

# DHANUSRI J

Electrical & Electronics Engineering Student

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## CAREER OBJECTIVE

Enthusiastic Electrical & Electronics Engineering student seeking a challenging role to apply electronics knowledge in circuits, sensors, and embedded systems, while gaining hands-on industry experience. Committed to developing problem-solving skills and contributing effectively to team projects. Keen to work in a professional environment that fosters innovation and continuous learning

## EDUCATION

### Bachelor of Electrical and Electronics Engineering

Government college of Engineering, Salem-636011

CGPA-8.88(Up to V th sem)

Septemper2023 – July 2027

### Higher Secondary Education

P.K.P swamy matric higher secondary school, Erode

Percentage-93.66

April2023

## INTERSHIP

### EV Fundamentals – TMS Motor, Namakkal

Awarded a free internship on EV fundamentals at TMS Motor, Namakkal, as a prize for winning the Naan Mudhalvan Hackathon. Gained hands-on exposure to EV electrical connections, motor-controller integration, and basic mechanical arrangement. Learned the construction and working principles of electric vehicles with focus on electronics systems.

## PROJECT

### 1.Artificial Pancreas (Electronic Prototype)

Developed an electronics-based artificial pancreas prototype using conductivity sensing to represent glucose-insulin levels. Saltwater was modeled as insulin and normal water as blood, with sensors detecting concentration imbalance. A microcontroller-controlled pumping mechanism automatically transfers insulin to maintain the required level, demonstrating closed-loop control systems.

### 2. PCM-Based Battery Management System

Designed a battery thermal management system using Phase Change Material (PCL) integrated with temperature sensors. Electronic sensing continuously monitors battery temperature and activates passive cooling without external power switching. The system improves battery safety and performance through real-time thermal regulation.

### 3. Solar Power EV Charging System Using MATLAB

Modeled and simulated a solar-powered EV charging system using MATLAB. Designed power electronics blocks for solar energy conversion, regulation, and battery charging analysis. The system evaluates charging efficiency and energy management under varying solar conditions.

## TECHNOLOGIES

Languages:

- C
- C++
- Phyton

Software:

- MATLAB Simulink
- Autodesk fusion 360
- Wokwi
- MIT App inventor
- MS offcie

## ACHIEVEMENTS

- Winner, State-Level Naan Mudhalvan Hackathon (EV Fundamentals): Designed MATLAB circuit for solar-powered EV charging system.
- Runner, State-Level Naan Mudhalvan Hackathon: Designed and developed a general-purpose PCB.

## CERTIFICATES

- Basics of c++,Phyton