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 (Group) [Ongoing] *August 2021 - October 2021*
Designing and engineering an autonomous wall following and obstacle avoidance robot using fuzzy control algorithm on a Microchip PIC microcontroller. I am developing the Bare-metal firmware and software stack in C for the project including a custom library for PIC16 8-bit microcontroller family and planning to use Hardware in the Loop designing conceps to optimize the algorithm.

BJT Audio Amplifier (Group) [Ongoing] *August 2021 - October 2021*
Designing an audio amplifer using a 2N2222 Bipolar junction transistor. I am responsible for designing and manufacturing a PCB for the project after initial simulations and prototyping.

Car Park Management System *May 2021*
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*
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 are 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	Python, C/C++, Java
Hardware Description Language	System Verilog
Software Tools	Matlab, Simulink, Proteus, Multisim, Vivado
Operating Systems	Linux, Windows, MacOS
Hardware Platforms	MSP430, Microchip PIC