ISS Tracker Hardware DIY Guide

Materials Needed

- Arduino Uno or Nano

- GPS Module (NEO-6M)

- OLED Display (0.96" I2C)

- RTC Module (DS3231)

- Jumper Wires

- Breadboard

- Buzzer/LED (optional)

- ESP8266 (for live TLE data)

Instructions

1. Connect GPS, OLED, RTC modules to Arduino as per wiring diagram.

2. Upload code to track ISS position.

3. Calculate user vs ISS distance; trigger alert if <500 km.

4. Optional: Use Wi-Fi to fetch real-time orbital data.