



SESHAN RAJARAMAN

i ABOUT

Industrious undergraduate student that tries his hardest to improve himself in all ways. To find a position where I can learn a lot and contribute as much as possible to the organisation. To choose a location where I may practise my talents and communicate with other team members.

🎓 EDUCATION

B.Tech. Electronics and Communication Engineering Vellore Institute of Technology, Chennai CGPA: 8.48	2018 - present
XII Asian International Private School, Abu Dhabi, UAE Overall: 82.8% PCM: 90%	2017 - 2018
X Asian International Private School, Abu Dhabi, UAE CGPA: 8.4	2015 - 2016

📖 PUBLICATION

Smart Classroom International Journal of Innovative Science and Research Technology (IJISRT) Nov 6, 2020
The Influence of Adolescent Siblings on Family Purchase Decisions Journal of Chengdu University of Technology Sep 5, 2021

🔧 PROJECT

Optisystem based CATV performance enhancement Using Python, Optisystem Jan 2021 – May 2021	This project explains about the use of erbium doped amplifiers in the enhancement of Cable television (CATV).
Railway Track quality Using MATLAB Jul 2020 – Dec 2021	This project displayed the methods through which defects can be detected in a railway track with the help of image processing.

Origami robot Using Python, Arduino IDE Nov 2019 – Mar 2020	The main concept behind this project is that the robot possesses the ability to fold itself with the help of electromagnetic force.
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CONTACT

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LANGUAGE

ENGLISH ●●●●●
Professional working proficiency (C1)
TAMIL ●●●●●
Native or bilingual proficiency
HINDI ●●●●●
Full professional proficiency
GERMAN ●●●●●
Limited working proficiency (A2)

SKILLS

PYTHON Advanced
●●●●●
C/C++ Intermediate
●●●●●
R Programming Intermediate
●●●●●
Java Intermediate
●●●●●
LTSpice Advanced
●●●●●
Keil Intermediate
●●●●●
MATLAB Intermediate
●●●●●
Xylinx Beginner
●●●●●

OTHER SKILLS

Communication ●●●●●
Leadership ●●●●●
Organization ●●●●●
Critical Thinking ●●●●●

TEST SCORES

- IELTS – 7.5
Reading – 7 | Listening – 8.5 |
Speaking – 8 | Writing – 6

EXTRA-CURRICULAR

- Cricket
 - Captain of the school cricket team
 - Member of the college cricket team
- Swimming
- Football
- Basketball

INTERESTS

- Mathematics
- Embedded Systems
- Signal Processing
- Internet of Things (IoT)

POSITIONS

Teaching assistant for the following subjects:

- Digital Signal Processing
- Probability Theory and Random Processes
- Control Systems
- Applied Numerical Methods

Image processing Using MATLAB Aug 2019 – Oct 2019	This project discussed about the different modifications that could be performed on an image.
Smart classroom Using python, Rasp pi Jul 2020 – Dec 2020	The project mainly focuses on projectors with a micro camera attached to a rasp pi such that it records the complete lecture and later upload it in a common platform such as Moodle.
IoT based Self-Checkout Stores using Face monitoring Using Rap pi Jan 2021 – May 2021	The system consists of two parts, the face mask detection and the customer count. Firstly, the mask detection part uses deep learning algorithms like CNN for generating a model that helps detect a mask. Secondly, the PIR sensor detects the entry and exit of customers and helps regulate the count below the threshold.
Wireless forest fire detection system Using Arduino uno Jul 2021 – Dec 2021	The project focuses on the development of a Wireless Sensor Network-based Forest Fire Detection System that comprises basic RF modules for wireless communication and solar energy harvesting system. The system will detect the presence of a fire using temperature, gas and flame sensors and transmit a message to the base station with the help of a Zigbee module, it will also trigger the controller which will enable the process of extinguishing the fire.
Image compression and decompression using LZW coding Using Python Jul 2021 – Dec 2021	The idea of the compression algorithm is the following: As the input data is being processed, a dictionary keeps a correspondence between the longest encountered words and a list of code values. The words are replaced by their corresponding codes and so the input file is compressed. Therefore, the efficiency of the algorithm increases as the number of long, repetitive words in the input data increases.
Holistic HealthCare Using C, ESP32-PICO-D4 microcontroller Jan2021 – June 2021	The main features of this project are detection of sleepwalking, high heart rate, high body temperature and intimation. In an emergency, it must intimate a family member about the patient by making a call. The accelerometer data is used by the microcontroller to calculate the number of steps taken by the user, their body temperature and pulse rate. If the values exceed a particular threshold, then the family member gets notified.
Bluetooth controlled Home automation System Using C, Proteus Nov2019 – Mar 2020	The project consisted of a virtual simulation of the devices which can be controlled by Bluetooth through our phone such as AC, Light etc. All the features had to be done manually and not with the help of a PIR sensor.

SMART TRASHSORT

Using java | Dec 2021 – May 2022

This project was successfully completed during my final year of the Undergraduate program. This project mainly focused on sorting out the trash into 4 different classifications (paper, wood, plastic, other waste). The other waste category mainly includes the covid waste disposal. After sorting of the data, an analysis is performed which gives statistical information about the waste disposed,