

# Aayush Shrestha

## Electronics Engineer, Vellore Institute of Technology, Vellore

Highly organized and hardworking individual looking for a responsible position to apply current skills required to achieve the interpersonal goals of the company.



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## WORK EXPERIENCE

### 1. Student Volunteer

SIAM VIT (MATHSOMANIA)



March 2020-present

## EDUCATION

### Bachelor of Technology(B.Tech)

Vellore Institute of Technology, Vellore

2018-present

Major:

SGPA

Electronics and Communication Engineering (ECE)

9.34

### XII(ISC)

Loyola School, Jamshedpur

2016-2018

Courses:

Percentage:

Pure Science + Computer

86.75%

### X(ICSE)

Loyola School, Jamshedpur

2004-2016

Courses:

Percentage:

Pure Science +Computer

92.2%

## SKILLS

### 1. Software: (proficient) C++, Python, C, Java, MATLAB (familiar)

ROS, Blender, JavaScript, R, SQL

2. Hardware: Keil, Cadence, Verilog, Multisim, PCB Design, Arduino, Proteus, Simulink, Embedded C

3. Tools: Cisco Packet Tracer, Node-RED, IFTTT, Thingspeak, IBM

Watson, Firebase, GoDaddy, Outsystems, Github, Dialogflow

4. Packages: Tensorflow, keras, OpenCV, pygame, streamlit, tkinter, scikit-learn, Numpy, Pandas

## ROLES AND RESPONSIBILITIES:

1. Active Participant in various workshops organized on campus including **Machine Learning Workshop** conducted during ARCS 2018 by Computer Society of VIT.

2. Volunteered in organizing various events in **Riviera**, the biggest cultural fest of VIT.

3. Active participant in several hackathons like **Hack SRM3.0** by SRM University, **GovTechThon 2020** sponsored by IEEE, Oracle and NIC.

4. Active participant in **LOCAL DAY HACKS by MLH**.

## PROJECTS

### 1. Self Stabilizing Platform using Arduino and MPU-6050

The idea behind the project is that many old aged people suffer from tremors. This platform will help them to get a firm grip on objects. It is also used in surgery and camera stabilizing platforms.

### 2. Crystal Tester circuit

Crystals are used in any important electronic components. This circuit is used to test the working of the crystal using a LED.

### 3. Password Based Door Lock System using 8051

Based on providing security using configurable password system to the traditional mechanical door lock systems which are used.

### 4. Home Automation using IOT

Automation of home appliances using our smartphone through WIFI and Blynk.

### 5. Electromyogram Signal Analysis using Matlab

EMG signal analysis is used for detection of any disorder in the muscles. In this project, we pass EMG signals of 3 patients, healthy, myopathic and neuropathic and observe the change in the signals for identifying the disorder.

### 4. 3D Modelling of Sentinel Robot using ROS, Gazebo and Blender

Made our very own levitating sentinel robot with auto regenerating tentacles using ROS and Gazebo simulator. Used Blender for the 3D modelling of the robot to give it a more realistic look.

### 6. Cryptographic algorithms used in the Defence Sector

Detailed comparison between AES and DES and also performing file and image encryption and decryption using the best algorithm obtained.

### 7. Customer Car


An AI based detection web application for ride sharing companies like Uber and Lyft integrated with 3 detections, whatsapp api, login and about us page.


## PUBLICATION


### 1. Experimental Design and Implementation of Fingerprint Based Exam Hall Authentication System with Temperature Sensing and Analysis using Internet Of Things


Presented at International Conference on Interdisciplinary Cyber Physical Systems, organized by ACRS IIT Madras with IEEE conference record number 51508, Paper ID No-13.


ACHIEVEMENTS

 HACK YOUR PORTFOLIO, BY MLH, JAN 2021  
*Won the third overall prize among 302 international participants.*

 TECH TOGETHER SEATTLE, JAN 2021  
*Won the best AI Hack sponsored by AI For Everyone among 285 participants.*

 HOLIDAY HACKS, BY MLH, DEC 2020  
*Won the third overall prize among 495 international participants.*

 WHO WANTS TO BE A HACKIONAIRE, BY MLH, NOVEMBER 2020  
*Won the third overall prize among 244 international participants.*

 SHARKHACKS, BY MLH, DEC 2020  
*Won the best hardware hack among 250 international participants.*




CERTIFICATES

- 1.Completed online VITOL course in **R PROGRAMMING** offered by *VIT University, Vellore.*
- 2.Completed online course in **Linear Circuits: AC Analysis** offered by *Georgia Institute of Technology, USA*
- 3.Completed online course in **Sensor Circuits and Design** offered by *University of Colorado Boulder, USA*
- 4.Completed online course in **Electrodynamics: in Depth solutions for Maxwell’s Equations** by *Korean Advanced Institute of Science and Technology, Korea*

STRENGTHS

Hardworking	Learner	Listener
Team Work	Reliable	Problem Solver

HOBBIES

	ART
	TRAVEL
	MUSIC

INTERESTS

Microcontrollers	Sensors and Wearables
Internet of Things	
Analog Circuits	