

SHAZADA NAWAZ

Quantitative Risk & Data Science Executive

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EXECUTIVE PROFILE

Quantitative Risk & Data Science Executive with 20+ years of experience driving model governance, data science innovation, and systems architecture at scale. Expert in building enterprise-level model risk frameworks, leading high-performing technical teams, and deploying AI/ML solutions that enhance compliance, efficiency, and decision accuracy. Bridges quantitative rigor with modern engineering practices to create trustworthy, scalable systems in regulated environments.

CORE CAPABILITIES

Quantitative Leadership

Model Risk Management; Model Validation (SR 11-7, OCC, FRB); Risk Analytics; Regulatory Compliance; Capital Stress Testing

Systems Architecture

AWS Cloud; Microservices; MLOps Pipelines; Docker/Terraform; Data Lineage; Automation Frameworks

Data Science & AI

Predictive Modeling; ML & NLP Governance; Explainable AI; Feature Engineering; Statistical Learning; Python/R Ecosystems

Leadership & Strategy

Cross-Functional Governance; Executive Reporting; Innovation Culture; Mentorship & Talent Development

PROFESSIONAL EXPERIENCE

USAA — Quantitative Risk Director, Model Risk Management

Phoenix, AZ | Aug 2018 – Present

- Lead Model Validation Quality Assurance for enterprise risk and finance models across credit, liquidity, and capital planning portfolios.
- Direct multi-disciplinary teams of quantitative analysts, data scientists, and engineers; ensure conceptual soundness, implementation accuracy, and ongoing performance monitoring.
- Built automation pipelines in Python and SQL on AWS to streamline validation testing and report generation — reduced cycle time by 30%.
- Partner with IT and Enterprise Data Architecture to modernize model inventory and metadata tracking for regulatory compliance and audit readiness.
- Developed AI/ML model explainability and fairness frameworks integrated with Power BI dashboards for executive oversight.
- Mentor teams on validating emerging ML and generative AI models in marketing, fraud detection, and credit risk applications.

DriveTime Automotive Group | Carvana — Assistant Director of Data Science / Senior Data Scientist

Tempe, AZ | Feb 2016 – Aug 2018

- Built predictive pricing and risk models in Python and R for vehicle and loan pricing strategies, boosting gross margins 70% YoY.
- Oversaw an auction analytics application processing 200K+ vehicles daily to identify top-margin candidates, doubling purchasing volume post-IPO.
- Introduced company-wide “CarvanaTalks” program to advance data science best practices and cross-team collaboration.

JPMorgan Chase — Vice President / Executive Director, Decision Sciences & Quantitative Risk

Phoenix, AZ | Apr 2004 – Nov 2015

- Led multi-year transformation of Auto and Mortgage Risk into decision science functions via advanced modeling, portfolio analytics, and system automation.
- Built and deployed loan-level forecasting and pricing engines in Python, Oracle, and SAS to model cash flows, prepayments, NPV, Expected Loss, and ROA across portfolios exceeding \$200B.
- Created an in-house Financial Engineering platform used during the Great Recession to set optimal bid prices on distressed assets — enabling sale of \$22B in loans to the secondary market.
- Designed and validated credit risk segmentation, scorecards, and decision trees (CART, CHAID, Logistic, ElasticNet) for approvals and delinquency forecasting.
- Implemented Basel II/III, CCAR, and stress-testing models for capital planning; served as technical liaison during OCC/FRB examinations.
- Architected a data ecosystem and analytics layer (Teradata + Python microservices) enabling real-time portfolio diagnostics and early-warning indicators.
- Recruited and led a cross-functional team of 12 analysts and engineers unifying model development, validation, and governance across Auto, Mortgage, and Home Equity.

EDUCATION

- **MBA**, Arizona State University — Tempe, AZ
- **BBA**, Baruch College, City University of New York — New York, NY

TECHNICAL TOOLKIT

Python · R · SAS · SQL · Spark · Docker · AWS · Tableau · Power BI · Git · Teradata · Model Governance Frameworks

CAREER PHILOSOPHY

“I build trustworthy systems where quantitative rigor, data science, and architecture converge to protect institutions and empower people.”

For opportunities and introductions, please use the contact form at shazadanawaz.com/contact or connect on LinkedIn (linkedin.com/in/shazadan).