Zaid Khan

US Citizen | zaidkhan5213@gmail.com | LinkedIn: zaid-khan-cs/ | Github: zaidkhan05 | zaidk.vercel.app

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, Microsoft Suite, AWS Cloud — *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.

TriVec Builders — Marietta, GA
Web Developer – HTML, CSS — *Jan 2025 – May 2025*

- Developed and deployed a public-facing website for a local construction company using GitHub and Vercel to improve customer visibility and streamline contact workflows.
- Integrated JSON-based data files to dynamically display project updates on the site, improving content freshness and supporting SEO performance.
- Added a FormSubmit-powered contact form to enable direct customer inquiries without backend infrastructure.

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.

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