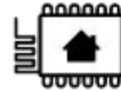


**Home Assistant**



ESPHome

# stove.mines.edu

- esp8266 & a relay module
- Custom firmware
  - ~200 lines of C
- Communication: send a correctly formatted struct in a TCP packet
- Integrations: Cron on my machine made coffee each morning

Not my picture ~~>



# ESPHome makes this easier

200 lines of C becomes a few lines of YAML:

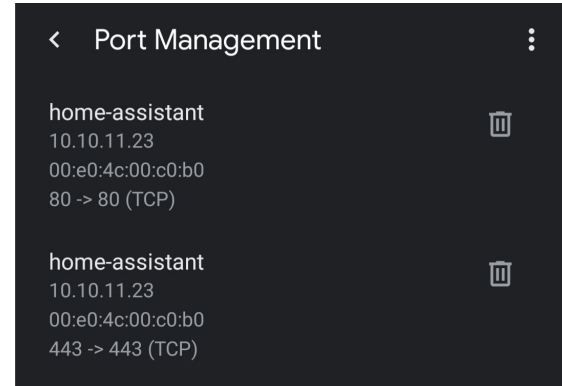
```
switch:  
  - platform: gpio  
    pin: 15  
    name: Stove
```

(along with a couple of more lines generated by the setup wizard for things like WiFi password, which board you're using, etc).

Integrations: Home Assistant (coming up)

# Home Assistant

- Self-hosted, open source
  - Deployment: Docker or HAOS
- Acts as the "hub" for all your home automations
  - Includes supports for scripts, routines, "if this then that" sort of stuff.
- Mobile apps
  - Also used for Home/Away detection
  - Supports NFC tags
- Likely compatible with many "smart things" you already have
  - Nest speakers & chromecast
  - More with add-ons & integrations
- Access from anywhere: port forward or Home Assistant Cloud (\$5/mo)



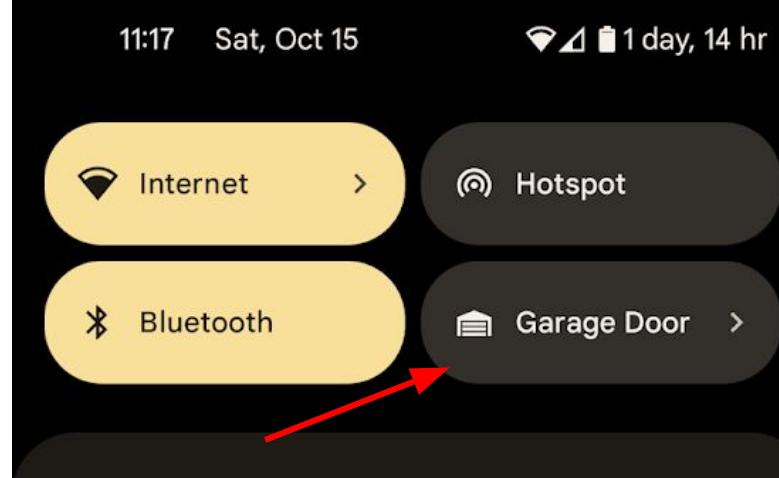
# IoT Garage Door

output:

- platform: gpio
- pin: GPIO15
- id: output\_gpio

button:

- platform: output
- name: "Garage Door Button"
- output: output\_gpio
- duration: 1000ms



# ESPHome is limitless

Scroll thru this page: <https://esphome.io/index.html>