TYSON THOMAS

Atlanta, GA • tysonmthomas@gmail.com • 404-205-6748 • Portfolio • GitHub • LinkedIn

EDUCATION

Bethune-Cookman University

May 2025

B.S. Computer Science, Mathematics Minor Presidential Scholar

Daytona Beach, FL 3.85 GPA

SKILLS

Technical: Visual Studio, Android Studio, MySQL, Eclipse, .NET, React, Anaconda, Spyder Unity, Unreal Engine, Blender **Languages:** Java, JavaScript, Python, C#, SQL, HTML, CSS, C++, Blueprints

EXPERIENCE

Software Engineer Intern

May 2024 - August 2024

Air Force Research Laboratory

Rome, NY

- Engineered modular system components in Unity/C# to expand feature capabilities by 60%, increasing system complexity and flexibility.
- Streamlined and implemented dynamic UI components using C# and .NET, enhancing reusability and reducing iteration time by streamlining navigation flows.
- Developed and deployed a custom client-server architecture supporting real-time data synchronization across distributed systems; utilized **Git** for collaborative version control and continuous integration.
- Conducted usability testing sessions with end users (Air Force personnel), iterating on system behavior and interface design based on actionable feedback.

Cryptography Research Intern

May 2023 - August 2023

University of South Florida

Tampa, FL

- Investigated the Kyber cryptosystem, applying advanced math techniques to understand and replicate post-quantum encryption methods using **Python** and **C**.
- Utilized Git and **GitHub** for **version control** and collaboration, analyzing open-source cryptographic libraries (e.g., SHA-256) to integrate and compare various **Java** encryption algorithms.
- Experimented with AI-driven replication of cryptographic functions, exploring one-shot and multi-shot **machine** learning approaches to validate cryptographic primitives.

PROJECTS

Reflection Journal

- Built a Reflection Journal app with **React.js**, **HTML**, **CSS**, and **JavaScript**, allowing users to record up to 10 daily logs by selecting an emotion from a dropdown, assigning a rating, and adding reflections.
- Integrated LocalStorage, Web Storage, and **REST APIs** to preserve user entries and sync data across sessions, and implemented dynamic **UI** chart visualizations to give users a clearer overview of their emotional trends over time.

Crisis AId

- Curated a live natural disaster tracking platform using **NOAA's API**, dynamically updating a world map with real-time disaster data to provide users with critical alerts and location-based visual UI insights.
- Integrated **AI-driven** donation recommendations to connect impacted individuals with potential donors, optimizing relief efforts by analyzing disaster severity, affected population density, and historical donation trends.

Astropick

- Designed a **3D** survival game in **Unity** using **C**#, with wave-based enemies, power-ups, and a scoring system.
- Led a 5-person team during a 48-hour game jam to implement engaging gameplay logic and UI design.

EXTRACURRICULAR ACTIVITIES

IEEE Robotics Club, National Society of Black Engineers, Mathematics Tutor, ColorStack

CERTIFICATIONS AND AWARDS

Pariveda Career Accelerator Scholar Unity Certified Associate: Game Developer