

SHASHVAT CHATHAPURAM

972-375-2880 | shashvatech@gmail.com | linkedin.com/in/shashchath13 | github.com/shashchath

EDUCATION

Texas A&M University

Bachelor of Science in Computer Science, Minor in AI in Business, Minor in Cybersecurity

May 2027 — GPA: 3.7/4.0

College Station, TX

- **Honors:** Dean's Honor Roll (2×), National Merit, AP Scholar
- **Relevant Coursework:** Data Structures & Algorithms, Programming Languages, Program Design, Database Systems, Computing, Computer Architecture, Operating Systems & Computer Systems, Network Security, Discrete Mathematics

EXPERIENCE

Karura US - University Mars Rover Challenge

Software Engineer

Sept 2025 – Present

College Station, TX

- Built a **Python** automation stack integrating embedded sensors for Karura's rover, enabling more efficient analysis.
- Collaborated in a cross-functional team to develop machine-learning vision models, achieving 92% detection accuracy.
- Integrated DJI streaming data into modular **ROS** components, improving reliability and reducing system crashes.

Toyota Motors North America

May 2025 – Aug 2025

Technical Analyst Intern

Plano, TX

- Managed tech support for **32** SharePoint sites, executing **27** migrations, and decommissioning **15** unused sites.
- Supported a **38-participant** Teams Frontline pilot, gathering data and feedback to guide nationwide rollout decisions.
- Built a multi-agent AI system to automate site classification and email owners, streamlining my decision-making.

Salesdrive Technologies

May 2024 – Aug 2024

Software Engineer Intern

Flower Mound, TX

- Designed a centralized training database with a team, automating and lowering onboarding time by **15+** hours.
- Developed backend automation systems using **Oracle IC APIs**, reducing commission reporting time by **35%**.
- Optimized data validation and error handling using **Python** and **SQL**, improving processing efficiency by **40%**.

PROJECTS

Boba Shop Customer Kiosk | React, JavaScript, Node.js, Express, SQL, Vercel, AWS

Nov 2025 – Dec 2025

- Built a customer-facing **SaaS platform** using **React** and **JavaScript** to support real-time browsing and checking out.
- Implemented **Node.js** and **Express**-based APIs backed by **SQL** for order processing and session management.
- Designed an interface with **WCAG 2.1 accessibility** features, including multilingual support and light/dark modes.
- Deployed the app on **AWS**, hosting the frontend on **Vercel** and integrating external APIs for personalized ordering.

Boba Shop POS System | Java, JavaFX, PostgreSQL, AWS, Git, Agile

Sept 2025 – Oct 2025

- Developed a full-stack POS system for a bubble tea franchise using **Java**, **Agile**, and **Git** for version control.
- Made back end with microservices linked to **PostgreSQL** on **AWS** cloud infrastructure for data management.
- Designed front end with **JavaFX** and **FXML**, supporting cashier workflows, sales tracking, and stock management.
- Collaborated on software design patterns and led code reviews, ensuring maintainable, high-quality source code.

RAG Chatbot | Python, ChromaDB, LangChain, Azure OpenAI (GPT-4o)

June 2025

- Built an end-to-end **RAG pipeline** in **Python** to power a context-aware chatbot using **Azure OpenAI GPT-4o**.
- Implemented a document ingestion pipeline with **strategic text chunking** for efficient retrieval and grounding.
- Designed **hybrid search** over a **ChromaDB vector store** to improve context relevance for response generation.
- Used the chatbot internally to support personal workflows, improving document retrieval efficiency by **40%**.

LEADERSHIP

Flower Mound Taekwondo

Oct 2012 – Present

3rd Degree Black Belt Instructor

Flower Mound, TX

- Led classes of **30+** students, fostering discipline, confidence, and teamwork through personalized instruction.
- Taught **200+** students and young instructors, demonstrating strong leadership and clear communication.

TECHNICAL SKILLS

Programming Languages: Python, Java, C++, Go, JavaScript (JS), TypeScript (TS), SQL, HTML, CSS, R

Frameworks/Libraries: React, Node.js, Next.js, Express.js, Pandas, NumPy, JavaFX, ChromaDB, LangChain, Oracle IC

Tools/Technologies: Git, Docker, Kubernetes, Amazon Web Services, Vercel, Redis, PostgreSQL, MySQL, Postman, Visual Studio (VS Code), Jupyter, LLMs, Power BI, PowerApps, SharePoint, Figma, Microsoft Suite, Azure, Jira