

Sarvesh Shah

AI and Data Professional

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[Linkedin](#) | Philadelphia, PA

SKILLS - Python (Langchain, Langgraph, FastMCP, FastAPI, sk-learn, Pandas, Numpy), SQL, R, Tableau, SAS

EXPERIENCE

Manager – AI & Data, Ernst & Young (EY), Philadelphia, PA

Jul 2025 – Present

- Designing an AI governance framework for generative AI and agentic applications; defining controls, key risk areas, monitoring and observability framework and post-production metrics like context precision, recall, hallucination rate, tool-calling chains etc.
- Currently building an agentic financial advisor that collates information from CRM, transactions, and customer portfolios to recommend next-best-actions and investment strategies for advisors' accounts, with entitlements for data privacy
- Designed a Gen AI solution to optimize sales incentive processes for a bank, scaling population coverage by 1.5x to 100% and saving 4,300 hours/month in review time across 26 international markets

Senior Data Scientist, Ernst & Young (EY), Philadelphia, PA

Feb 2022 – Jun 2025

- Achieved a \$400K/mo cost reduction in customer acquisitions by automating 65% of manually reviewed business credit card applications for a client using Decision trees, Informational Value analysis etc.
- Decreased false positive rates in fraud detection by 12% amounting to \$1million/year without increasing dollar loss using A/B testing, XGBoost and running SAS simulations in a new fraud capturing framework
- Led an initiative that reduced 8 hr/day of manual reporting by rewriting SQL for 18+ reports and Python orchestration; Developed claims reporting structure for incoming and reopened credit card dispute claims
- Served as SME and tech PM for a data transformation ensuring timely delivery of potentially non-compliant complaints escalated in response to an MRA. Performed a comprehensive audit of firm's controls framework and reporting strategy

Data Scientist, SEPTA, Philadelphia, PA

Sep 2019 – Feb 2022

- Developed a data warehouse that blends data from 6 disparate data sources to create a holistic picture of SEPTA's ridership. Developed 4 data products using Tableau and webapps to support business needs
- Designed algorithms that inferred destinations for 85% of trips from historic transactional data. Identified 2 untapped markets for fare-product expansions and created user profiles and spending behavior
- Determined the feasibility of battery-electric buses over gasoline/hybrid buses by analyzing data from 125 buses and two routes over 6 months using A/B testing and regression models

Product Analyst, Uber Technologies, San Francisco, CA

Jun 2019 - Aug 2019

- Tested an app feature using A/B tests in 4 cities to reduce driver cancellations. Identified bad performing cities and interviewed drivers; relayed feedback to UI teams to fix the design issues
- Predicted cancellation rates for airport trips based on surge, time, and rating other features with regressions (R^2 83%). Devised 2 metrics to quantify impact of driver behavior on cancellations

Data Analyst, Temple University, Philadelphia, PA

Oct 2018 - Dec 2019

- Reduced turnaround time for reports by 50% by automating report production and streamlining data workflows with Python, VBA, Alteryx, Tableau and Power BI
 - Scraped data using Canvas APIs, automated survey distribution using Qualtrics APIs, and performed sentiment analysis on student feedback to gauge faculty performance across 95 courses
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PROJECTS

D&D Quest Generator | Python, Langgraph, FastAPI, React, MCP, SQLite

Mar 2026

- Built a multi-agent system using 4 specialized agents with MCP grounded rulebook lookups, asynchronous state management via Server-Sent-Events (SSE), human-in-the-loop approval nodes and persistent memory via check points

Multi-Agent Marketing Strategist | Python, Langgraph, React

Feb 2026

- Designed a multi-model orchestration agentic workflow with state graphs; built a custom Python REPL tool for data analysis; agents coordinated to produce a campaign report covering budget allocation, channel mix, and risk mitigation

Additional information and other projects available at sarvesh-shah.com/projects

EDUCATION

MSE Artificial Intelligence, University of Pennsylvania

Aug 2026 - Present

MS Business Analytics, Temple University | GPA: 3.77

Aug 2018 – Dec 2019

BE Computer Engineering, University of Mumbai | GPA: 3.4

Aug 2013 – May 2017