

# Tanisha Rakshit

Electronics Undergraduate, Vellore  
Institute of Technology, Vellore

Highly organized, enthusiastic, hardworking individual always eager to learn about new technologies and looking for a responsible position to apply current skills required to achieve the interpersonal goals of the company.



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## EDUCATION

### B.Tech, Electronics and Communication Engineering

Vellore Institute of Technology, Vellore

07/2018 - Present

Current CGPA: 9.06

### 12th Standard , 10th Standard

Delhi Public School, Kolkata

04/2004 - 06/2018

AISSCE - 93.4% , ICSE - 97.6%

## ACADEMIC PROJECTS

### Machine Learning Projects

- Predictive modelling along with data visualization applied on several projects like prediction of winner in match, election winner, forecasting of weather, face mask detection, score prediction, recognition of handwritten digits using scikit-learn.

### Cryptographic algorithms used in the defence sector

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

### 3D Modelling of Sentinel Robot Using ROS

- Made our very own levitating sentinel robot from the movie Matrix with autogenerating tentacles using ROS and Gazebo simulator. Also used Blender app for the 3D modelling of the robot to give it a more realistic view.

### Configurable Password based Door lock System using 8051 Microcontroller

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

### Experimental design of Home Automation using IoT

- Automation of home appliances using our smartphone through Wifi and the Blynk App.

### Self Stabilizing platform Using Arduino, MPU-6050

- This platform will help old aged people to get a firm grip on objects. It is also used in surgery and camera stabilizing platforms.

### Electromyogram Signal Analysis Using MATLAB- For detection of any anomaly in EMG signals

## WORK EXPERIENCE

### Electronics Intern

Tata Steel Private Limited

06/2021 - 07/2021

Jamshedpur ( Work from Home )

#### Achievements/Tasks

- Undergone vocational training on "Improving Electrical Safety at Shop Floor in Coke Ovens" and completed E-Learning modules on PLCs, Induction Motors, Instruments and Control Systems

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## TECHNICAL SKILLS

Electronics, IoT, Microcontrollers, Sensors, PLCs

JAVA, Data Structures, Computer Networks, OOPS, NODE-RED

Data Analysis, Python, Machine Learning, Computer Vision, C++

Neural Networks, Robotics, Cryptography, Control Systems



## ACHIEVEMENTS

Quanta Hacks, Stem For Fem (01/2021 - 01/2021)

Won the second overall with an amazon gift card.

Holiday Hacks by MLH (12/2020 - 12/2020)

Won the third overall and also recognized by VIT as Special Achiever for winning in the hackathon.

IEEE RAS Reboot 2.0 (03/2020 - 03/2020)

Won the best girls team among 120 shortlisted candidates.

Merit AISSCE 2018, Merit Scholarship ICSE 2016, JEE Mains 2018 qualified - among the top 6.5%

Second overall in school in ICSE and Scholar Badge Holder in AISSCE

## ORGANIZATION

SEDS VIT (12/2018 - 07/2021)

Worked as Coordinator and Student Volunteer; Organized hackathons and workshops related to astronomy and robotics.

## PUBLICATIONS AND CERTIFICATION

Comparative Analysis and Implementation of Heart Stroke Prediction using Various Machine Learning Techniques (05/2021 - 07/2021)

Accepted and published by IJERT in Volume 10, Issue 6 ( June 2021 )

Experimental Implementation of Covid'19 Safety Measures in Ride Sharing Cabs using Deep Learning and Internet of Things- Springer (02/2021 - 06/2021)

Detection based web application for safety of passengers in ride-shares

Experimental Design and Implementation of Fingerprint based Exam Hall Authentication system with Temperature sensing and analysis using Internet of Things (06/2020 - 12/2020)

Accepted and presented at IEEE ICPS conducted by ACRS, IIT Madras virtually. DOI: <https://doi.org/10.1109/ICPS51508.2020.00012>

IBM Data Science Course, GOOGLE Crash Course on Python, Data Structures by UC San Diego

Offered by Coursera

## INTERESTS

Data Science

IoT

ML

AI

Music