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github.com/BALAMURALI-404

leetcode.com/u/BalamuraliB//

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# OBJECTIVE

"I'm a mechatronics student passionate about innovation and problem-solving. I love learning, adapting to new challenges, and creating solutions that make a difference."

#### **EDUCATION**

**Kongu Engineering College** 

B.E.Mechatronics Engineering - CGPA: 8.71 (Till 5th Semester)

Vedavalli Vidyalaya Hr.Sec.School

HSC - 83.2%

Vedavalli Vidyalaya Sr.Sec.School

SSLC - 80.6%

Perundurai, Erode

2022 - present

Walajapet, Ranipet

2022

Walajapet, Ranipet

2020

#### **PROJECTS**

#### **Smart Agro Storage Device**

October, 2024

• Developed a smart, portable refrigerator using a Peltier module and DHT11 sensor, enabling efficient temperature regulation for perishable storage. Integrated Adafruit IoT for real-time temperature monitoring and remote control, enhancing user convenience and energy efficiency.

## **AI Based Smart Geyser**

January, 2024

• Implemented the K-Nearest Neighbors (KNN) algorithm to analyze geyser operational patterns from historical usage data, gaining insights into user behavior. Automated geyser functionality based on identified patterns, optimizing energy consumption and ensuring efficient operation.

# **AREAS OF INTEREST**

Internet Of Things

Full Stack Development

#### **SKILLS**

- **PROGRAMMING -** C | C++ | Java | Python
- FRONTEND HTML | CSS | JS
- **DATABASES -** MySQL | MongoDB
- FRAMEWORK ReactJS
- **DEVELOPMENT TOOLS -** GitHub | VS Code

#### SOFTWARE KNOWN

AutoCAD

SolidWorks

• EAGLE (PCB)

LabVIEW

# **INPLANT TRAINING**

NIDCE INDIA PRECISION TOOLS - 4 DAYS - JULY, 2024

#### **CERTIFICATION**

MongoDB Associate Developer - MongoDB (2025)

• Ethical Hacking - NPTEL (2023)

### ADDITIONAL COURSES

Data Visualization Using MATLAB - KEC

• Design Of Printed Circuit Board - KEC

• IOT And Application - KEC

#### PAPERS AND CONFERENCE

- "Smart Home Automation" in Anna University, Coimbatore on November 2023.
- "Loan Prediction Using Machine Learning" in PA Engineering College on April 2024.
- "Performance Analysis Of Noise Reduction In a Capacitive MEMS Accelerometer" in IIT, Mandi on June 2024.

#### LEADERSHIP EXPERIENCE

- IEEE Robotics And Automation Society Executive Head
- Active Member Of National Service Scheme

#### **LANGUAGES KNOWN**

• TAMIL • ENGLISH