# Sameer Khan

# **Electrical Engineer**

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Mansehra ,Kpk pakistan

#### **SUMMARY**

Electrical Engineering student with hands-on experience in digital circuit design and implementation. Developed a water level indicator using Arduino and ultrasonic sensors for accurate monitoring, alongside a 16-bit up and down counter using digital logic design principles. Skilled in programming (C/C++), project management, and documentation. Seeking internship opportunities to apply technical expertise in a dynamic engineering environment.

# **EDUCATION**

# Bachelor in Electrical Engineering

**University of Engineering and Technology Peshawar** 

**GPA** 3.46 / 4.0

#### Intermediate Education

Light Tower Public School and College Mansehra, Kpk **Pakistan** 

GPA 3.6 / 4.0

# **PROJECTS**

#### Calculator Implementation on 8051 Microcontroller

**=** 04/2024 - 06/2024

- Implemented a calculator on 8051 microcontroller using Proteus for simulation and Keil uVision for coding.
- Integrated keypad input and LCD display for user interaction and feedback.
- Implemented arithmetic operations including addition, subtraction, multiplication, and division.
- Managed error conditions such as division by zero and overflow through robust error handling.
- Demonstrated proficiency in embedded systems design, C programming for microcontrollers, and hardware-software integration.

#### 16-Bit Up and Down Counter

**=** 01/2023 - 02/2024

- Designed a 16-bit up and down counter using digital logic design principles.
- Implemented the counter using flip-flops, logic gates, and counters on a breadboard or using simulation software (specify if applicable).
- Programmed the counter behavior in VHDL/Verilog or implemented it using discrete logic components.
- Validated functionality through simulation and hardware testing, ensuring accurate counting in both up and down modes.
- Documented the project including design specifications, circuit diagrams, and test results for comprehensive understanding and future reference.

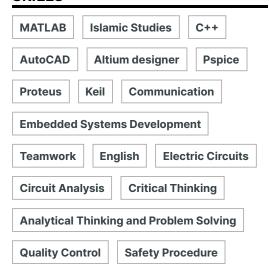
#### Float Level Indicator

**iii** 11/2023 - 01/2024

- Designed and assembled an electronic water level indicator system using Arduino microcontroller.
- Integrated ultrasonic sensors for accurate real-time measurement of water levels in a tank.
- Programmed Arduino in C/C++ to process sensor data and display water levels using LEDs.
- Conducted thorough testing and calibration to ensure reliability and accuracy across various water levels.
- Documented project specifications, circuit diagrams, and test results for future reference and presentation.

#### REFERENCES

#### **SKILLS**



#### **STRENGTHS**



#### **Problem Solving**

Applied analytical problem-solving skills to design and optimize electronic systems, ensuring functionality and efficiency in projects like a water level indicator and a 16bit up/down counter.



# **Project Management**

Successfully planned and executed projects in digital circuit design, including the development of a water level indicator and a 16-bit up/down counter. Demonstrated proficiency in organizing tasks, coordinating team efforts, and meeting project milestones effectively.



#### Innovation

Utilized creative problem-solving to pioneer advancements in digital circuit design, exemplified by projects like a water level indicator and a 16-bit up/down counter.

# LANGUAGES

| <b>English</b><br>Proficient | •••       |  |
|------------------------------|-----------|--|
| <b>Urdu</b><br>Native        | <br>•••   |  |
| <b>Hindko</b><br>Native      | <br>•••   |  |
| <b>Punjabi</b><br>Advanced   |           |  |
| Pashto Intermediate          | <br>• • • |  |