Thomas Conner

EDUCATION

University of Texas at Dallas

Bachelor of Science, Software Engineering

Awards: Engineering Honors, University Honors, National Merit Scholar

EXPERIENCE

Data Structures and Algorithms TA/Grader

University of Texas at Dallas

- Evaluated Java, Python, and C++ code for correctness and efficiency
- Tutored students in technical and conceptual DSA-related topics during office hours

Undergraduate Research Assistant

Materials Science Lab, University of Texas at Dallas

- Implemented Sci-Kit models, reducing simulation runtime by 97%, maintaining standard error of 5%
- Designed custom Matplotlib visualizations to represent high-dimensional data (5+ dimensions)
- Refactored Python codebase, improving maintainability and speeding up simulation runtime by 17%
- Automated simulation workflows with Python and Bash scripts for seamless execution on Linux

PROJECTS

ARGO Marketing Intelligence Platform

- Developed LLM-powered natural-language querying for Google Analytics 4 data using Google Gemini
- Engineered prompts for natural language data analysis with ChatGPT and Gemini using LangChain
- Developed front-end interface for Gemini, ChatGPT chatbot, allowing users to directly query LLMs
- Implemented custom REST APIs in TypeScript and automated unit tests in Jest for CI/CD
- Containerized application with a multi-stage dockerfile using Node.js on Alpine for minimal image size

Comet Cupboard Inventory Tracking System

- Led development for data analytics page, streamlining data collection by packaging it with application
- Redesigned UI using Nuxt.JS for 67% more device compatibility while ensuring FERPA compliance
- Developed REST APIs and unit tests using Postman to interface with PostgreSQL database
- Reviewed Git pull requests for approval before merging with the production branch

TheLab.ms Kiosk/Calendar System

- Replaced faulty local database with REST APIs, enabling intuitive integration with partner systems
- Implemented error-handling to inherited codebase, reducing software failure in 63% of use cases
- Integrated USB RFID/Card Reader for instant RSVP to events and improved user experience

EXTRACURRICULAR

ACM Research

- Developed real-time natural language video querying pipeline in Python using Jupyter Notebooks
- Integrated pipeline with Magic Leap hardware for application in Blind-Vision-Impaired accessibility

Engineering Projects in Community Service (EPICS)

• Identified stakeholder's technical needs and provide software solutions in an Agile environment

SKILLS

Languages: Python, Java, C, C++, JavaScript, SQL, HTML/CSS, Bash Technologies/Frameworks: Git, React, NextJS, PostgreSQL, AWS, Docker, Linux CL

GPA: 3.76

May 2025 (Expected)

Jan 2025 – Present

Apr 2023 – Aug 2024