## **Professional Summary**

FIFA 2022 World Cup Prediction

Pair Trade – Using Time Series

Lead data science & optimization professional with 5+ years of experience delivering business value through advanced analytics, simulation, and OR solutions. Proven in solving complex decision problems at scale with strong coding and stakeholder skills.

Work Experience			~ 5 Years
Senior Operations	Research Analyst	Target	Aug 2024 to Present
Stockout Prediction Model	<ul> <li>Developed prediction model (with AUC_PR of 0.65) for proactive management of future stockout events</li> <li>Provided recommendations with total opportunity of \$250-300M solvable stockouts for frequency business</li> </ul>		
Port of Entry Selection	<ul> <li>Developed PySpark simulation model to predict port of entry volumes for 64 different port eligibility settings</li> <li>Used MILP to assign port eligibility settings, constrained on entry port capacity, resulting in savings of \$12M</li> </ul>		
Multi-echelon Inventory	<ul> <li>Developed dynamic programming model for optimizing review frequency at DCs for replenishment items</li> <li>Estimated ideal inventory level for a multi-echelon network; projecting overall inventory reduction of 10-15%</li> </ul>		
Prepaid to Collect Conversion	<ul> <li>Developed decision model for minimum required discount for collect conversion of domestic vendors</li> <li>Used PuLP linear programming optimization to estimate transportation expense in a consolida network</li> </ul>		
Senior Data Science	ce Consultant	Wells Fargo	Jul 2021 to Aug 2024
Strategy & Leadership	<ul> <li>Led 5+ projects in channel science focusing on optimizing value for On-us digital offer decisioning engin</li> <li>Contributed to cross-channel marketing analytics roadmap &amp; strategy &amp; presented to executive leadership</li> <li>Built strong partnership &amp; trust with stakeholders; Guided several team-members as SME in the domain</li> </ul>		
Offer Decisioning Simulator	<ul> <li>Owned end-to-end development of offer decisioning simulator; achieved 94%+ F1-score vs actual outcom</li> <li>Enabled simulation capabilities for - new offers, frequency capping, audience &amp; business weight changes</li> <li>Integrated application with intake form &amp; lift measurement reports, enabling seamless business user acce</li> </ul>		
Value Based Optimization	Introduced offer & placement level financial value into prioritization framework that optimized revenue/vier Generated 22% overall lift in value of accounts booked (annualized value of \$48M) with all LOBs benefitting		
BI Reporting and Automation	<ul> <li>Partnered effectively with 15+ stakeholders from 5 LOBs to understand their needs &amp; identify relevant KPIs</li> <li>Developed suite of executive &amp; operational dashboards with automated data pipelines, saving 20+hrs/week</li> </ul>		
Previous Roles		Multiple Companies	Prior to Jun 2020
Zolve – Product Internship	<ul> <li>Conducted primary &amp; secondary research on customers &amp; competitors for an early-stage neo-banking star</li> <li>Designed customer &amp; business centric wireframe prototype for mobile app using prototyping tool Adobe</li> </ul>		
Cognizant - Developer	<ul> <li>Worked 1+ year as full stack developer for development &amp; maintenance of a private banking web application.</li> <li>Implemented multi-threading in Java to enhance speed and memory utilization of a log analysis application.</li> </ul>		
Professional & A	cademic Achievement	rs -	
Professional Recognitions	<ul> <li>Recognized for initiative, technical excellence and continuous improvement by Target leadership in 20</li> <li>First Runners Up in Showcase 2024 at Wells Fargo under 'Grow the Business' category out of 50+ projeting received Team Spotlight Award 2023 &amp; promoted to senior role for exceeding expectations year-on-year Offered PPI from Zolve for excellent contribution &amp; accelerating product's launch in a fast-paced environment.</li> </ul>		
Academic Excellence	<ul> <li>Cumulative grade point average of 3.57/4.00 in 18 courses of Analytics, Finance and Operations in 2021</li> <li>Secured AIR 1199 in JEE 2013, 99.52%ile in CAT 2018 and 98.23%ile in GATE Computer Science 2019</li> <li>National Top 35 in INPhO; Attended selection camp for International Physics Olympiad at HBCSE in 20</li> </ul>		
Certifications	<ul> <li>Pursuing MITx Supply</li> </ul>	Chain Micromasters from EdX; Comple	eted 2/5 courses with A grade (above 90%)
Skills, Technolog	gy and Tools		
	■ Team Mentoring, Proje	ect Planning and Delivery, Stakeholder N	Management
People Skills	■ Data Visualization, Statistics, A/B Testing, Machine Learning, Forecasting, Linear Programming, Simulation		
People Skills  Data Skills	<ul> <li>Data Visualization, Sta</li> </ul>	tistics, A/B Testing, Machine Learning,	Forecasting, Linear Programming, Simulation

• Web-scraped player & team performance data and ELO ratings to train random forest classification model

Modelled & forecasted spread (regression residual) using ARIMA to predict profitability of trading positions

Introduced variance in features to create stochastic output for simulating matchups & predicting winner
 Shortlisted pairs of two highly correlated assets for which their spreads demonstrated stationarity property