

CAGLA AKIN

London, UK • hello@caglaakin.com • Global Talent Visa Holder

EXPERIENCE

AMAZON.COM, Inc. | Seattle, US & London, UK

Aug 2019 - Present

Finance Manager, Supply Chain Optimization Technologies

Data Science

- Built a supply-chain simulation model from scratch in two weeks during COVID-19, replacing fragmented cross-system forecasts with a unified model of backlog clearance against labor capacity across NA, EU, and Japan; engineered ETL pipelines and daily regional metrics that became the single source of truth behind the SVP decision to cut promised delivery times by 76% (21→5 days), contributing to 38% revenue growth (~\$100B) in 2020.
- Developed Amazon's North America 1-Day delivery-speed forecasting model; engineered predictive features across inventory placement and transportation and validated via backtesting with 197 bps average error vs a ± 500 bps threshold, establishing the model as leadership's decision-making foundation for identifying and pursuing a \$3.8B revenue opportunity.
- Architected the end-to-end data infrastructure for Amazon's transportation cost anomaly detection product that uncovered \$300M in free cash flow; co-designed its causal-inference model with Core AI economists, engineered model-ready features, and used SQL and Python to integrate 7 data sources into a curated 300GB data library powering the tool's analytics.
- Pioneered Amazon's first causal inference model to quantify the financial cost of labor forecast error across fulfillment centers; engineered SQL queries and automated ETL reporting into weekly business reviews, surfacing \$78M annual savings opportunity and realizing \$11.6M as early accuracy gains cut forecast error 4.2%.

Product Management

- Built the first metrics framework to quantify profit lost to capacity shortfalls; designed and ran an A/B test with a 10% inventory holdout as control that quantified \$40MM in lost sales in Q4 alone, driving changes to the inventory-health engines to clear stale inventory faster and free capacity for sellable stock.
- As acting Senior Product Manager, architected a global facility dataset with data engineers, consolidating 12 upstream sources across 180,000+ facilities to cut manual workloads 80% and deliver \$2.8M in annual savings; drove UAT and stakeholder alignment, and built SQL validation and data-lineage checks to ensure data quality.

Finance

- Owned the financial strategy for \$10B inventory across EU and Japan; developed valuation methods to quantify the impact of inventory-efficiency initiatives, sharpening plan-versus-actual explanations at month-end close and serving as leadership's go-to for inventory performance questions.
- Drove the finance-side inventory forecast alongside the science team's Bayesian VAR (BVAR) model, auditing and validating its cost inputs across business units; identified \$50M in unhealthy inventory clearance opportunity and aligned operations and retail teams to action on \$10M against competing P&L incentives.

CARNEGIE MELLON UNIVERSITY | Pittsburgh, PA, US

Aug 2016 – May 2019

PhD Candidate/Doctoral Researcher

- Conducted PhD-level empirical research on large-scale financial datasets, applying causal inference and econometric methods to quantify the impact of regulatory interventions.
- Built novel research datasets from scratch by web scraping and combining disparate sources, engineering original variables unavailable in existing data.
- Produced peer-reviewed findings (e.g., a 9.4% decline in low-income credit supply; a 4% emissions reduction from disclosure), earning the American Accounting Association's Best Doctoral Student Paper Award.

DELOITTE TOUCHE TOHMATSU | Istanbul, Turkey

Jun 2015 – Jul 2016

Financial Advisory Associate

- Managed the financial due diligence process for M&A transactions across retail, manufacturing, and tech, analyzing financial statements, EBITDA, working capital, and net debt and scrutinizing management forecasts to inform buy- and sell-side negotiations.

UNIVERSITY OF CALIFORNIA SAN DIEGO | San Diego, CA, US

Jun 2015 – Jul 2016

Research Assistant (Remote)

- Collaborated remotely with Prof. Marta Serra-Garcia on a behavioral-economics experiment in audience perception, supporting experimental design and conducting data collection and analysis as an international research partner.

EDUCATION

IMPERIAL COLLEGE BUSINESS SCHOOL London, UK Executive Education in Data Science	Oct 2025 – Apr 2026
CARNEGIE MELLON UNIVERSITY Pittsburgh, PA, US Tepper School of Business, MSc. in Industrial Administration (Finance & Accounting) (Completed PhD coursework and research before earning a Master's degree)	Aug 2016 – May 2019
BILKENT UNIVERSITY Ankara, TR Bachelor of Science in Business Administration, Minor in Economics	Sep 2011 – Jun 2015
UNIVERSITY OF BOCCONI Milan, IT Exchange Student, Finance and Economics	Jan 2014 – Jul 2014
AllWomen Tech London, UK Applied AI Bootcamp	Feb 2026 – Apr 2026

SKILLS

Machine Learning & AI: Classification & Regression, Gradient Boosting (XGBoost), NLP & Transformers, Generative AI & LLMs, Feature Engineering, Model Validation
Statistics & Experimentation: A/B Testing, Causal Inference, Statistical Modeling, Forecasting, Linear Programming
Data Engineering & Analytics: ETL, Data Modeling, Dataset Design, Data Quality Assurance, Product Analytics
Programming: Python (Pandas, NumPy, SciPy, scikit-learn), SQL (Amazon Redshift), Stata, MATLAB
Visualization & BI: Tableau, Power BI, Amazon Quicksight, Python (Matplotlib, seaborn)
Tools: AWS SageMaker, Streamlit, REST APIs, Jupyter Notebook, Git/GitHub, Agile/Scrum, LaTeX, MS Excel

PROJECTS & PUBLICATIONS

- **Spotify Hit Predictor, Imperial School of Business:** Built an XGBoost model to predict song chart success using ~170K track data; found artist reputation matters far more than a song's audio characteristics, deployed as an interactive web app via Streamlit Cloud.
- **Suno AI, AllWomen Tech:** Built an NLP brand-monitoring prototype analyzing public conversations with VADER sentiment and keyword-guided topic modeling; found ~68% positive sentiment overall, with copyright/legal remaining as the key reputational risk.
- Causal Inference in E-Commerce and Technology Business, Harvard Business Review Türkiye
- The Real Effects of Mandatory CSR Disclosure on Emissions: Evidence from the Greenhouse Gas Reporting Program. Working Paper, NBER, Yang, L., Muller, N., Liang, P., **Akin, C. (2021)**
- Consolidation of Securitization Entities and the Effects on Charitable Lending. Accepted in Journal of Management Policy and Practice vol. 20, no. 4
- Financial Disclosure in Municipal Bond Markets. Working Paper

AWARDS & RECOGNITION

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| • Exceptional Talent in Digital Technology Endorsement , Tech Nation UK | Apr 2025 |
| • Company-wide All Hands Award , Project TRACE, Amazon | Aug 2022 |
| • Best Doctoral Student Paper Award , American Accounting Association | May 2019 |
| • William Larimer Fellowship , Carnegie Mellon University | Aug 2016 |

CONFERENCE & PUBLIC ENGAGEMENTS

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| • NextGen Finance Transformation Conference, London, UK - Panelist & Moderator | Jun 2026 |
| • McGinnis Venture Competition, Carnegie Mellon University, USA - Judge | Jan 2025, 2026 |
| • Career Development Days, Bilkent University, Turkey - Panelist | Mar 2025 |
| • Business Trip Career Events, Koç University, Turkey - Guest Speaker | Mar 2025 |
| • Causal Inference Methods, Aalto School of Business, Finland - Guest Lecturer | Nov 2024 |
| • Capital Markets Research Session, Mid-Atlantic Regional Meeting - Moderator & Presenter | May 2019 |
| • Annual Accounting Mini Conference, Carnegie Mellon University - Presenter | 2016, 2017, 2018 |

LEADERSHIP & COMMUNITY

- **Product Owner, Code Your Future (CYF Dashboard):** leading a technical team of 9 using agile/Scrum to ship features for an education platform serving 300+ underrepresented trainees and volunteers.
- **DJ & Music Producer:** Experienced in curating radio, club and hospitality experiences across London venues and stations, with working knowledge of independent labels, artist communities and music discovery culture.