

**PROTECTION OF VOLTAGE AND CURRENT USING  
IOT**

A project report submitted in partial fulfillment of the  
requirements For the award of the degree of

**BACHELOR OF TECHNOLOGY  
IN  
ELECTRICAL & ELECTRONICS ENGINEERING**

Submitted by

**K RAM PRASAD  
(16811A0204)**

**P MOHANA PRIYA  
(16811A0208)**

**G LAZAR  
(17815A0205)**

**G L VINOJ KUMAR  
(17815A0206)**

**K REVATHI  
(17815A0210)**

Under the Esteemed Guidance of

**Mr. K NARAYANA RAO**

**Assistant Professor**



**DEPARTMENT OF ELECTRICAL AND ELECTRONICS  
ENGINEERING**

**AVANTHI INSTITUTE OF ENGINEERING AND TECHNOLOGY**  
(Permanently Affiliated to Jawaharlal Nehru Technological University, Kakinada, AP)  
(An NAAC Accredited Institution)

Tamaram, Narsipatnam, Visakhapatnam-531113

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**DEPARTMENT OF  
ELECTRICAL AND ELECTRONICS ENGINEERING**



**CERTIFICATE**

This is certify that the project report entitled "PROTECTION OF VOLTAGE AND CURRENT USING IOT" is a bonafide work submitted by

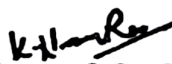
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**JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY,  
KAKINADA**

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**Internal Guide**  
**Mr. K NARAYANA RAO**  
Assistant Professor  
Dept. of Electrical & Electronics Engg.  
AIET, Narsipatnam.

  
**Dr. T Srinivasa Rao**  
**Head of the Department**  
Dept. of Electrical & Electronics Engg.  
Avanthi Institute of Engg. & Tech.  
Narsipatnam.

## ABSTRACT

This paper proposes a power-system protection device designed to be integrated in smart environments based on Internet-of-Things technologies. The proposed system enhances electrical safety by fast disconnection of the power supply in case of fault events like leakage current, electrical arc, over current or overvoltage and has been designed with the goal to be integrated in smart environments like smart homes or smart cities for protecting the electrical equipment. The system also enables real-time monitoring and notification events through an advanced communication interface using a data concentrator architecture. This paper provides an extended description of the proposed system's design and implementation, as well as the experimental validation results