

Smart Office Automation Using ESP32

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Abstract: *Leveraging Internet of Things (IoT) devices is crucial for enhancing office security and automation in today's connected world. Controlling multiple office appliances individually can be challenging for office owners. To address this, IoT technology can be utilized for office appliance automation, enabling control of appliances through the internet using a user-friendly application.*

A proposed smart office system uses ESP32 and ESP32-CAM modules, integrating motion detection, lighting, fan, window, and electrical component control via mobile and wireless communication. This creates an efficient and cost-effective solution. The Wi-Fi module receives user commands over the internet, which are processed by the ESP32 microcontroller, switching loads through relays. The system also updates the switch status on mobile devices when changed physically..

Keywords: ESP32, ESP32-CAM, IoT, Arduino IDE, SOAS

