

## ABOUT ME

A machine learning enthusiast with background in Electronics and Communication. In past I have worked on several automation projects in embedded systems and IoT, I am working to create intelligent solutions with Machine Learning and Data Science.

## ACADEMIC QUALIFICATION

Qualifications	Institute	Year	Result
BTech. in Electronics and Communication	JSS Academy of Technical Education	May 2021	7.0 CGPA
Senior Secondary School Education (CBSE)	Amity International School	May 2016	82 %
High School Education (CBSE)	Amity International School	May 2014	10 CGPA

## EXPERIENCE

- Jan 2020 CyberCure Technologies**  
Trainer  
• I conducted a two days workshop on Embedded system and Robotics at NIT Kozhikode.
- Sept 2019 Arcturus Business Solutions**  
Intern  
**Jan 2020**  
• Led an upgradation of already existing AI based Solution  
• The work was mainly based on Python's PyQt5 framework and SQL  
• Incorporated a statistical dashboard in the software
- Jun 2018 Central Electronics Limited**  
Intern  
**Jul 2018**  
• Worked in Quality Check of System Production Department. Training in the following:  
• Digital Axle Counter • Solar Panels • Microwave Electronics

## SKILLS

**Embedded System:** Arduino • Atmega2560 MCU

**Python:** OpenCV • PyQt5 • Matplotlib • Scipy

**Backend:** Django • Flask

**Data Science:** Numpy • Pandas • Seaborn • Plotly

**Machine Learning:** Scikit Learn

**Deep Learning:** TensorFlow and Keras

**Other:** HTML • PHP • SQL (Beginner)

## KEY PROJECTS

### Chat Bot

An initiative to change the way we perceive automated chat systems. Creating interactive intelligent Chat Bot. Technical Stack used here -

- Python • Flask • Keras • NLTK
- Ajax • Web Socket • Java Script • HTML5

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## Whatsapp Chat Analysis [↗](#)

A detailed chat analysis of a person to measure connections and individual character of the participants, using python Data Science Framework. The following features were analyzed -

- Emojis • Media Sent • Message Delete • Frequently used Words
- Activity pattern through time and days • Choice of Words

## Lane Detection System [↗](#)

An attempt to Identification of lane with image processing algorithms with Python's OpenCv library in a video(Dubai Roads). The algorithm was based on edge detection and color masking techniques.

- The algorithm was successfully able to detect lane of car in initial frames. There were certain limitations.
- To solve this problem, I developed a variable color masking systems which is pending to published.

## Instrument Identification System [↗](#)

Algorithm inputs a monotone sound and outputs onset, note and instrument used to play the sound. This system is made on Python's libraries - Numpy, SciPy and Sklearn. Features of this project are -

- Sound Processing • Identification of Note • Identificaion of Instrument using machine learning(SVM)

## Automatic Flushing System [↗](#)

Designed a flushing system for ill people, with Arduino, ultrasonic sensor and a servo motor.

- The hardware design is very heap and can be deployed in any household facility.
- The MCU code is designed to optimize sanitation, with minimal number of flushes.

## RELEVANT COURSES

**B.Tech** - Digital Signal Processing, Digital Logic Design, Data Structure And Algorithms, Micro Controllers, Discrete Mathematics

**Coursera** - Machine Learning [Stanford University], Applied Machine Learning in Python [University Of Michigan], Data Analysis With Python [IBM], Deep Learning Specialization [deeplearning.ai]

**MIT OpenCourseWare** - 18.06 Linear Algebra [Gilbert Strang]

**Harward OpenCourseWare** - Statistics 110: Probability [Joe Blitzstein]

**UCF CRCV** - Computer Vision [Mubarak Shah]

## POSITION OF RESPONSIBILITY

### Quanta, JSSATE

Creative Head(Feb 2018 - Present)

At Quanta we organize at least two workshops every year. These workshops aim to help students to create electronics

### Entrepreneur Development Cell, JSSATE

Global Business Partner(Dec 2018 - Present)

At EDC we conduct events to encourage student to think of innovative ideas and lead them toward entrepreneurship.

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