|  |  |  |  |
| --- | --- | --- | --- |
| **Title:** | IoT Based Power Monitoring of Solar Panel Incorporating Tracking System | | |
| **Author(s) Name:** | Md. Masud Ali Shah, Md. Shahariar Parvez, Abir Ahmed and Md.Rifat Hazari | | |
| **Contact Email(s):** | rifat@aiub.edu | | |
| **Published Conference Name:** | 2021 International Conference on Automation, Control and Mechatronics for Industry4.0 (ACMI) | | |
| **Type of Publication:** | International Conference | | |
| **Volume:** |  | Issue |  |
| **Publisher:** | IEEE | | |
| **Publication Date:** | Sept. 8, 2021 | | |
| **ISSN:** |  | | |
| **DOI:** | https://ieeexplore.ieee.org/document/9528207 | | |
| **URL:** | https://doi.org/10.1109/ACMI53878.2021.9528207 | | |
| **Other Related Info.:** | Pages 1-4 | | |
|  | | | |

|  |  |
| --- | --- |
| **Abstract:** |  |
| Solar power added a significant value in energy harvesting in developing country like Bangladesh. People use solar power for homemade electrical appliances, vehicles, satellites and industries etc. The sun position and dust may affect the output of solar panel. Therefore, this paper designed an internet of thing (IoT) based smart system which can rotate the panel to enable tracking characteristics, cleaning and monitoring of the output. The overall IoT system is employed Arduino Uno, Wi-fi module and mobile phone to get necessary information in the application. Designed system has been verified through both simulation and hardware analysis to validate the work. | |