solorzanoah@gmail.com | (469) 516-9213 | solorzanoah.com | Dallas, TX

Skills

• Languages: Java | C++ | Python | Bash | SQL

• Tools: Git | Docker | Podman | Gradle | Linux | Spring Boot | JIRA | CI/CD | Ansible | Helm | CMake | Vcpkg

• Frameworks: Agile | Scrum | Kanban

• Networking: gRPC | Protobuf | UDP | CIGI | UCI | DIS

Work Experience

Software Engineer - Top Secret Clearance

Lockheed Martin - ADP

April 2023 - Present

Core Development

- Develop and maintain a Modeling and Simulation software suite of 25+ Java and C++ microservices packaged as deployable Docker/Podman containers. Requires deep familiarity with Spring Boot, multithreading, Vcpkg, CMake, GitLab CI/CD, and containerization.
- Create and maintain Bash and Python scripts for internal tooling and infrastructure support.
- Serve as cross-team data mediator: standardize communication protocols (UCI, DIS, gRPC, CIGI), align timing, and optimize data flow across teams' services.
- Support integration of simulation services with supplier-provided emulators, **AFSIM**, and the **Joint Simulation Environment** (**JSE**) in secure classified lab environments.

Developer Improvements

- Designed an internal automation tool for multi-service workflows: building, packaging, versioning, Git operations, and dynamic code replacement. Reduced suite update time by 2+ hours and minimized manual error risk.
- Improved developer productivity by enhancing the Lightweight Container Framework (LWCF), refactoring plugin utilities, and eliminating the need to rebuild services to switch debug modes—saving 10+minutes per test cycle.

Mixed Reality Cockpit Simulation

Lead an augmented reality-based cockpit simulation effort using a Varjo headset, integrating HUD/HMD and embedded graphics overlays with physical cockpit hardware and Integrated Graphics Aechelon for immersive flight training.

Scrum Master Responsibilities

- Act as Scrum Master: lead Agile ceremonies, facilitate Scrum-of-Scrums coordination, and resolve blockers to sustain team velocity.
- Manage Jira boards and roadmaps to support dynamic PI planning, backlog refinement, and delivery alignment.

Education

University of Texas at Arlington, Fort Worth, TX

M.S. in Software Engineering, GPA: 4.0

May 2025

Dec 2021

Texas Woman's University, Denton, TX

B.S. in Computer Science, GPA: 4.0

Summa Cum Laude | Outstanding CS Student Award | Dean's List

AI / ML Projects

AI-Powered Exercise Form Visualizer (OpenCV, Pose Estimation)

Developed a **real-time** visual tool for analyzing exercise form using **pose estimation**. Captures human body landmarks via **webcam**, compares joint angles to correct reference poses, and provides immediate visual and statistical feedback for form correction and injury prevention.

Q-Learning and Deep Q-Learning Agent (Python, OpenAI Gym)

Implemented both Q-Learning and Policy Iteration on the Frozen Lake environment. Tuned hyperparameters (alpha, gamma, epsilon) to analyze convergence and stability. Extended to a Deep Q-Learning agent using a neural network to approximate Q-values and trained it on an Atari environment using OpenAI Gym.

Review-Based Movie Recommender (Python, scikit-learn)

Built a semantic movie recommender that compares user review language using **TF-IDF** and **cosine similarity** to identify films with viewer-perceived tone and themes similar to *The Prestige*.