

ST. CLAIR COLLEGE

RESEARCH AND INNOVATION

AT A GLANCE

2 Researchers. 2 Student Researchers design of solar-powered charging solution. Focus on green energy sources and solutions.

Mobile Solar EV Charger

Project Overview

This initiative, supported by partner Funding, involves St. Clair College and industry leaders collaborating to support EV charging research. The project aims to create a flexible, mobile solution for EV charging that leverages solar energy, aligning with automobility ecosystem advancements.

Purpose and Objectives

The purpose of the project was to develop a mobile solar-powered charging system for electric vehicles (EVs) and other electrical devices, promoting the use of green energy sources.

Company Information

St. Clair College, is at the forefront of educational and research technology, often partnering with industry leaders to further push limits of electrical and structural design. Partnering with industry leaders has allowed the colleges to expand its reach and offer student researchers opportunities for a hands-on experience.

Approach

- Standards Evaluation
- Electrical Components
- List CAD and Structural Design
- Project Coordination

Deliverables

- **Mobile Charging System:** A solar-powered charging solution designed for EVs and electrical devices, emphasizing mobility and green energy use.
- **Electrical and Structural Design:** A comprehensive design including a wiring diagram, parts list, and CAD files for the structural components using industry leaders aluminum mounting system.
- **Bill of Materials:** Completion of the design phase led to the creation of a detailed bill of materials, setting the stage for the procurement of necessary components.
- **Next Steps:** The upcoming phase involves purchasing electrical and structural components, assembling the system, and conducting configuration and testing to ensure efficiency and functionality.

