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Objective

I am a dedicated Computer and communication student specializing in Digital IC Design enthusiast with expertise in RTL design, verification, and FPGA prototyping. I am skilled in Verilog/System Verilog, digital logic design, and hardware testing. Strong problem-solving abilities and passion for creating efficient and scalable hardware solutions.

EDUCATION

Helwan National University

Bachelor, intelligence Systems (Computer & Communication)

Oct2023 - Feb2028

- GPA - 3.43
- Last semester 3.91
- Rank 7th

PROFESSIONAL EXPERIENCE

▪ National Telecommunication Institute - NTI

Digital Design using FPGA,

Aug 2025 – Sep 2025, Remote

- Learned digital circuit design and RTL development using Verilog.
- Practiced simulation, debugging (ModelSim), and FPGA prototyping on quartus .
- Implemented hands-on projects including an 8-bit Microprocessor and I2C protocol controller.

▪ Information technology institute -ITI

AI & Machine learning,

Jul 2025 – Aug 2025, Remote

- Gained strong foundation in Artificial Intelligence and Machine Learning concepts.
- Applied Python, NumPy, Pandas, and Scikit-learn for data analysis and model development.
- Implemented practical projects including classification, regression, and neural network models.

▪ Information technology institute -ITI

Web development ,

Feb 2025 - Mar 2025, Remote

- Learned the fundamentals of front-end web development.
- Worked with HTML, CSS, and JavaScript to create dynamic user interfaces. Optimized model performance.
- Developed hands-on projects including responsive and interactive websites.

▪ Information technology institute -ITI

CS50T ,

Sep 2024 - Sep 2024, Remote

- Gained foundational knowledge of computers, internet, and cybersecurity concepts
- Learned basics of web development, multimedia, and programming logic.
- Completed practical exercises to strengthen problem-solving and tech literacy skills.

▪ Digital Orange Center

Digital Design 1,

Sep 2023 - Sep 2023, Hybrid

- Gained knowledge in fundamental digital concepts, Boolean algebra, and combinational/ sequential logic.
- Learned Verilog fundamentals and introductory concepts of FPGA design.
- Completed hands-on exercises applying digital design principles.

CERTIFICATIONS

- Digital Design using FPGA , NTI
- AI & Machine learning, ITI
- Web development, ITI
- Cs50t , ITI
- Digital Design 1- Orange
- Ai fundamentals - Udemey

PROJECTS

8-bit Microprocessor using VHDL

Aug 2025- Sep 2025

- Designed and implemented a simple 8-bit microprocessor using VHDL.
- Developed key components: ALU, registers, control unit, and memory interface .
- Verified functionality through simulation and testbenches.

I2c Master using Verilog

Aug 2025- Sep 2025

- Implemented a basic I2C master controller
- Covered core operations: start, stop, data transfer, and acknowledgment.
- Verified functionality through simple simulation test cases.

Digital Lock (Hardware Implementation)

May2025-June2025

- Designed and implemented a digital lock system as part of a digital design course.
- Built the circuit using basic digital components (flip-flops, logic gates, counters).
- Verified correct functionality through hardware testing and practical demonstration.

Arithmetic Logic Unit (Hardware Implementation)

Apr 2025-June2025

- Designed and implemented an 8-bit ALU in the Computer Architecture course.
- Built the circuit using basic digital components to perform arithmetic and logic operations
- Tested and verified functionality through hardware prototyping and practical evaluation.

Simple Website (HTML & CSS)

Feb 2025-Mar 2025

- Built a static web page using HTML and CSS.
- Applied basic styling and layout for a clean design.
- Practiced creating a responsive and structured webpage

SKILLS

- **Programming & Tools:** C++, Verilog, VHDL, System Verilog , Java, Html , CSS ,Java Script ,Python ,Google Colab.
- **Interpersonal Skills:** Management, Team leader ,Organization Skills, Problem Solving, Communication, Teamwork.
- **Languages:** English A2, Arabic Native.