



**INDIAN INSTITUTE OF INFORMATION TECHNOLOGY, SRI CITY  
CHITTOOR, ANDHRA PRADESH**

## **Kakarla Venkata Seshasai Pavan Teja**

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### **EDUCATION**

B. Tech. (ECE)	2023	Indian Institute of Information Technology, Sri City	<b>8.39 / 10.0</b>
Class XII	2019	Sri Chaitanya College, Hyderabad, Telangana	<b>938 / 1000</b>
Class X	2017	Sri Chaitanya School, Hyderabad, Telangana	<b>9.3 / 10.0</b>

### **PROJECTS**

#### **Academic Thesis Project**

**(Jan 2022 – Present)**

- **Designing Of MIMO Antenna Setup For Radar Applications**
- MIMO antenna setup designing for radar applications
- MIMO antenna is built and simulated it in FEKO simulator for certain frequency.
- Built a single antenna and converted it to MIMO antenna in simulator and found the differences in their characteristics.
- Micro-strip patch with inset feeding method is used to build the antenna and using simulator verified values designing of will be done.

#### **Wine Classification Using Machine Learning Techniques**

**(Aug 2021 – Dec 2021)**

- We classified the wine on the basis of giving features using wine quality dataset.
- The dataset has the fundamental features which are responsible for affecting the quality of the wine.
- Normalization of features is done and trained these features using Logistic Regression, Gaussian SVM, and Neural Network Classifiers.
- Obtained confusion matrices, accuracy, ROC Curves from training the data and Tested the data using above trained models, result is the test accuracy.

#### **Water Quality Prediction**

**(Jan 2021 – May 2021)**

- Using Sensors, data is uploaded to cloud using MQTT protocol through NodeMcu device.
- By using suitable ML algorithms (KNN, DT), data is analyzed to predict quality of water and an app interface for the user to receive measures on how improve water quality.
- Input data is given to ML models through mobile app.
- 30days ahead prediction is done to predict the water quality using trained and tested data.

#### **Small Games built using C++**

**(July 2022)**

- Small games like number prediction; rock, paper, and scissors built using C++.
- Number prediction using C++: prediction a random number generated within range by compiler. Based on the input number given by user, program prints the output on terminal (matched or higher or lower) and also no. of guess user takes to guess is printed on terminal.
- Rock, paper and scissors using C++: random selection among rock or paper or scissors by compiler. User selects among these three and compiler match user and the random selected value, prints either true or false.

## SOFTWARE SKILL SETS

Languages : C, C++, Java, Embedded C  
Operating System : Windows 10, Linux, Mac  
Others : Data Structures and Algorithms, OOPS, HTML, Matlab, Embedded Systems

## ACADEMIC ACHIEVEMENTS AND CO-CURRICULAR ACTIVITIES

- Achieved Hacker Rank C++ Gold Badge
- Certified for Java – Basic Hacker Rank
- Python for beginners from coursera.
- Participation certification for application development (mobile) using android studio by Vortex, NIT Trichy.

## EXTRA CURRICULAR ACTIVITIES & ROLES

Volunteered in National Service Scheme Activities:

- “Run for Unity” celebrated to commemorate the birth anniversary of Sardar Vallabhbhai Patel. **(October 2019)**
- “Blood Donation Camp and Candle Marathon” for Police Commemoration Day. **(October 2019)**
- “5K and 10K marathon” for Fitness Day **(May 2020)**