Afkar Ahamed

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PROFILE

As a passionate and highly enthusiastic Electrical & Electronic Engineer, I am excited to use my practical and technical knowledge and strong analytical abilities in an energetic work setting. My background includes collaborative project experiences and a keen ability to manage time and resources effectively. I am excited to join a prestigious organization and apply my love for creative problem-solving and productive cooperation, with the goal of making a major contribution to the company's success and difficult tasks.

TECHNICAL SKILLS AND COMPETENCIES

Programming Languages	C/C++, Python, Java
Hardware Description Languages (HDL)	Verilog, System Verilog, VHDL
Frameworks	Universal Verification Methodology (UVM)
Software Tools	Xilinx Vivado, Quartus II, Matlab, Simulink, Proteus, Multisim
Operating Systems	Windows, MacOS, Unix/Linux based OS, FreeRTOS
Shell Scripting	Proficient in Bash Shell Scripting
Hardware Platforms	DE2_70 FPGA, PIC, ESP32, MSP430, ATMEGA, Raspberry Pi

EDUCATION

Sri Lanka Institute of Information Technology *2020-2023*

Bachelor of Science in Engineering

Specialized in Electrical and Electronic Engineering.

GPA: 3.6/4

Zahira College Colombo 10 *2016-2019*

Completed Secondary Education.
In Physical Science Stream.
Completed Advanced Level with 3 Credit Passes

Apex Business Academy 2023-Present

Chartered Institute of Management Accountants (CIMA)
Foundational Level

INDUSTRIAL EXPERIENCE

ACCELR, Sri Lanka *(2022 Nov– 2023 Jan)*

RTL Verification Engineer Intern *Full-Time*

Worked as a RTL verification engineer trainee at ACCELR (Pvt) Ltd. And I was trained to write testbenches for RTL designs using UVM (Universal Verification Methodology). So, my primary job role at ACCELR was to write testbenches for RTL designs using UVM.

Sanken Constructions (Pvt) Ltd *(2021Nov – 2022 Jan)*

Electrical and Electronic Engineer Intern *Full-Time*

Worked as a trainee at Sanken Constructions Pvt (Ltd) and I was assigned to both Electrical related projects such as conduiting, transformer installing and maintaining, troubleshooting and electronics related projects such as,networking, programming and troubleshooting the Room Control Unit (RCU).

PROJECT EXPERIENCE

A GPU Accelerated Inference Framework to run Deep Learning Algorithms on Raspberry Pi 4.

As a key member of a team developing a GPU-accelerated machine learning inference framework for the Raspberry Pi, I was responsible for designing and implementing high-performance compute kernels in C++. My role involved optimizing these kernels for GPU operations, significantly enhancing the framework's efficiency in machine learning tasks like tensor computations and neural network processes. Additionally, I conducted comprehensive benchmark tests comparing GPU and CPU performance, ensuring optimal effectiveness of our solutions.

Object Detection Helmet for visually impaired persons.

I led a team of 4 designing a Object Detection Helmet for visually impaired persons which got selected for the final rounds in a competition conducted by IEEE students branch of Sri Lanka. My primary contribution in the project was to lead the team and handling sensors and actuators.

Smart Irrigation System.

Designed and implemented an embedded system which was able to control the irrigation, based on water level, and other environmental factors. Thus optimizing the harvest.

Car Park Management System

I created a Java-based parking management system, following the fundamentals of Object-Oriented programming and making use of common libraries. The console application for this project was created with scalability in mind to enable future updates and upgrades.

Temperature Controlled Cooling Fan

I lead a group of 3 in designing and implementing a prototype of temperature controlled cooling fan using PIC16F877A microcontroller. My primary role was to design the architecture for the hardware and to program the microcontroller.

Filter Design

Designed and implemented a Low pass, Band pass, and High pass filter of Butterworth Approximation.

Audio Amplifier

Designed and Developed an Audio amplifier using BJT transistors and FET transistors to obtain a given gain.

CERTIFICATIONS

AZ-900: Microsoft Azure Fundamentals – Reading (2023)

LANGUAGE FLUENCY

Fluent in Sinhala, Tamil and English. (Spoken And Written)

PERSONAL INFORMATION

Date of Birth: 25.10.1998

Gender: Male

Nationality: Sri Lankan Moor

Permanent Address: Shams Villa, Water Board Road Junction, Welihitiya, Dickwella

References available upon request.

I HEREBY CERTIFY THAT THE ABOVE INFORMATION IS TRUE AND ACCURATE AS TO THE BEST OF MY KNOWLEDGE
YOUR SINCERELY,
Afkar Ahamed