

Noble Joseph Alex

Sharjah, UAE | noblejosephalex@gmail.com | github.com/nobleimage | noblealex.xyz

PROFESSIONAL SUMMARY

Incoming BITS Pilani Computer Science freshman focused on where software and AI intersect: building practical, AI-assisted applications that solve everyday problems, from campus logistics to personal privacy and security. Comfortable across the full stack, with hands-on experience in system architecture, automation, and responsible security research.

EDUCATION

BITS Pilani, Dubai Campus — Dubai, UAE

Expected Graduation: May 2030

B.E. Computer Science

Progressive English School — Sharjah, UAE

Graduated: Spring 2026

ICSE Board – Science Stream

TECHNICAL PROJECTS

CampusBytes – Hostel Mess Management System | *Next.js, Node.js, Supabase, Redis* | [repo demo](#)

- Co-developed a full-stack, WebAuthn-secured web application to digitize university hostel mess check-ins, replacing manual paper queues with a high-speed QR-code scanning system.
- Architected the system logic and utilized AI developer tools to implement client-side TOTP (HMAC-SHA1) for 30-second rolling QR passes, preventing unauthorized screenshot sharing.
- Engineered a Warden Kiosk Mode using atomic database transactions and Upstash Redis caching, achieving sub-150ms processing times with zero duplicate entries at the database constraint level.

School Portal Vulnerability Discovery | *Independent Project* | *Python*

- Identified an Insecure Direct Object Reference (IDOR) vulnerability in the school's official report card portal using browser console diagnostics, then responsibly disclosed it to school administration.
- Built a Python script to verify and document the vulnerability's scope without retaining or exposing student data, supporting a swift, fully-patched resolution.

AI Inventory Management System | *3rd EAU AI & Data Science Competition* | *Python*

- Built an AI-driven inventory tracking system selected to represent the school at the Third EAU Competition in Artificial Intelligence and Data Science, held at Emirates Aviation University.
- Designed data visualization dashboards that surfaced inventory trends from historical sales data, driving optimized purchasing decisions.

Windows Privacy Controller | *Independent Project* | *Python* | [repo](#)

- Built a lightweight, background Windows utility that toggles camera and microphone access independently or together at the OS level using pycaw, requiring admin privileges to disable devices directly.
- Implemented global hotkeys and a dynamic system tray icon with distinct states per device combination, giving users instant control and at-a-glance status without interrupting their workflow.

LEADERSHIP & EXTRACURRICULARS

Assistant Headboy – Operations & Logistics | *Progressive English School*

- Directed school-wide logistics, including the annual march-past and student rosters for Physical Education classes, and authored scripts for assemblies and awareness campaigns (e.g., Anti-Drug initiatives).
- Selected as an official anchor for the school's graduation ceremony, representing the student council in a formal, public-facing role.
- Anchored the school's annual Science Quiz and CCA program, reflecting a consistent track record of public speaking across school-wide events.

SKILLS

- **AI-Assisted Development:** Antigravity, Google AI Pro, Prompt Engineering, Code Review & Debugging
- **Languages (Familiarity):** Python, JavaScript/TypeScript, Java, C++
- **Web & Databases:** Next.js, PostgreSQL (Supabase), Redis (Upstash), Tailwind CSS
- **IT & Developer Tools:** Git/GitHub, Command Line Interface (CLI), Hardware Troubleshooting
- **Practical & Soft Skills:** Public Speaking, Event Anchoring, Cross-Functional Coordination, Canva
- **Spoken Languages:** English (Fluent), Hindi (Fluent), Malayalam (Fluent)