

# **Transformer Health Monitoring System**

**Aditya Shinde, Prasad Kale, Rajesh Karre, Gaurav Jadhav, Shivam Mandlik**

Department of Electrical Engineering  
Matoshri Aasarabai Polytechnic College, Nashik, India

**Abstract:** *This research presents an IoT-based system designed for real-time monitoring of transformer health, leveraging the Blynk application. The system integrates various sensors to track essential parameters such as temperature and oil levels, transmitting the data to an IoT platform for continuous analysis. By detecting abnormalities early, the system helps prevent transformer failures. The inclusion of the Blynk app allows instant notifications, ensuring timely responses from maintenance teams. This approach enhances efficiency, reduces downtime, and lowers maintenance costs, making it a viable solution for reliable transformer monitoring.*

**Keywords:** IoT, Transformer Monitoring, ESP32, Blynk, Sensors, Real-Time Data, Fault Detection