

# **GPS Tracker Using Arduino**

**Shruti Singh**

Student, Diploma in Computer Engineering

Vishweshwarayya Institute of Engineering and Technology, Almala, Maharashtra, India

**Abstract:** *The advancement of embedded systems and Internet of Things (IoT) technologies has significantly improved real-time monitoring and tracking systems. This paper presents the design and implementation of a GPS tracker using Arduino, aimed at providing accurate location tracking with minimal cost and complexity. The system integrates a GPS module to acquire geographic coordinates and a communication module (GSM/Wi-Fi) to transmit the data to users. The proposed system is efficient, portable, and highly scalable for various applications such as vehicle tracking, personal safety, and smart agriculture. The project demonstrates how low-cost hardware and open-source platforms can be used to build reliable tracking solutions, making it suitable for both urban and rural deployments.*

**Keywords:** Arduino, GPS Tracker, IoT, Embedded System, Real-Time Tracking, GSM Module, Location Monitoring

