**An iot smart home system based on Python+Arduino**

**1) Project introduction**

With Arduino UNO controller as the core, this system realizes data acquisition of temperature and humidity sensors, light sensors and ultrasonic sensors by the processor through Python language, and displays the collected data on the LCD screen. According to the collected data analysis results, external function modules (LED lights, DC motors, steering gear, buzzer, etc.) are controlled. Implement basic smart home functions.

**2) The project uses technology**

（1）Arduino microcontroller technology

（2）Sensor technology

（3）RS232 communication technology

（4）Python programming technology

（5） IIC bus technology