

Mario Sinclair

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EDUCATION

Bachelor of Science in **Computer Science**

GPA: **3.81**/4.0

University of South Florida

Expected Graduation: May 2027

TECHNICAL SKILLS

Coursework: Computer Vision, Generative AI, Operating Systems, Embedded Systems, Computer Architecture, Object-Oriented Programming, Data Structures & Algorithms

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

Frameworks/Techologies: React, Next.js, Node.js, Express.js, MongoDB, Firebase, NumPy, Flask, FastAPI, OpenCV, PyTorch

PROJECTS

Lead Developer, USF NSBE Website (www.usfnsbe.com)

Jan 2025 - Present

HTML, CSS, JavaScript, Git, Vercel

- Directed the **end-to-end design, development, and deployment** of a responsive, **user-friendly** website for the USF NSBE chapter, serving a community of **400+ active students**, integrating a **CI/CD pipeline** to streamline testing, updates, and version control.
- Implemented **comprehensive SEO and performance optimization strategies**, including meta tags, keyword targeting, sitemaps, high-quality backlinks, lazy-loaded images, AVIF format support, resulting in a dramatic improvement in search visibility from **Google ranking 20+** to an average of **4**.
- Led ongoing maintenance and **monitored user engagement** via **Google Search Console**, tracking impressions, clicks, and CTR to inform iterative improvements, while creating an open-source repository to enable community contributions and planning future interactive features.

OptionScope, A Black-Scholes Options Pricing & Visualization Tool

May 2025 - Present

React, Flask, FastAPI, NumPy, Chart.js, HTML, CSS, Git, Vercel

- Built a **full-stack Black-Scholes options pricing and visualization tool**, translating complex financial mathematics into an intuitive interface for end-users, enabling interactive exploration of options pricing scenarios and simplifying decision-making for financial analysis.
- Developed a **high-performance RESTful API** using **FastAPI** and **NumPy** to handle pricing requests, ensuring accurate computation of option prices and sensitivity metrics under various market conditions.
- Integrated dynamic, interactive charts with Chart.js** to visualize the Greeks (Delta, Gamma, Vega, Theta), providing insights into option risk and sensitivity, enhancing user engagement with real-time financial data.

LEADERSHIP EXPERIENCE

NSBE Conference Planning Chair

Jan 2025 – Present

National Society of Black Engineers

- Spearheaded the planning and execution of the **Annual NSBE National Convention** and the **Fall Regional Conference**, directing budgeting, travel, lodging, registration, and professional development logistics for **30+ members**, ensuring meaningful engagement in workshops, leadership training, and networking opportunities.
- Organized large-scale **STEM outreach initiatives**, including the **USF Engineering Expo**, leading the design and demonstration of engineering projects that **educated 5000+ K-12 students** on STEM pathways.
- Led the coordination of **technical workshops, industry office visits, and professional development sessions** for **380+ active members**, fostering technical growth, career readiness, and sustained engagement.

SHPE Technical Director

Sep 2025 - Present

Society of Hispanic Professional Engineers

- Designed, deployed, and managed technical infrastructure for **USF's largest hackathons, HackJam and HackaBull**, supporting **410+ participants** and ensuring reliable performance during peak activity.
- Developed and curated engaging technical challenges and event tracks, fostering collaboration, problem-solving, and skill growth among students with diverse coding backgrounds, while driving **high participation**, competitive engagement, and **hands-on learning experiences**.
- Maintained and updated hackathon resources, including **event webpages** and **GitHub documentation**, ensuring participants had access to up-to-date information and project continuity, while supporting future hackathon teams with reusable technical infrastructure.