IJARSCT
ISSN (Online) 2581-9429
International Journal of Advanced Research in Science, Communication and Technology (IJARSCT)
International Open-Access, Double-Blind, Peer-Reviewed, Refereed, Multidisciplinary Online Journal
Impact Factor: 7.53
Volume 4, Issue 4, June 2024

IoT Based Solar Panel Cleaning System

Deeraj. C[1], Annu Sharma[2], Divya K[3]
Department of Master of Computer Applications[1,2]
Raja Rajeswari College of Engineering, Bengaluru, Karnataka, India
mailto: deerajsimha@gmail.com, annumca01@gmail.com and mailto: divya.k.gowda115@gmail.com

Abstract: *Utilizing photovoltaic (PV) or compressed solar panels (CSP), solar energy converts solar radiation directly into electrical energy. Clean, green power is the most plentiful energy source on the planet. Solar energy is the power source of the future since it is renewable. These days, it is widely acknowledged worldwide. increase the energy that can be generated by sunshine. Dust accumulation on solar panels and air pollution, which lowers the energy production of solar cells by around 25% to 40% in various regions of the world, particularly tropical countries like India, are two significant barriers to achieving this aim. Given that the Indian government has set an ambitious target of building 40GW of solar power, it is also our responsibility to support this aim.*

.The Indian government has set an ambitious target to develop 175GW of renewable energy capacity over the next five years, which includes grid-connected rooftop solar photovoltaic installations by 2022. This research proposal focuses on the use of Internet of Things (IoT) technologies to construct a smart solar panel cleaning system. The total efficiency of solar PV panels is enhanced by its capacity to detect dust, conduct advanced analysis, and maintain system management.

Keywords: Utilizing photovoltaic