

Ahmed

Aarij | 050-3880691 | Abu Dhabi, United Arab Emirates

Summary

Dynamic software developer with over two years of experience in web development and game design, making significant contributions to user experience through innovative solutions. Proficient in creating web applications and engaging game mechanics, consistently delivering high-quality results. Expertise in C, C++, and JavaScript enhances technical capabilities, complemented by strong project management skills and a keen eye for detail. Passionate about leveraging technology and audio design to elevate creative projects, while dedicated to continuous learning and collaboration within teams.

Education

42 Abu Dhabi

Oct 2023 - Present

Software Development · Abu Dhabi

- Completed the intensive 42 coding curriculum, mastering C programming with focus on memory management, data structures, and algorithms. Built diverse projects including a ray tracing engine (miniRT), optimized sorting algorithms (push_swap), a full-stack web application with real-time multiplayer gaming (Transcendence), an IRC server implementation, and containerized infrastructure with Docker (Inception). Developed proficiency in Python, Java, web technologies, Unix/Linux systems, and Git version control. Strengthened problem-solving and collaboration skills through peer-to-peer learning, delivering scalable solutions across systems programming, networking, and full-stack development.

GEMS Our Own Indian School

- Feb 2022

12th · Mass Media · Dubai

Graduated High School majoring in Mass Media with focus on Marketing and Entrepreneurship. Built foundational communication and creative problem-solving skills that complement technical abilities, bridging the gap between user-centric design and software development.

Experience

Endless Game Jam

Dec 2023 -

Game Developer · Lead Developer

- Lead developer in a competitive game jam, securing second place and winning the "Best Visuals" award for outstanding art and design, contributing to the overall success of the project.
- Created and composed original soundtracks for a subsequent game jam, with my sound design being highly praised for its immersive quality and seamless integration into the game.

Freelance Web Development

Oct 2024 - Present

Full Stack Developer · Freelance

- Developed and deployed responsive e-commerce platforms, integrating user-friendly interfaces and secure payment gateways, resulting in a seamless online shopping experience for users.
- Designed and implemented interactive portfolio websites, utilizing modern web technologies such as HTML, CSS, JavaScript, enabling clients to showcase their work with custom layouts and functionality.

Projects

ft_irc | Project Repository

Apr 2025 - May 2025

42 Abu Dhabi · C++98, TCP/IP Sockets, I/O Multiplexing (poll), Non-blocking I/O, IRC Protocol (RFC 1459), STL, Makefile, Git

Networking & Systems Programming

Co-developed a fully functional IRC server in C++ as part of a 3-person team, supporting multiple concurrent client connections through TCP/IP socket programming and implementing the IRC protocol with non-blocking I/O for real-time chat functionality.

Inception

42 Abu Dhabi · Docker, Docker Compose, Nginx (TLS/SSL), MariaDB, WordPress, PHP-FPM, Docker Networks & Volumes, Shell Scripting, Makefile

Designed and deployed a multi-container infrastructure using Docker and Docker Compose, orchestrating Nginx web server with TLS, MariaDB database, and WordPress with PHP-FPM. Implemented secure networking, persistent volume management, and automated deployment configurations

Jul 2025 – Aug 2025

DevOps & System Administration

MiniRT | [Project Repository](#)

42 Abu Dhabi · C, Linear Algebra, Computer Graphics Mathematics, MiniLibX (minimal graphics library)

Partnered with a peer to develop a ray tracing engine from scratch in C, implementing fundamental computer graphics algorithms for 3D rendering. Built mathematical solutions for ray-object intersections, Phong lighting model, shadow casting, and scene parsing to render realistic images without external graphics libraries.

Sept 2024 – Sept 2024

Graphics

Minishell | [Project Repository](#)

42 Abu Dhabi · C, POSIX System Calls, Process Management (fork/execve), Pipes & Redirections, Signal Handling, File Descriptors, Lexical Parsing, Valgrind

Partnered with a peer to build a fully functional Unix shell in C, implementing command parsing, process management with fork/execve, pipe handling for command chaining, I/O redirections, signal handling, and built-in commands. Managed file descriptors and environment variables while ensuring proper memory management.

Jun 2024 – Jul 2024

Systems Programming & Operating Systems

Philosophers | [Marketing Campaign Analysis](#)

42 Abu Dhabi · C, POSIX Threads (pthread), Mutexes/Semaphores, Concurrency Control, Thread Synchronization

Implemented the classic dining philosophers concurrency problem in C using POSIX threads and mutexes to simulate resource sharing among multiple threads. Developed thread-safe synchronization mechanisms to prevent deadlock and race conditions while managing precise timing and shared resource allocation.

Apr 2024 – Apr 2024

Concurrent Programming & Synchronization

Skills

Skills: C, C++, Python, SQL, Program Optimization, OpenGL, Java, Data Structures, Algorithms, Git, Docker, DevOps, Networking, Computer Graphics, Shell Scripting

Languages

English [Native Proficiency], Hindi [Native Proficiency], Urdu [Native Proficiency], Italian [Limited Working Proficiency]
