

Yusuf Shaikh

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EDUCATION

University of Texas at Dallas

Richardson, TX

B.S. in Computer Science

Expected December 2026

- GPA: 3.9 — AES Scholar
- Relevant coursework: Adv. Algorithms, Software Eng., Operating Systems, Linear Algebra, Natural Language Processing

TECHNICAL SKILLS

Languages: Python, Java, C++, C, JavaScript, TypeScript, SQL

Frameworks/Tools: HTML, CSS, React, Next.js, Node.js, Flask, FastAPI, Docker, MongoDB, Firebase, AWS, GCP, TensorFlow, PyTorch, Springboot

Certifications: AWS Cloud Practitioner, Convolutional Neural Networks in TensorFlow (DeepLearning.AI)

EXPERIENCE

Web Applications Developer Intern

January 2026 – Present

Applied Concepts | React, FastAPI, Pick

Richardson, TX

- Developing and maintaining internal web tools and backend services to support enterprise data workflows.
- Collaborating with cross-functional teams to design, test, and deploy scalable software solutions.

Founder

June 2025 – Present

Prism | React, FastAPI, PostgreSQL, TanStack Query, GCP, Docker, Github Actions

Plano, TX

- Built a full-stack adaptive SAT tutoring platform implementing **Item Response Theory (IRT)** for personalized mastery tracking, generating **4-figure revenue**.
- Engineered a gamified learning system and multi-agent AI content pipeline (CrewAI), leveraging **TanStack Query** for optimized caching, real-time updates, and scalable data synchronization.
- Deployed containerized services to **Google Cloud Run** and designed a **CI/CD pipeline** using **GitHub Actions** to automatically build, test, and redeploy on every push to production.

Co-Founder

June 2025 – Present

Tamkeen | React, FastAPI, PostgreSQL, pgvector, Supabase, GCP, Docker, Github Actions

Plano, TX

- Built a full-stack language learning platform with a real-time **AI voice tutor** that dynamically queries student mastery, lesson progress, and course content via tool calling.
- Designed a multi-model PDF extraction pipeline and **RAG-based knowledge graph** (pgvector) to ground responses in structured course material.

PROJECTS

Greenify | *Next.js, Tailwind CSS, Flask, Pinecone, GPT-4, LangChain*

November 2024

- Built a sustainability management dashboard for **CBRE** to track emissions and corporate ESG metrics, winning **First Place at HackUTD 2024**, the largest 24-hour hackathon in North America (2024).
- Developed an AI-powered chatbot with a RAG pipeline (LangChain + Pinecone + GPT-4) and engineered a data ingestion system to parse and structure annual reports into queryable insights.

Self-Driving Robot | *ROS2, Nav2, SLAM, Raspberry Pi, LiDAR, Python, C++*

February 2026

- Engineered a fully autonomous differential-drive robot using **ROS2** and **Nav2** for real-time path planning and obstacle avoidance.
- Integrated LiDAR, IMU, and wheel encoders to implement SLAM and localization, with Raspberry Pi high-level planning and Arduino motor control.

COMMUNITY & LEADERSHIP

Volunteer Java Instructor

May 2025 – Present

Itkan Robotics

Plano, TX

- Volunteer with Itkan Robotics, the largest youth robotics organization in Texas, to teach middle and high school students Java for programming competitive robots.
- Teach object-oriented programming, control systems, and algorithm design in the context of robotics competitions.