PASAN SANJULA PERERA

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EDUCATION

Sri Lanka Institute of Information Technology   *2020 - Present*
Bachelor of Science in Engineering
Specializing in Electrical and Electronic Engineering
Expected Graduation: *March, 2024*

Ananda College, Colombo 10   2011 - 2019
G.C.E Advanced Level Examination
Physical Science (Combined Mathematics, Physics, Chemistry)

TECHNICAL PROJECTS

Autonomous Wall Following Robot   *August 2021 - September 2021*
Our group designed and prototyped an autonomous wall following and obstacle avoidance robot using fuzzy control algorithm on a Microchip PIC microcontroller. I developed the Bare-metal firmware and software stack in C for the project including the control algorithm while using Hardware in the Loop concepts to test and optimize the algorithm.

BJT Audio Amplifier   *August 2021 - September 2021*
Our group designed an audio amplifier using a 2N2222A Bipolar junction transistor. I designed the PCB layout for the circuit using Autodesk Eagle after initial simulations and prototyping using National Instruments Multisim 14.

Car Park Management System   *May 2021*
I designed and developed a car park management system in Java using only standard libraries and following Fundamental Object Oriented design patterns. The program was developed as a console application with the ability to improve over time.

Queue Length Counter   *May 2021*
I designed and simulated a digital circuit using only logic gates to count the occupied slots and to check the availability of slots in a queue where the number of slots is predefined. Used National Instruments Multisim 14 as the simulation environment.

Battle of the Maroons Live Score Application   *November 2017 – March 2018*
Developed a cross platform mobile application along with the team using Angular, Ionic and Firebase in order to provide live updates of 89th Battle of the Maroons cricket encounter. I managed the project as the project coordinator and contributed to the design of the core architecture.

TECHNICAL SKILLS AND COMPETENCIES

Programming Languages	C/C++, Python, Java
Hardware Description Languages	System Verilog
Software Tools	Matlab, Simulink, Proteus, Multisim, Eagle, Vivado
Operating Systems	Linux, Windows, MacOS
Hardware Platforms	MSP430, Microchip PIC