



ACADEMICS

| COURSE | INSTITUTION | BOARD | AGGREGATE | YEAR |
|---|---|--------------|-----------|------|
| B. Tech (Electronics & Biomedical Engineering) | Govt. Model Engineering College, Thrikkakara | KTU | 7.8 | 2019 |
| Class XII | GHSS Kadayirippu | Kerala state | 94.17 | 2014 |
| Class X | St John's J.S.H.S Kanniattunirappu | Kerala state | 99 | 2012 |

AREAS OF EXPERTISE

- **Technical Skills:** C++, Proteus, Arduino, Python.
- **Operating Systems known:** Windows, Linux.
- **Areas of Interest:** Hospital engineering, biomedical instrumentation, IOT.

WORK EXPERIENCE

- **Company: O E N India Limited** **Post: Intern** **Duration: 1 week**
 - Gained knowledge of different stages of manufacturing of connectors, familiarized with tool design, and R&D components and with industrial tools.
- **Company: MOSC Medical College Hospital** **Post: Intern** **Duration: 1 week**
 - Familiarized with functioning of biomedical department, duties of biomedical engineer and with prominent equipments used in hospital.
- **Company: Production and Maintenance Division, Edapally** **Post: Intern** **Duration: 10 days**
 - Familiarized with Internet of things and Gained experience in development of project on IOT based smart bulb.

PROJECTS

- **Microproject: An IOT based smart LED Bulb** **Team Size: 4** **Duration: 10 days**
 - Based on the principles of internet of things using a local Web server control switching and dimming of a LED lamp connected to the Arduino Uno. Also after switching off the LED, power consumed by it displayed on web page.
 - **Role: Software**
 - **Technology Used: Arduino, Python, PHP**
- **Design Project: Automatic Intravenous Fluid level Indicator** **Team Size: 4** **Duration: 4 Months**
 - A low cost RF based automatic alerting and indicating device where IR sensor is used as a level sensor. It is based on the principle that the IR sensor output voltage level changes when intravenous fluid level is below certain limit. A comparator is used to continuously compare the IR output with predefined threshold. When the transceiver output is negative then the Arduino controller identifies the fluid level is too low and it alerts the observer by buzzer.
 - **Role: Design documentation**
- **Main Project : An IOT based sleep apnea detection using ECG signal** **Team Size: 4** **Duration: 10 Months**
 - A real time monitoring of sleep apnea using ECG signal acquired with AD8232 ECG sensor. The SVM classification used to classify the apnea and non apnea data based on the features extracted from ECG processing in Raspberry Pi. An alarm indicated in case of apnea detection and an email sent to the doctor. The details of apnea occurrences for each patient displayed in web page. The local server used to control the working of the whole system.
 - **Role: Software**
 - **Technology Used: Arduino, Python, PHP**

EXTRA-CURRICULAR ACTIVITIES

- Attended a lecture on IAS preparations as a part of Tathva'17 conducted by NIT, Calicut.
- Participated in a workshop on python 2D game development as a part of Ritu'18 conducted by RIT kottayam.
- NSS Volunteership of 4 years.

REFERENCES

- Prof. Dr. V P Devassia, Principal, Govt. Model Engineering College, Thrikkakara. Email ID: principal@mec.ac.in.
- Dr Jessy John, HOD, Electronics and Biomedical Engineering, Govt. Model Engineering College, Thrikkakara. Email ID: jessyjohn@mec.ac.in