

MOSTAFA HASSAN

7B Hussein Kamal, Dokki, Giza

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Education

Cairo University

Bachelor of Computer Engineering

Oct. 2022 – Jul. 2027

Giza

Relevant Coursework

- Data Structures
- Algorithms
- OOP
- Verilog

Projects

Alien Invasion | C++, Data Structure, Visual Studio

May 2024

- Developed the project using C++ and use data structures to implement the proposed design.
- Write a complete object-oriented C++ program that performs a non-trivial task.

ADVANCED ENCRYPTION STANDARD (AES) | *verilog, Quartus, FBGA*

May 2024

- Computer Security Standard, Cryptography.
- The Advanced Encryption Standard (AES) specifies a FIPS-approved cryptographic algorithm that can be used to protect electronic data.
- The AES algorithm is a symmetric block cipher that can encrypt (encipher) and decrypt (decipher) information, Encryption converts data to an unintelligible form called ciphertext, decrypting the ciphertext converts the data back into its original form, called plaintext.

Calculator | Logic components, Logic Kits, Logisim

November 2023

- Calculator that makes the conventional arithmetic operations on two numbers.
- Dealing with Hardware Components.

Paint for Kids | C++, OOP, Visual Studio

November 2023

- Game for kids that teaches them the geometric shapes and colors. After drawing all shapes the kid will play an amazing pick and hide game.
- Dealing with Graphical user interface.

Smart Elevator | Arduino

November 2022

- Elevator that is very safe by putting in it a load cell. When the load is more than its allowed value a buzzer will alert the users and will display the load on a screen.
- Dealing with Arduino and Hardware components.

Technical Skills

Languages: C++, Verilog, Arduino C

Developer Tools: Visual Studio, VS code, Quartus, ModelSim, Logisim, Arduino simulator

Technologies/Frameworks: GitHub