

Omar Irshad

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Education

Texas A&M University | Bachelor of Science in Computer Engineering

Expected May 2023

- GPA: 2.5/4.0
- Specializations: Computer Science
- Deans Honor Roll: Engineering

Experience

Software Engineering Intern

Jun. 2022- Aug. 2022

Fujitsu Tech | Richardson, TX

- Utilized spring-boot framework to take a Java-based application and have it run as an individual microservice
- Set up a local testing environment using an H2 Database and sending JSON requests for verification of program
- Containerized program using Docker and deployed it as a cluster using Kubernetes while verifying functionality

Electrical Engineering Intern

Jun. 2021- Aug. 2021

Dow Chemical | Deer Park, TX

- Created a relay system database that provides an efficient method for engineers to analyze and create potential design changes to substations
- Developed a mapping excel macro system of One-Line Diagrams for electrical maintenance of substations and plants
- Designed and validated transformer and breaker bus topologies for substation upgrades while maintaining the National Electric Code.

Projects

GPIO Traffic Controller

Aug. 2022- Sept. 2022

Texas A&M University | Microcomputer Systems

- Built a functioning traffic control system that takes input from user and counts down for pedestrians walking
- Hardware was built through Raspberry Pi 3, buttons, resistors, and LED's while software developed using Python and the GPIO package

Aggie Shell

Jan. 2022- May 2022

Texas A&M University | Introduction to Operating Systems

- Built a functioning Linux shell that had file input/output redirection, basic commands, and directory handling
- Utilized Input/Output redirection, command pipelining, and background processes using C++

Seam Carving

Aug. 2020 – Dec. 2020

Texas A&M University | Programming Design

- Developed an algorithm that was able to recognize the energy of a pixel within an image and decipher what pixels were relevant to the image
- Utilized output streams, pointers, and functions to achieve proper image manipulation

Attendance Management System

Aug. 2020 – Dec. 2020

Texas A&M University | Programming Design

- Developed a system using a C++ to keep track of attendance as well as what classes students signed up for and checks for overlapping classes
- Read in data from external files and utilized file streams to quantify attendance rates of students

Skills & Relevant Coursework

Programming/Design Implementation

C++ | Python | JAVA | HTML | CSS | ArmV8 Assembly | Structural Verilog | Xilinx | Docker | Kubernetes |

Courses

Introduction to Computer Programming | Engineering programming lab | Data Structures and Algorithms | Electrical Circuit Theory | Introduction to Operating Systems | Database Systems | Machine Learning

Organizations

- Young Muslims College Station Chapter – Cofounder
- Institute of Electrical & Electronics Engineers
- Texas A&M Muslim Student Association
- Project Downtown