

MANIT DANKHARA

Arlington, TX | (682) 509-1460 | Manitdankhara007@gmail.com | [LinkedIn](#) | [GitHub](#)

Profile

Computer Science student at the University of Texas at Arlington with hands-on experience building secure, testable backend systems, data pipelines, and mobile applications. Skilled in Python, Java, C++, REST APIs, SQL, and modern frameworks. Experienced with automation, modular system design, and collaborative development. Seeking a Back-End Software Engineering Internship to build scalable, reliable, and secure distributed systems.

Education

University of Texas at Arlington

B.S., Computer Science

2026

Experience

University of Texas at Arlington

Resident Assistant

2025 - Present

University Housing

- Mentored and supported a community of 30+ residents by planning programs, mediating conflicts, and ensuring policy compliance to enhance community living standards and safety, applying software development principles to structure and optimize engagement activities
- Coordinated with housing staff and campus resources in a collaborative team environment, employing agile-inspired documentation practices and performance optimization to maintain accurate, on-time incident reports

Projects

AI Stock Analysis & Portfolio Builder

Jul 2025

- Built a research tool that ingests real-time and historical market data via a market data API, cleans it, and computes features (returns, rolling stats, momentum signals).
- Implemented a config-driven backtesting engine to compare multiple strategies on multi-year OHLCV data with risk metrics (Sharpe, max drawdown, volatility).
- Automated the pipeline (ingest → feature gen → backtest → report) and produced PDF summaries/plots for faster decision-making.
- Structured the codebase with modular components (data, indicators, strategies, reporting) and robust error handling/logging.

Image-to-Text Converter (OCR Mobile App)

Mar 2025

- Built an offline mobile app that converts photos of receipts/notes into selectable, shareable text-no network required.
- Improved recognition by adding preprocessing (grayscale, denoising, thresholding) and perspective correction for skewed images.
- Designed a two-tap export flow (TXT/PDF/share sheet) and packaged the OCR pipeline as a reusable Flutter widget with unit tests for preprocessing steps.

Fusion AI Multi-Source Intelligent Assistant using LLaMA and RAG

Jan 2026

- Built an AI-powered intelligent assistant using the LLaMA 3.3-70B model with a Retrieval-Augmented Generation (RAG) pipeline to fetch and synthesize responses from weather APIs and structured databases, improving contextual relevance by ~25%.
- Developed a user-facing web application using Flask, HTML, and CSS, enabling real-time natural language interactions with multi-source data.
- Containerized the application using Docker to support consistent environments, scalable deployment, and streamlined development workflows using Python, NLP techniques, and REST integrations.

Technical Skills

- **Languages:** Python, C, C++, Java, Dart, JavaScript, SQL, Swift
- **Frameworks/Libraries:** Flask, FastAPI, React, Flutter, Pandas, NumPy, scikit-learn, OpenCV, TensorFlow, Postman, Security Testing
- **Databases/Cloud:** MySQL, SQL Server, SQLite, REST APIs, Git/GitHub, Kubernetes, RESTful services, Azure
- **Tools:** VS Code, Jupyter, Postman, Unix/Linux, Docker
- **Professional Skills:** Software Development, Performance Optimization, Secure coding practices, Debugging

Activities & Leadership

University of Texas at Arlington

Aug 2023 - May 2024

Member, UT Arlington Computer Science Club; Volunteer Tutor; Sports

- Member, UT Arlington Computer Science Club
- Volunteer Tutor: Python & C++
- Sports: Basketball & Swimming