

DARSHAN BABU SHRESTHA

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Education

University of Texas at Arlington

Bachelor in Computer Science, Minor in Data Science

CGPA: 4.0

Current – May 2027

Arlington, TX

Ullens IB World School

International Baccalaureate Diploma Program

Aug. 2020 – May 2022

Lalitpur, Nepal

Technical Skills

Languages: Python, Java, C, JavaScript, HTML/CSS, SQL

Frameworks: FastAPI, React, Vite, Git, Google Cloud, NetBeans, VS Code

Libraries: NumPy, Pandas, Matplotlib, scikit-learn, OpenCV

Concepts: Object-Oriented Programming, Artificial Intelligence, API Development, Debugging, Full-Stack Web Development, Data Analysis, Cloud Deployment

Soft Skills: Team Collaboration, Communication, Problem Solving, Mathematics

Internship

Web Developer Intern – TLT (Tomorrow's Leaders Today)

May 2025 – Current

Building AI Educational Tools

Remote

- Working on and maintaining company Website, also focusing on its security factor.
- Collaborating with mentors to enhance accessibility of the company, learning through automation and innovation

AI4ALL Ignite Fellow

May 2025 – Current

AI Fellowship Program for Social Good

Remote

- Selected as an AI4ALL Ignite Fellow to develop responsible AI and Machine Learning applications for real-world impact
- Worked on inclusive AI and Machine Learning systems and received mentorship from industry experts in AI ethics and innovation

Projects

GeminEye - AI Navigation for Visually Impaired People — Python, FastAPI, Google TTS, OpenCV, Gemini API **March 2025**

- Hack Day UTA Winner 2025 — Best Use of Gemini API
- Built a real-time AI assistant that uses voice, vision, and text to aid navigation for the visually impaired
- Integrated Google Gemini API, Google TTS, and OpenCV for intelligent voice feedback

AI-Powered Slide-to-Lecture Audio System — Python, FastAPI, React, Google TTS, Gemini API **Feb 2025**

- Built software to convert PDF/PPT slides into lecture videos with AI narration, AI Professor Chat-Bot, and AI Quiz Section
- Implemented backend logic in FastAPI to extract and process text from uploaded files
- Created frontend in React with dynamic PDF viewer, audio playback, and chatbot integration
- Used Google TTS for natural-sounding audio generation and synchronized it with slide visuals

AI-Powered Recipe Generator — Python, FastAPI, React, Google TTS, Gemini API **Feb 2025**

- Built software to scan Fridge and generate Recipe with steps to make the Recipe that can be made from the items inside the fridge.
- Implemented backend logic in FastAPI to extract and process picture
- Created frontend in React to show list of recipe including steps to make them

Stock Management System — SQL, Java, NetBeans **Nov 2022**

- Developed inventory system for tracking stock levels and transactions with a GUI interface
- Developed full secure Login and Sign-up page
- Developed a Data-base to store all the data
- Created 2 different user experience for company CEO and General Stake holder

QuizAI - AI-Powered Quiz Generator — Python, FastAPI, Gemini API **April 2025**

- Created a system to extract text from lecture slides and generate intelligent quizzes automatically using Gemini API
- Built backend with FastAPI and integrated Gemini Flash for contextual question generation

Accomplishments

- Won Best Use of Gemini API at Hack Day UTA 2025 for building GeminEye, an AI-powered navigation system for the visually impaired
- Maintained a 4.0 GPA while balancing academic, internship, and personal development projects
- Earned 6+ professional certifications including: Google Crash Course on Python, IBM Python for Data Science, UC Davis SQL for Data Science, Debugging C Code, Git with VS Code, and Python Data Structures by the University of Michigan

Extracurricular

- Hack Day 2025 Winner – Best Use of Gemini API
- inSTEM @ UTA – Active Member
- Phi Theta Kappa – Active Member