

Kathan Parag Shah

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EDUCATION

Bachelor of Science in Computer Science and Economics, Arizona State University

May 2026

Major GPA: 3.81/4.0 (Dean's List)

Key Modules: Principles of Programming, Object-Oriented Programming & Data Structures, Data Structures & Algorithms, Discrete Mathematical Structures, Probability & Statistics for Engineering, Principles of Programming Languages

PROFESSIONAL EXPERIENCE

W.P. Carey School of Business, Arizona State University

Oct 2023 - Nov 2024

Tempe, AZ *Information Technology Support Specialist*

- Optimized ticket triage and standardized IT workflows using Django and Git to streamline support processes for faster resolutions and uptime improvements across critical enterprise systems, achieving a 35% reduction in average downtime.
- Streamlined troubleshooting protocols and deployed diagnostics scripts to reduce system downtime by 25% while meeting 1-hour first-response SLAs across all infrastructure components, improving reliability metrics.
- Collected user feedback and collaborated with stakeholders to redesign the support portal UI, implementing enhancements that boosted satisfaction scores by 20% and improved accessibility compliance across platforms, resulting in increased adoption.

Sun Devil Athletics, Arizona State University

Nov 2023 - Jan 2025

Tempe, AZ *Technology Assistant*

- Managed the setup, maintenance, and troubleshooting of over 150 IT systems, ensuring 98% operational availability and resolving 95% of technical issues within 24 hours to minimize disruptions and support uninterrupted athletic operations.
- Conducted and delivered staff training programs on IT best practices and system workflows, boosting technical proficiency and operational efficiency by 30% across staff teams to enhance support capabilities, reduce incidents, and ensure knowledge.
- Initiated a condition-based monitoring system for 150+ IT assets, leveraging real-time data analytics to forecast hardware degradation and improved system longevity by an estimated 25%.

PROJECTS

Wheel Strategy Options

March 2025 - May 2025

- Engineered a Next.js/TypeScript app ingesting 570K+ option records each hour, computing covered-call yields, probabilities, and breakevens in under 500ms per query for 1,200 monthly users.
- Implemented an intuitive React front-end with interactive tables and charts, paired with a Node.js/Express backend handling data processing and caching to ensure sub-second response times under heavy query loads.

MegaShop E-Commerce Dashboard

April 2025 - May 2025

- Launched a React/Chart.js dashboard tracking \$2M in quarterly sales and 10,000 daily visits, enabling real-time inventory alerts that reduced stockouts by 35%.
- Built RESTful APIs in Node.js and MongoDB to support filtering and drill-down capabilities for business stakeholders.

Sea Level Predictor

April 2025 - May 2025

- Developed ARIMA and LSTM models on 50-year NOAA datasets, achieving a 92% backtest accuracy and delivering daily projections to 300+ users via a Streamlit interface.
- Packaged results into a Streamlit app with interactive charts, enabling users to explore projections and confidence intervals.

Page View Time Series Visualization

April 2025 - May 2025

- Engineered a dashboard with Plotly Dash to visualize website traffic patterns and detect seasonal trends in page views.
- Automated data ingestion and preprocessing workflows with Pandas and SQL, reducing analysis time by 40%.

Medical Data Visualization

April 2025 - May 2025

- Spearheaded an interactive healthcare analytics tool in R Shiny to explore patient outcomes across demographics and treatment plans.
- Employed ggplot2 and plotly for customizable visualizations, aiding clinicians in rapid identification of at-risk populations.

Mean Variance Standard Deviation Calculator

April 2025 - May 2025

- Implemented a lightweight Python CLI utility to compute descriptive statistics for any numeric dataset.
- Added CSV import/export functionality and error-handling routines to ensure robustness for large-scale data inputs.

Demographic Data Analyzer

April 2025 - May 2025

- Built a Jupyter Notebook pipeline using Pandas and Seaborn to clean, analyze, and visualize census datasets by region and age group.
- Created automated reporting scripts that generate summary tables and plots, accelerating stakeholder insights delivery.

SKILLS

Technical: Python (NumPy, Pandas, Seaborn, NetworkX, scikit-learn), R (tidyr, dplyr, ggplot2), SQL, Power BI, Stata, QGIS, Git/GitHub

Methods: Object-Oriented Programming, Agent-Based Modeling, Scenario Analysis, Statistical Risk Assessment, K-Nearest Neighbors, Support Vector Machines, Econometric Modeling