Soli O. Ateefa

214-607-7298 | sateefa2904@gmail.com | linkedin.com/in/solia

Education

The University of Texas at Arlington **Expected Graduation: Fall 2025**
Bachelor of Science in Computer Science, Minor in Biomedical Engineering *Honors College, GPA: 3.644*
Relevant Coursework: Algorithms & Data Structures, Artificial Intelligence, Neural Networks & Deep Learning, Computer Vision, Linear Algebra, Operating Systems, Theoretical Computer Science, Databases

Experience

UTSW Center for Alzheimer's and Neurodegenerative Diseases **July 2024 – Present**
Software Engineer Intern *Dallas, Texas*

- Developed and tested algorithms in **Fortran and C++** to optimize **workflow performance and reliability** for large-scale data analysis pipelines.
- Enhanced **data processing accuracy** and improved software **workflow efficiency** in high-performance computing environments.
- Collaborated with cross-institutional research teams to refine **software development objectives** and support **multi-site research projects**.
- Reviewed and tested code for **algorithmic improvements**, reducing data processing errors and increasing performance for datasets exceeding 1TB.

UT Arlington The Vision-Learning-Mining Research Lab **February 2024 – Present**
Undergraduate Research Assistant *Arlington, Texas*

- Collaborated on research projects in **deep learning and computer vision**, focusing on improving **hand-pose estimation** accuracy.
- Assisted with **data preprocessing** and **model evaluation** for machine learning experiments.
- Participated in lab discussions and cross-functional projects, contributing to the **development and refinement of machine learning models**.

UT Arlington Peer-Led Team Learning Leader (PLTL) **January 2024 – May 2024**
Calculus I Tutor *Arlington, Texas*

- Led weekly **peer-learning** sessions for 12–15 students, improving **exam scores by 15%** and **homework completion rates by 90%**.
- Provided **individualized feedback** and adaptable strategies to boost confidence in **problem-solving** and **analytical thinking**.

Projects

Aphrodite's Odyssey | Unity, C#, F#, Animation & Scripting **March 2024 – Present**

- **Develop** AI-driven enemy behavior systems in Unity using F#, with a focus on enhancing adaptability and improving response times by 20%.
- Build **physics-based movement and interactive object mechanics** in C#, aiming to optimize memory usage and reduce performance lag by 15%.
- Apply **pathfinding algorithms and procedural generation techniques** to create dynamic labyrinth levels that boost player engagement and gameplay variety.

Technical skills

Languages: Python, C++, Fortran, Java, C#, F#, Assembly
Technologies/Frameworks: React, Node.js, Linux, Unix, Git, Visual Studio Code
Scripting & Data Processing: Python scripting, data preprocessing, algorithm optimization
Machine Learning/AI Models: PyTorch, TensorFlow, Keras, Scikit-Learn, CNNs, Pose Estimation
Collaboration & Tools: Microsoft Office Suite, cross-functional collaboration, technical documentation
Spoken Languages: Arabic and English