ZACHARIAH X. LUNSFORD

+1-336-583-6984 • zxlunsford@aggies.ncat.edu • linkedin.com/in/zachariah-lunsford/

EDUCATION

North Carolina Agricultural & Technical State University **Expected Grad date: May 2027**
M.S. Computer Science (Currently Pursuing)
B.S Computer Science w/ Certificate in Cyber Security, GPA: 3.87/4.00

SOFTWARE PROFICIENCIES AND SKILLS

Programming Languages: Python, C++, Bash, HTML/CSS, JavaScript
Deep learning tools: PyTorch, NumPy, TensorFlow, Pandas, Hugging Face Transformers
DevOps Tools: Docker, AWS, Google Cloud Platform, Git
Operating Systems: MacOS, Windows, Linux **Specialized Tools:** Unity

EXPERIENCE

Graduate Research Assistant - LLMs for Log Anomaly Detection August 2025 - Present

- Investigating applications of LLMs for anomaly detection in raw system log data, with focus on handling concept drift, rare-event detection, and scalability challenges.
- Reviewing and reproducing state-of-the-art research on log-based anomaly detection, including attention-based classification and hybrid supervised/unsupervised methods.
- Designing experiments using Python (PyTorch, Hugging Face Transformers) to evaluate model performance against benchmark datasets (e.g. HDFS, BGL).
- Exploring human-in-the-loop approaches for improving anomaly classification accuracy in evolving log environments.

Graduate Teaching Assistant - Senior Project I August 2025 - Present

- Led weekly lab sessions and mentored 30+ undergraduate students in designing, implementing, and evaluating computer-based solutions to complex problems.
- Developed and graded project deliverables placing a strong emphasis on reinforcing debugging, documentation, and software engineering best practices.

Undergraduate Research Assistant January 2025 - May 2025
Deep Learning and VR Applications

- Gained hands-on experience with CNNs, RNNs, LSTMs, and Transformer models using TensorFlow.
- Applied foundational techniques including optimization algorithms, regularization methods (Dropout, BatchNorm), and vectorized network design.
- Developed a VR Unity project exploring integration of deep learning for interactive and adaptive environments.

PROJECTS

VR Video Streaming App (Unity + Firebase) 2025

- Developing a virtual reality video app for Meta Quest 2 that allows users to stream curated playlists in a 3D immersive environment.
- Implementing smartphone-based remote control for playback, leveraging embedded system interaction patterns.
- Designing Firebase integration for video storage and user playlists, applying cloud platform concepts (Google Cloud Platform).

Comp Sci Senior Design Expo First Place Winner January 2025 - May 2025

- Developed a web application that integrated Blackboard web scraping and the SMTP library to centralize assignment deadlines for students.
- Engineered an automated system for academic reminders through customizable notifications (email/text).