Abdulrahman Shaalan Taher Al-Dhaher

Academic Background

- **Graduate of the Department of Pharmacy Technologies** (Class of 2026) – Northern Technical University.

Professional Profile

Abdulrahman is a dynamic professional who seamlessly bridges the healthcare and technology sectors as a Full-Stack Systems and Internet of Things (IoT) Developer. He possesses an exceptional ability to transform conceptual ideas into tangible products, backed by advanced expertise in programming languages (C#, Laravel), microcontroller engineering (Arduino, ESP32), 3D design and printing, and the integration of Artificial Intelligence technologies to serve the healthcare and education sectors.

Skills & Interests

Distinguished by a high capacity for troubleshooting complex challenges and pioneering radical technical solutions. His core interests focus on electronic circuit design, exploring cutting-edge AI tools, and developing smart systems that elevate institutional workflow efficiency and improve daily life operations.

Key Achievements & Innovative Projects

Smart Pharmaceutical & Medical Systems *(Under the continuous supervision of the Head of the Pharmacy Department, Dr. Wael Al-Rawas)*

- **Smart Pharma OCR Application:** An advanced web system utilizing Optical Character Recognition (OCR) and Artificial Intelligence to read and analyze handwritten medical prescriptions. This system directly contributes to minimizing medical errors and accelerating the dispensing documentation process.
- **Smart Medical Card System:** An innovative platform developed to digitize health records, enabling the secure storage and retrieval of patient medical histories and prescriptions through an encrypted smart card to ensure safe healthcare delivery.
- *These systems and projects were successfully showcased at the Innovation Conference held at Northern Technical University, receiving high acclaim as practical, innovative solutions.*

IoT Smart Attendance System

An integrated smart device designed and built entirely from scratch (Software & Hardware). The project encompassed 3D modeling and printing the external chassis, as well as programming the internal components to link fingerprint sensors and RFID card readers to an advanced cloud database (Laravel). This system is currently being maintained and upgraded with the future goal of official deployment for attendance tracking within the Technical Institute.

Custom Exam Management Software for Computer Laboratories

An innovative desktop application developed specifically to overcome the shortcomings of traditional laboratory examination systems (such as data loss and ensuring student rights). The software mandates the entry of the student's name prior to starting, automatically records the entire screen throughout the exam duration, and saves answers into a structured archive for streamlined faculty grading and review.