Smart Charging App for EV

A PROJECT REPORT

Submitted by,

Mr. VENKAT B M - 20211CSE0430

Mr. ARUNKUMAR H GURAV - 20211CSE0406

Mr. NAGENDRA B S - 20211CSE0435

Mr. KUSHAL C S - 20211CSE0422

Under the guidance of,

Ms. Dornadhula Dhanya

Assistant Professor

School of Computer Science,

Presidency University, Bengaluru

in partial fulfillment for the award of the degree of

BACHELOR OF TECHNOLOGY

IN

COMPUTER SCIENCE AND ENGINEERING

At

GAIN MORE KNOWLEDGE
REACH GREATER HEIGHTS

PRESIDENCY UNIVERSITY

BENGALURU

JANUARY 2025

PRESIDENCY UNIVERSITY

SCHOOL OF COMPUTER SCIENCE AND ENGINEERING

CERTIFICATE

This is to certify that the Project report **"Smart Charging App for EV"** being submitted by "VENKAT B M, ARUNKUMAR H GURAV, NAGENDRA B S, KUSHAL C S" bearing roll number(s) "20211CSE0430, 20211CSE0406, 20211CSE0435, 20211CSE0422 " in partial fulfillment of the requirement for the award of the degree of Bachelor of Technology in Computer Science and Engineering is a bonafide work carried out under my supervision.

Ms. Dornadhula Dhanya
Assistant Professor
School of CSE
Presidency University

Dr . Asif Mohammed H.B
Associate Professor & HoD
School of CSE
Presidency University

Dr. L. SHAKKEERA
Associate Dean
School of CSE and IS
Presidency University

Dr. MYDHILI NAIR
Associate Dean
School of CSE and IS
Presidency University

Dr. SAMEERUDDIN KHAN
Pro-Vc SOE, SOCSE, SOIS
Dean -School of CSE&IS
Presidency University

PRESIDENCY UNIVERSITY

SCHOOL OF COMPUTER SCIENCE AND ENGINEERING

DECLARATION

We hereby declare that the work, which is being presented in the project report entitled **Smart Charging App for EV** in partial fulfillment for the award of Degree of **Bachelor of Technology** in **Computer Science and Engineering**, is a record of our own investigations carried under the guidance of **Ms. Dhanya Dornadhula, Assistant Professor, School of Computer Science and Engineering, Presidency University, Bengaluru.**

We have not submitted the matter presented in this report anywhere for the award of any other Degree.

Name	Roll No	Signature
Venkat B M	20211CSE0430	Venkat BM
Arunkumar H Gurav	20211CSE0406	
Nagendra B S	20211CSE0435	Nagendra
Kushal C S	20211CSE0422	

ABSTRACT

The widespread adoption of electric vehicles (EVs) is driving the need for innovative solutions to optimize charging infrastructure, and the "Smart Charging App for EVs" is designed to transform the charging experience by leveraging technologies like artificial intelligence (AI), blockchain, and dynamic pricing models. This app addresses key challenges faced by EV users, such as locating charging stations, reducing wait times, and ensuring secure transactions, by offering an intuitive interface, AI-powered predictive analytics for recommending optimal charging times and locations, blockchain-based secure and transparent payments, and dynamic pricing to manage demand and maximize station efficiency. Real-time updates, slot booking, and personalized notifications enhance user convenience, while the systematic approach to design, development, and deployment ensures improved accessibility, optimized station utilization, and secure payments. By reducing downtime and enabling better charging planning through AI insights, the app supports a sustainable energy ecosystem and provides a scalable, user-centric solution for the growing EV market, fostering adoption and contributing to global sustainability efforts.