Josiah White

Education

University of South Carolina

Bachelors of Science in Computer Science, Minor in Business & Data Science

Expected Graduation: May 2027

Columbia, SC

- Honors College **GPA: 4.0**
- Courses: Software Engineering, Intro to C++ & Linux, Operating Systems, Computer Architecture, Intro to Java 1 & 2

Work Experience

Undergraduate Research Assistant - Honors College Research Grant

Aug 2025 - Present

University of South Carolina

Columbia, SC

- Received competitive research grant to develop a MIPS assembly interpreter within the Godot engine using C++
- Designed a virtual machine to parse and execute MIPS instructions, modeling registers, memory, and instruction flow within a game engine environment
- Explored integration of low-level systems concepts with game development, laying groundwork for a MIPS-based game engine

Projects

KeyQuest - Music Learning Application | Source Code

Java | JavaFX

- Collaborated in a 5-member Agile team using **GitHub Projects** and **Scrum** methodology to manage sprints, track issues, and conduct regular stand-ups
- Led architecture planning by creating UML diagrams and following the Software Development Life Cycle from requirements to testings
- Developed JavaFX-based UI and implemented backend logic for sheet music playing and creating
- Wrote and executed unit tests using JUnit to ensure code reliability and maintainability across modular components

Minesweeper | Source Code

 $C++ \mid Qt \mid CMake$

- Recreated the classic Minesweeper from scratch with a GUI for users to enjoy
- Managed game logic using **object-oriented principles** to ensure efficient interaction between front-end and back-end elements
- Configured a CMake file to optimize the building and compiling of the game

CockBots - Social Media Application | Source Code

PHP | SQL | Python

- Won "Best in AI" and "Best in Implementation" for CockyHacks 2024; created and presented in 32 hours by a team of 3 engineers
- Developed social media application that categorized images using AI allowing posts with bots and removing those without; built interactive social media functions, user registration, posting, and interaction with other users' posts
- Detected bots with over 90% accuracy using an AI built in Python and trained on gathered data
- Deployed a website on a local server using PHP, kept track of user data with SQL, and categorized the posted images using TensorFlow

Leadership

Kappa Theta Pi

Mar 2025 – Present

Executive Secretary, Founding Member

Columbia, SC

- Helped found a professional fraternity aimed at aiding nonprofits and empowering students with a passion for technology
- Served as the executive secretary on the first executive board, helped to recruit and lead an alpha class of 25+ members

Skills

Languages: Java, C++, Python, SQL, JavaScript, HTML, CSS

Technical Skills: Git, Software Engineering, Back-End Development, Linux, Object-Oriented Programming, Data Structures & Algorithms