# IMPLEMENTATION OF IOT BASED MONITORING AND CONTROLLING SOLAR SYSTEM

M Tech Dissertation Submitted in partial fulfillment of the requirements for the degree of

## **MASTERS OF TECHNOLOGY**

in VLSI Design And Embedded System

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#### PARUL UNIVERSITY, FACULTY OF ENGINEERING AND TECHNOLOGY Electronics and Communication Department M.Tech (Branch: VLSI Design and Embedded System)

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### ABSTRACT

The The Internet of Things now a day one of the most popular being research topic so, based on our system sensing, controlling or monitoring wirelessly to the available on the network. With help of IoT creating connectivity computer operated system. Our system uses the Message Queuing Telemetry Transport protocol. This network working based on publishes and subscribe method. These publish and subscribe in between available broker. Broker is a work as server in this network method. In our system display online uses of power, voltage, current, temperature, weather condition, tracking sun light and dust cleaning with help of wipers. All this monitoring and controlling is done through ATmega328 controller, ModBus to TTL convertor, ESP8266, etc. in this system monitor the analysis of the daily bases of data & control solar wipers and sunlight toward movement of solar panel.