Zaid Khan

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EDUCATION

Kennesaw State University   Atlanta, GA
Bachelor of Science in Computer Science   *Jan 2023 - Dec 2025*

EXPERIENCE

Delta Air Lines   Atlanta, GA
Software Engineering Intern – Python, SQL, Microsoft Suite   *May 2025 – Aug 2025*
– Developed modular Python data-processing scripts using AWS Athena and Pandas, implementing timestamp alignment, outlier detection, and imputation to automate validation of GSE telematics data from 9 hubs.
– Built automated anomaly-detection scripts in Python to diagnose malfunctioning telematics devices across 2 hubs, reducing diagnostic latency and improving uptime of GSE equipment.
– Engineered asset-level usage models by creating features such as duration, time-of-day, and divisional usage, enabling accurate equipment clustering and seasonal forecasting for downstream analytics systems.
– Built Prophet-based forecasting scripts to generate predictive maintenance schedules by analyzing time usage data for airport critical GSE fleets, improving alignment of maintenance intervals with actual equipment usage.
– Developed Python-based data pipelines and clustering analyses to support an ML-driven prediction model for airport GSE demand, improving long-term resource planning.
– Collaborated with engineering and operations teams to refine data requirements and deliver reliable data transformations, supporting GSE analytics workflows.

Kennesaw State University Robotics Competition Team   Marietta, GA
OWL Robotics Programming Lead – C++   *Jan 2023 – Aug 2024*
– Led development of C++ control software for 8 VEXU competition robots, contributing to a top-3 global ranking across head-to-head and skills challenges.
– Designed and tuned custom PID controllers in C++ using encoder and sensor feedback to improve motor precision across variable speed regimes, reducing drift and overshoot in autonomous routines.
– Developed autonomous and teleop control routines in C++ for multi-subsystem robots including drivetrains, arm actuators, and scoring systems, enabling reliable navigation of complex game environments and efficient scoring.
– Managed Git workflows for a 13-member team and mentored new members on version control practices and C++ codebase structure to accelerate onboarding and contributions.

PROJECTS

Sustain Sync AI Engine | *Docker, Django, Postgres, Python, React*   Aug 2025 – Dec 2025
– Engineered and deployed a REST API with 9 production endpoints for utility-bill analytics using Django views, serializers, and PostgreSQL to ensure reliable data ingestion and management.
– Built AI analysis and forecasting services by integrating Prophet for time-series predictions and implementing a RAG pipeline using FAISS retrieval with Ollama3.2.
– Developed a React-based analytics dashboard by integrating backend APIs and implementing responsive, data-driven visualizations (React + Vite).
– Containerized the full development stack using Dockerfiles and Docker Compose with persistent volumes and health checks to support reproducible, CI/CD-ready environments.

Simple Restaurant Management System | *Python, HTML/CSS, Flask, Pandas*   Jan 2025 – May 2025
– Developed a small-scale restaurant management web app with a Flask backend and static HTML/CSS frontend to handle login, table management, menu ordering, inventory tracking, and manager operations.
– Designed and implemented REST-style JSON APIs for user authentication, table status updates, order finalization, and inventory CRUD actions backed by lightweight CSV storage.
– Utilized Flask, Flask-CORS, and Pandas for API routing and data persistence, enabling rapid testing and portability.
– Created role-based static interfaces (manager, waiter, busboy, chef views) that interacted with the backend via local API calls, improving usability and modularity.
– Collaborated within a small Agile team using sprint planning, task tracking, and iterative development cycles to manage deliverables and maintain consistent progress.

LEADERSHIP

Kennesaw State University Robotics Competition Team   Jan 2023 – Dec 2025
– Managed 50+ members, lab logistics, and internal communication using Notion, Slack, Outlook, and Google Calendar; improved member retention and team organization.
– Mentored 20+ student robotics teams across GA and the Southeast, helping multiple novice teams qualify for the VEX World Championship.

TECHNICAL SKILLS

Languages/Frameworks: Python, C++, Flask, Django, Pandas, React, Postgres
Developer Tools: Git, VS Code, Google Suite, Microsoft Suite, Vercel, Heroku