Colton E. Terrian

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PROGRAMMING EXPERIENCE: (C++, C, Python, HTML)

Project Topics: Data Structures, Web Scraping, Data Forensics, Cryptography, etc.

C++...9 Python...8 C...4 HTML...1 -> Total Projects...22

Example Projects:

- Delivery Drone (C++)
 - Built a graph processing application to compute Minimum Spanning Trees (MST) and optimize Traveling Salesman Problem (TSP) routes.
 - Implemented FASTTSP with insertion heuristics and OPTTSP with permutation-based optimization for delivery logistics.
 - O Developed a user-friendly command-line interface, applying advanced graph theory and algorithm design.
- SillyQL
 - Developed an SQL query engine that supports commands like CREATE, INSERT, JOIN, REMOVE, and GENERATE INDEX using a custom parsing framework.
 - Designed data structures to manage tables and relational data, enabling efficient filtering, joining, and aggregation.
 - Enhanced C++ proficiency while implementing query optimization and data integrity database concepts.

EDUCATION:

2023-Present

Bachelor of Computer Science at School of Engineering (Graduating May 2026)

- University of Michigan, Ann Arbor, MI
 - o GPA: 2.9
- Relevant Coursework:
 - EECS 280: Programming and Intro Data Structures
 - o EECS 281: Data Structures and Algorithms
 - o EECS 388: Introduction to Computer Security
 - o SI 206: Data-Oriented Programming

2021

Tactical Aircraft Maintenance Technical School

- Sheppard Air Force Base, Wichita Falls, TX
 - o GPA 4.0
 - Appointed class leader and led 6 students through an 18-week technical course

MILITARY/WORK EXPERIENCE:

2020-Present

USAF KC-135T Electrical & Environmental Journeyman (E-4)

- Michigan ANG, Selfridge ANGB, Harrison Twp, MI
 - o Maintained eight KC-135T aircraft valued at \$62M for missions worldwide
 - Maintained accurate aircraft records, zero QA failures in 4+ years of maintenance
 - Helped launch over 150 flights and fix well over 350 aircraft discrepancies

NOTEWORTHY ACCOMPLISHMENTS & ACTIVITIES:

- CENTCOM Deployment to Al Udeid Air Base (August 2023-November 2023)
- Aircraft Electrical & Environmental Technical School Distinguished Graduate (2021)