

# Nafis Anwar

Tampa, FL | 656-203-8046 | [anwarnafisneo@gmail.com](mailto:anwarnafisneo@gmail.com) | [linkedin.com/in/nafisanwar/](https://www.linkedin.com/in/nafisanwar/) | [Github](#)

## SUMMARY

Software Engineer with a strong foundation in backend/frontend development and technical skills. Led cross-functional teams to improve application performance and developed scalable systems using C++ and Python. Enhanced system reliability by debugging and testing code for obstacle-avoiding robots, achieving significant improvements in real-time detection. Eager to leverage technical expertise to deliver exceptional results as a Backend Engineer.

## EDUCATION

### University of South Florida

*Bachelor of Science in Computer Science*

- **GPA:** 3.80

**Aug 2023 - May 2027**

*Tampa, FL*

## EXPERIENCE

### Google Developer Student Club at USF

**Jun 2025 - Present**

*Technical Marketing Lead*

*Tampa, FL*

- Designed graphics and created content for the GDSC Marketing Team, producing 52+ assets using Photoshop and Illustrator. Reduced turnaround time from 4 days to 2 days by standardizing custom templates on Canva, enhancing team efficiency
- Created technical documentation and educational content for developer community events, managing a content pipeline serving 500+ developers, while collaborating with cross-functional teams on technical event planning and developer experience optimization

### PATHFINDER Team - Engineering Lab at USF

**Aug 2023 - Dec 2023**

*Lead Developer*

*Tampa, FL*

- Led a cross-functional team of 4 in designing and implementing an obstacle-avoiding robot, programming and testing C and Assembly code in Arduino IDE to synchronize servo motors with ultrasonic sensors, achieving a 60% improvement in real-time obstacle detection and avoidance.
- Enhanced system reliability by debugging with terminal tools, serial monitor, and logic analyzer to resolve timing issues (95% fewer collisions), and by designing comprehensive edge-case test scenarios in both simulated and real-world conditions to ensure rover-level robustness.

### SQUARE International - Textiles Division

**Sep 2022 - Dec 2022**

*Human Resources Intern*

*Dhaka, Bangladesh*

- Validated 250 employee records in Optic and HCMS systems by performing data migration and ensuring compliance with internal protocols. Participated in developing an automated HR tracking system using a relational database, which reduced reporting errors by 18%

## PROJECTS

### GritVM Web IDE

**Aug 2025 - Present**

- Compiled a C++ virtual machine to WebAssembly, enabling browser-based execution and cross-platform portability with no native setup required; React IDE with Monaco Editor supporting step execution, syntax highlighting, and real-time memory visualization for GritVM assembly.
- Exposed C++ internals to JavaScript via Emscripten bindings, achieving 150 ms state updates in the UI and deploying the full-stack app on Vercel.

### RSA Full-Stack Educational Playground

**Jul 2025 - Aug 2025**

- Developed a polyglot system by integrating a native C crypto engine with ASP.NET Core via C# P/Invoke, achieving 30% faster RSA operations compared to a pure C# implementation.
- Developed a RESTful API with endpoints for key generation, encryption/decryption, and digital signatures, load-tested to handle 100+ requests/sec with 120 ms average response latency.
- Automated cross-platform builds and Dockerized deployment, cutting setup time from 10 minutes to under 1 minute and enabling seamless reproducibility across Linux, macOS, and Windows.

### MediTrends

**May 2025 - Jun 2025**

- Developed a full-stack system analyzing 28k+ Reddit posts/comments across 18 communities. with built-in semantic search using FAISS vector structures, achieving retrieval in 110 ms.
- Applied NLP pipelines (TensorFlow, PyTorch) for clustering and trend detection, generating reports with 3 KPIs (volume, growth, sentiment).

## Leadership

### Residential Education at USF

**Aug 2025**

*Resident Assistant*

- Fostered community engagement by organizing and facilitating 2 social and educational programs per semester, averaging 18 attendees, and boosted floor participation by 26% for 34 residents within my community
- Created automated reporting and tracking systems for community metrics, handling 18 conflict resolution cases and 58 technical inquiries with systematic documentation while serving as the first point of contact for 500+ residents across our assigned residential spaces.

## TECHNICAL SKILLS

- **Programming Languages:** C, C++, Python, Java, C#, JavaScript, HTML5/CSS, SQL, Assembly (Arduino IDE)
- **Frameworks & Tools:** Flask, React.js, MongoDB, TensorFlow, PyTorch, Git, FAISS, Arduino, AWS, Azure
- **Core Knowledge:** Data Structures & Algorithms, Object Oriented Design, Software Quality Assurance, Risc-V, Computer Architecture & Organization, Semantic Search