

CREST

FINAL YEAR PROJECT • B.TECH ELECTRICAL ENGINEERING

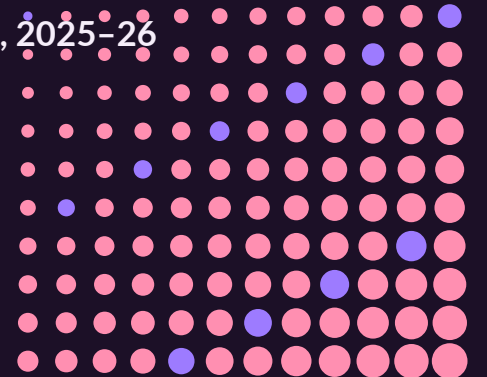
Solar Power Monitoring Dashboard

Live generation tracking for rooftop solar

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DEPARTMENT
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Agenda

01

Introduction

02

Literature & Gap

03

Proposed System

04

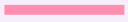
Implementation

05

Results

06

Conclusion



**Solar plant monitoring is still
handled manually in most places —
slow, error-prone and hard to track.**

Why this project matters

Problem statement

01

Manual work

Solar plant monitoring takes hours of repetitive effort.

02

Errors

Mistakes creep in and are hard to trace.

03

No insight

Homeowners and installers lack data to make decisions.

Literature survey

Study	Approach	Limitation
Study A	Rule-based automation	Not adaptive
Study B	Mobile data collection	No analytics
Commercial tools	Full-featured suites	Costly and complex

Representative summaries — replace with your own citations.

System architecture



Input

Data captured from users or sensors



Process

Core logic validates and analyses



Store

Secure database and backups



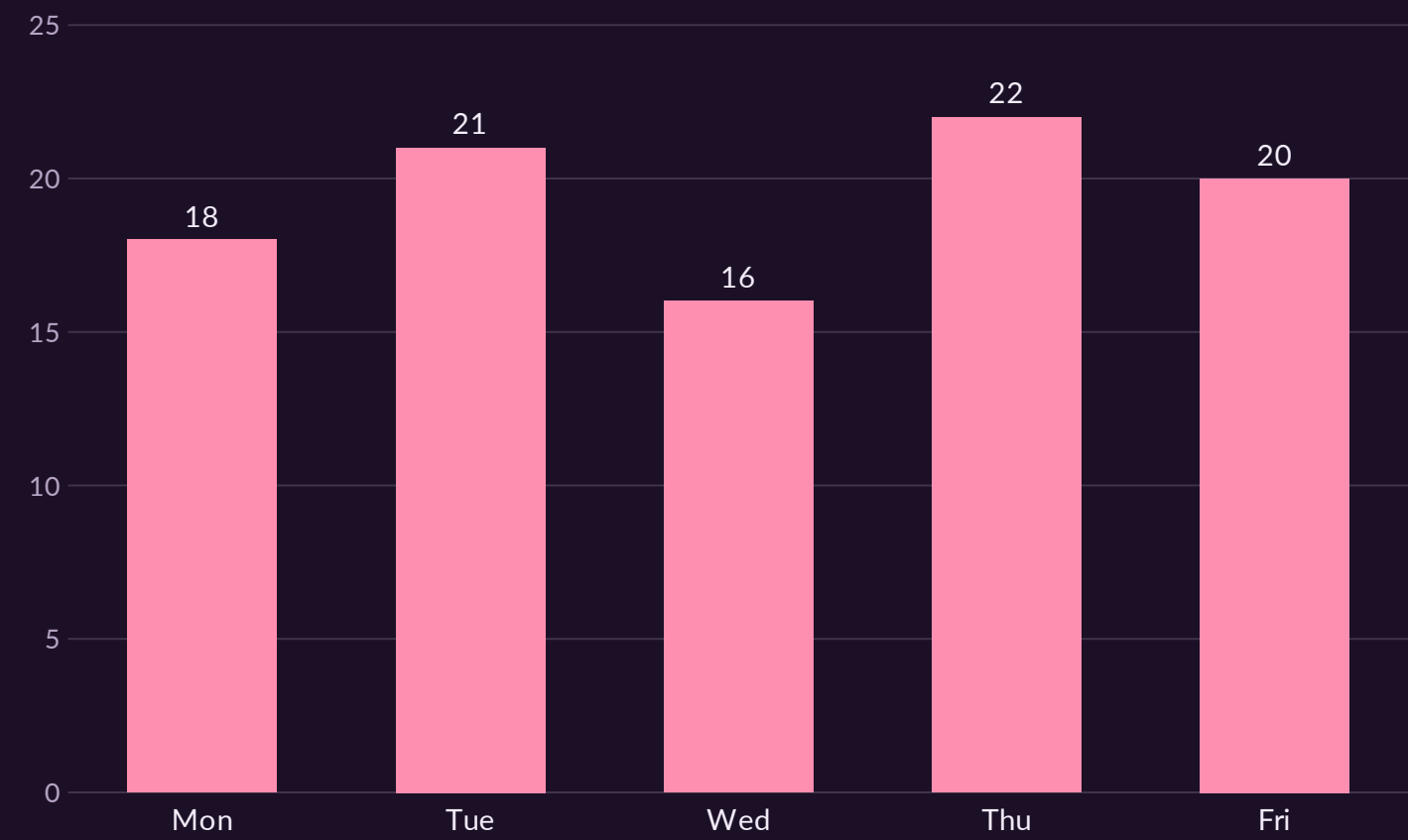
Output

Dashboard, alerts and reports

Project timeline



Results



Sample data for illustration — replace with your own figures.

12%

more yield after fault alerts

The prototype improved steadily over the evaluation period (sample data).

Conclusion

- Solar Power Monitoring Dashboard meets its main objectives
- Automation saves time and reduces errors for homeowners and installers
- The design is simple to extend and maintain

Future scope

01

Mobile app

Native apps for Android and iOS

02

AI insights

Predictions from historical data

03

Scale-up

Deploy across more sites

Thank you

Questions and suggestions are welcome.