

## ARDUINO BASED HOME AUTOMATION USING BLUETOOTH ANDROID SMARTPHONE

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## ABSTRACT

The world is moving faster towards automation. Home automation isn't more an idea rather it's grown to be a necessity. Just imagine, to regulate everything around your home with one click of your phone is nothing but fascinating. This paper has presented an approach for smart home automation using Arduino with Bluetooth module. The aim was to develop and design a Home automation using Arduino with Bluetooth module with Android application. The Bluetooth module based Home Automation will enable the user to use a Home Automation System via Bluetooth using their android smartphones. The trendy homes are automated through Bluetooth and therefore the home appliances are controlled. Home appliances such as LED lights, Bulbs, Fans, Refrigerator, etc. can be controlled using Arduino UNO with the help of Bluetooth module. The paper's main aim was to make a smart home control system which monitors and controls the appliances and devices, so as to provide a smart home which would be secure, easy to access and energy & cost efficient. Android phones are used to provide an interface between the smart home and the user which can be used for monitoring the system too.

KEYWORDS: Arduino, Home Automation, Bluetooth, Smart Phone, Security