


M BASIM IRFAN

Computer Science Student

CONTACT

 +92 3344961389

 mbasimirfan65@gmail.com

 308-A, Journalist Colony Lahore

 @mbasimirfan

EDUCATION

- **FAST-NUCES LAHORE**
(2023 - Present)
B.S. in Computer Science
(CGPA 3.85)
- **HSSC | GCU LAHORE**
89.99% (2021-2023)
- **SSC (BISE) | SUPREME SCHOOL**
99.01% (2019-2021)

AWARDS & CERTIFICATIONS

- 4x Deans List of Honor.
- 1x Rectors List.

SKILLS

- **Programming Languages:** C, C++, Python, JavaScript, Java.
- **Tools/Platforms:** VS Code, Git, GitHub, Postman, Figma.
- **DataBases:** SQL Server.

OBJECTIVE

Detail-oriented 6th-semester Computer Science student with a focus on systems architecture and high-performance development in C++, Java, and Assembly. Currently leveraging a strong foundation in low-level programming and multithreading to build scalable, full-stack solutions using the MERN stack.

PROJECTS

Chess Game

- Developed a polymorphic engine using C++ inheritance and virtual functions to manage complex piece movements on a dynamic board.
- Implemented a Stack-based simulation system for backtracking to detect checkmate, stalemate, and board state legality.
- Programmed specialized logic for algebraic coordinate translation and advanced chess rules including castling and pawn promotion.

Flappy Bird (x86 Assembly)

- Developed a hardware-level game to manage direct CPU and memory interactions without abstractions.
- Programmed low-level graphics and real-time input handling for a responsive console experience.
- Optimized performance via machine-code instructions for state updates and collision detection.

Multithreaded File Copier (Java / Concurrency)

- Developed a Java utility utilizing multithreading to handle concurrent file transfer operations.
- Optimized I/O throughput by parallelizing data copying across multiple worker threads.
- Programmed a CLI to manage file path arguments and coordinate asynchronous tasks.