Anay Somani

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EDUCATION

University of Arizona Tucson, AZ

Bachelor of Science in Computer Science
Bachelor of Science in Statistics and Data Science *Expected May 2027*
GPA: *3.50*

Relevant Coursework: *Data Structures & Algorithms, Machine Learning, AI, Probability & Statistical Inference.*

EXPERIENCE

Deloitte May 2025 – Aug 2025

Software Engineer Intern *Hyderabad, India*

- Developed three enterprise applications integrating Azure OpenAI and LangChain for automated analytics, KPI generation, and policy validation.
- Automated Security Policy Optimizer - Implemented machine learning algorithms for pattern detection, reducing manual policy review effort by 50% and shortening validation cycles from weeks to days.
- KPI/KRI Analytics System - Designed a platform to generate KPIs from large datasets using Pandas and Azure OpenAI, reducing metric creation time by 80% and supporting analysis of 100k+ records per run.
- AI-Powered Code Analysis Platform - Developed an automated compliance and security analysis system (PCI DSS, SOC) using FAISS vector search, improving detection of non-compliant code patterns by 30%.

Tech Launch Arizona Jan 2024 – May 2025

Data Team Lead *Tucson, AZ*

- Designed 15+ dashboards and data pipelines to analyze engagement and performance metrics that improved program effectiveness by 20% across 1,000+ students.
- Supported the $5M Wildcat Philanthropic Seed Fund by overseeing student-led pitch competitions and guiding due diligence on startup applications.
- Implemented agile methodologies to prioritize and deliver analytics projects, improving efficiency by 35% .

PROJECTS

Prediction Market Backtester | *Python, Pandas, Parquet, Numpy, Sci-py*

- Built an backtesting framework for prediction markets with a Strategy base class, chronological trade replay, and performance metrics (Sharpe ratio, max drawdown, P&L by category) over 36GB of Parquet data.
- Implemented Kelly criterion position sizing and fee modeling for Kalshi/Polymarket, including longshot-fade and maker-replication strategies.

OptiInvest | *React, FastAPI, PyPortfolioOpt, Pandas, Scikit-Learn*

- Built a investment platform enabling AI-driven portfolio optimization based on Modern Portfolio Theory, offering strategies for multiple risk profiles.
- Implemented a multi-source sentiment analysis engine using VADER and data from over 5,000+ news articles and social media posts to generate actionable trade recommendations.

Fintool | *React, Node.js, LangChain, OpenAI API*

- Developed an tool to extract intelligence from financial documents, using Retrieval-Augmented Generation (RAG) to analyze 10-K, 10-Q, and earnings call transcripts.
- Enabled interactive Q&A on complex financial reports exceeding 100+ pages, transforming filings into structured, analyzable insights.

TECHNICAL SKILLS

Languages: Python, SQL, C/C++, R, TypeScript, JavaScript, Java
Data Science & ML: Pandas, NumPy, Scikit-Learn, PyTorch, LangChain, Matplotlib, Plotly
Frameworks & Tools: React, FastAPI, Flask, Node.js, Git, Docker, Azure OpenAI