

# Zaid Khan

US Citizen | [zaidkhan5213@gmail.com](mailto:zaidkhan5213@gmail.com) | LinkedIn: [zaid-khan-cs/](#) | Github: [zaidkhan05](#) | [zaidk.vercel.app](#)

## EDUCATION

### Kennesaw State University

Bachelor of Science in Computer Science  
EXPERIENCE

Atlanta, GA

Jan 2023 - Dec 2025

### 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.
- 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.

## ACTIVITIES AND LEADERSHIP

### Kennesaw State University Robotics Competition Team Mentor

Aug 2024 – Current

- Managed 50+ members, lab logistics, and internal communication using Discord and Microsoft Suite - Teams, Outlook, Calender - improving member retention and team organization.
- Mentored 10+ student teams across GA, with multiple teams performing well in the VEX World Championship.
- **Volunteering:**  
Head Referee at multiple VEX robotics events across Georgia and neighboring states.  
Robotics programs for younger kids, introducing them to robotics and helping them get excited about STEM.

## TECHNICAL SKILLS

**Languages/Frameworks:** Python, C++, Flask, Django, Pandas, React, Postgres

**Developer Tools:** Git, VS Code, Google Suite, Microsoft Suite, Vercel, Heroku