in **Python**, ingesting Wikipedia's live edit feed through **Apache Kafka** into **PostgreSQL** to surface per-page edit velocity as an early signal of breaking news.
- Orchestrated anomaly detection and retention with **Apache Airflow**, served via **FastAPI** and a live dashboard; containerised with **Docker**, deployed to **AWS** via **Terraform**.

riskcli — Quantitative Risk Analytics CLI

- Engineered a **Python quantitative risk analytics** tool computing **CAGR**, Sharpe/Sortino, max drawdown, historical **VaR**/**CVaR**, skew/kurtosis, and **CAPM** beta/alpha via automated **market data** ingestion (**yfinance API**) and **pandas**/**NumPy** statistical modeling.
- Designed **portfolio risk attribution** via Euler covariance decomposition (component VaR, % risk, diversification ratio); shipped with full **unit test** coverage, **CI/CD** (GitHub Actions), and one-command install via **uv**/**pipx**.

Technologies

Core Engineering: ETL, Apache Kafka, Airflow, Snowflake, Docker, AWS (Lambda, DynamoDB, SNS), PostgreSQL, Git, uv, FastAPI, Great Expectations, Elasticsearch/Solr, Terraform
Data Science & Languages: Python, R, SQL, Spark, Pandas, Polars, Scikit-learn, PyTorch, Plotly, Seaborn, Time-series modeling (ARIMA/ARMA), Regression, XGBoost, Anomaly detection
Methodologies & Soft Skills: System Architecture, Workflow Automation, Analytical Mindset, Cross-functional Collaboration
Languages: English (Professional Proficiency), Greek (Native).