## Jaylen Monroe

#### Education

### Georgia Southern University

Bachelor of Science in Computer Engineering

Statesboro, GA

Expected Graduation: May 2026

- President's List x1 | GPA: 3.26
- Relevant Coursework: Java I/II, Program Design, Computing for Engineers, Digital Design Lab, Logic Circuit Design, Discrete Mathematics, Ordinary Differential Equations, Technical Communication

### **Projects**

### Digital Design Lab Project | Video

VHDL

- Collaborated in a group to design and implement a retro racing game on the DE10 Board as part of a Digital Design Lab course. Used Quartus VHDL to integrate seven-segment LEDs, switches, and buttons, resulting in an interactive experience demonstrated to an audience of 20+ peers and an instructor, enhancing engagement by 30% during interactive learning sessions.
- Programmed car and obstacle movement using VHDL, achieving real-time interactions with a response time under 100ms, contributing to 25% smoother gameplay through dynamic obstacle avoidance and highly responsive controls, improving the game's realism and functionality.
- Developed and showcased an interactive gameplay experience with advanced game logic as a group, highlighting proficiency in VHDL programming and digital system design. Delivered a practical demonstration of hardware-software integration skills, which was evaluated as "exceptional" by the instructor and peers.

NSBE Chapter Website (GSU NSBE) | Website | Source Code

HTML | CSS | JavaScript

- Transformed the Georgia Southern NSBE Chapter's online presence: Designed, developed, and currently maintain a professional website for the Georgia Southern Society of Black Engineers, increasing member engagement by 50% through a centralized platform that connects members, provides access to resources, and keeps them updated on events.
- Enhanced user engagement and accessibility by implementing a modern and intuitive design, which resulted in a 40% increase in return visits, ensuring accessibility for users with varying technical expertise. This approach also expanded the reach to potential members and partners.
- Demonstrated technical expertise and leadership as the sole developer and maintainer of the platform, leveraging HTML, CSS, and JavaScript to build a cutting-edge website. The site effectively showcases the NSBE Chapter's mission and values, while contributing to cost savings by avoiding third-party developer fees.

## Leadership Experience and Activities

#### National Society of Black Engineers (NSBE)

Aug 2023 - Present

- Currently serving as the **Public Relations Chair**, managing communication and building relationships between the organization and its audience by overseeing **publicity efforts** such as **social media**, **events**, and **press releases**, increasing engagement and brand awareness.
- Created graphic design material for a 50+ member student-led organization, achieving 2,000+ impressions per month across multiple social media platforms, while producing visuals for Career Fair Follow-Up, Networking, and Resume Workshops to enhance members' professional growth.

The Collegiate 100

Oct 2023 - Present

• Supported initiatives within the Collegiate 100, under 100 Black Men of America, promoting mentorship, leadership, and academic success for minority students through events and workshops that enhanced community engagement at Georgia Southern and surrounding communities.

#### Boys and Girls Club Mentor

May 2024 - Present

• Provided guidance, support, and served as a positive role model for youth at the Boys and Girls Club, mentoring students to develop essential life skills and achieve personal and academic goals. Led activities, contributing to significant improvements in kids social, emotional, and academic outcomes.

# Skills

Languages: Java, C, HTML, CSS, JavaScript, MATLAB, VHDL

Soft Skills: Skilled Collaborator, Rapid and Adaptive, Effective cross functional communicator, Solutions Oriented professional, High Achiever