



Home Assistant: The Technology My Family Can't Live Without

Home Assistant Conference - December 13th, 2020
By Marlon Buchanan



What I'll Cover Today

- Background
 - Me
 - My family's Home Assistant use
- A "Day In The Life" of my family using Home Assistant
 - My key Home Assistant integrations
 - My key Home Assistant automations
 - What parts of Home Assistant my family uses the most



Background





A Little Bit About Me

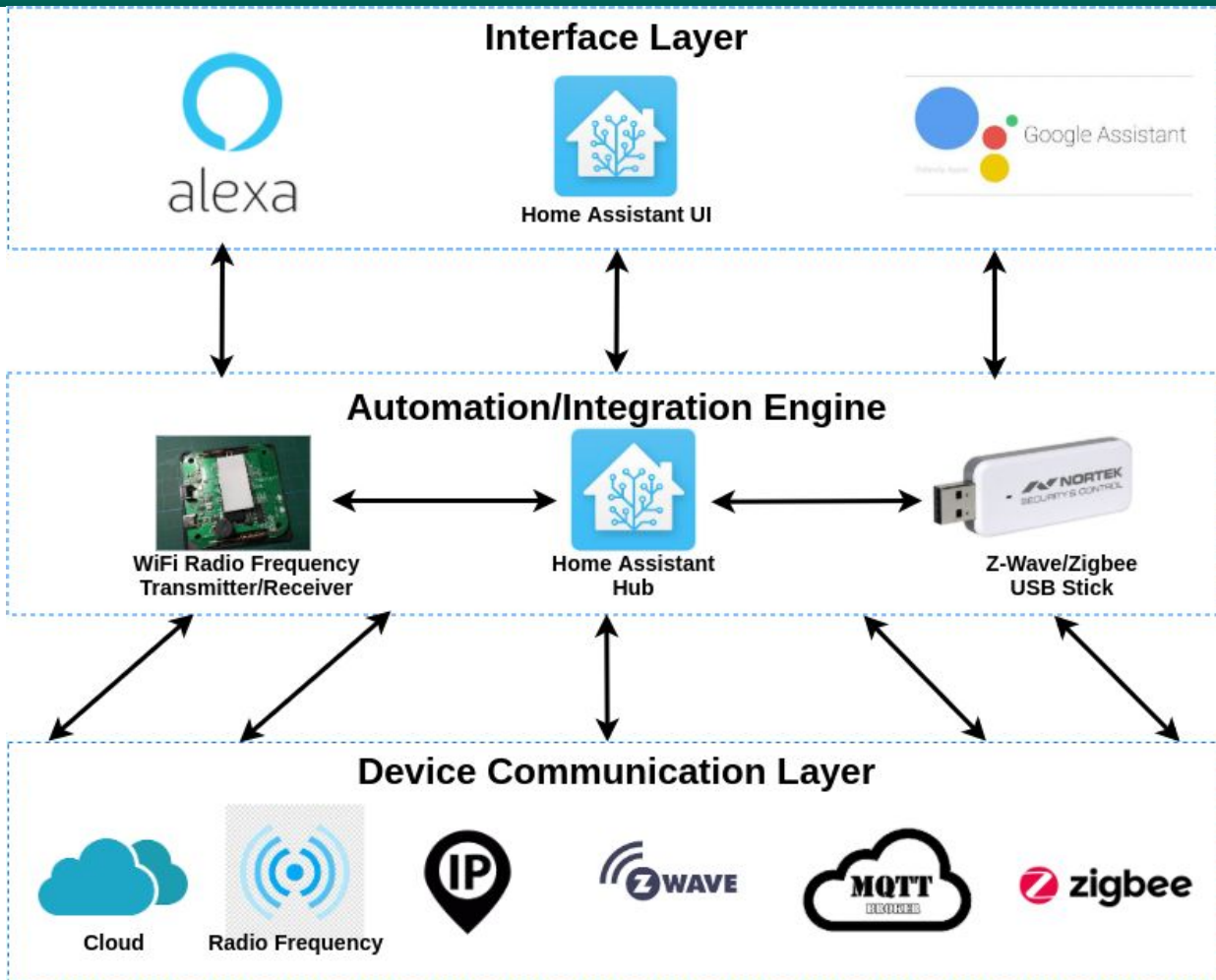


- Day job: IT Director at University of Washington's Continuum College
- Side Gigs:
 - Run [HomeTechHacker.com](https://www.hometechhacker.com) blog
 - Author of [The Smart Home Manual](#)
- Software development background, but no longer code professionally
- I've been dabbling in smart home technology for 15 years



Our Home Assistant Powered Smart Home

- Been using Home Assistant for 2 years
- Over 100 smart devices in the house (switches, bulbs, plugs, voice assistants, sensors, LED controllers, etc.)
- Home Assistant Core runs in a Python virtual environment on an Ubuntu VM
- 4 Users (my wife and my two sons, ages 10 and 13).





Things I Control/Monitor Via Home Assistant

- Lights (Z-wave, IP, Zigbee, MQTT)
- Ceiling Fans (Zigbee)
- Deadbolts (Z-wave)
- Garage Doors (MQTT+Z-Wave)
- Thermostats (IP + Cloud)
- Occupancy (Z-wave, MQTT)
- Sensors (temp, humidity, light, etc. - MQTT, Z-wave)
- Irrigation (IP + MQTT)
- Home Entertainment (Roku, TVs, Stereo Receivers, etc. - IP)
- Alarm System (Cloud)
- Robot Vacuum (Cloud)
- Home Energy Usage (Z-wave)
- Google Home (IP + TTS)



A Day In The Life...





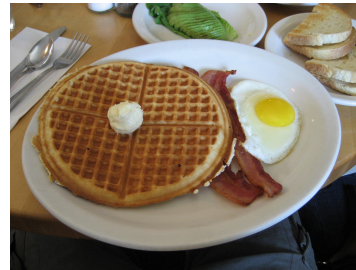
In the morning



- 3:30 AM - No rain forecast for today or tomorrow. Turn the sprinklers on
- 5:00 AM - Christmas lights and decorative LEDs turn on
 - Different days have different themes (Easter, 4th of July, Sport teams)
- 5:30 AM - How cold did it get overnight? Turn on hydronic heating to get us to 72 F
- 6:15 AM - Still not warm enough? Turn on Heat Pump to heat more quickly.
- 6:30 AM - Kids want to watch TV. “Hey Google, Turn on Family Room TV”



In the morning continued...



- 7:00 AM - The hydronic system turns off because the house is warm enough, which automatically turns off the heat pump
- 7:30 AM - Sunrise! The outdoor lights and LEDs automatically turn off
- 7:57 AM - A Google Home announces it's time for to start a school morning Zoom session
 - The TV turns off. The A/V receiver turns off. Power to the subwoofer turns off
- 10:30 AM - Son wants to go outside to play. He says, "Hey Google, open the garage door."
- 10:40 AM - I get an alert that the garage door has been left open



In the afternoon



- 12:00 PM - It's time for the kid's lunch break. They also want to play Nintendo switch in the basement. "Hey Google, turn on Nintendo." The receiver turns on to the right input, the projector powers up, and the lights turn on dim in the basement because it's dark!
- 1:00 PM - I get an alert that the generator is running. No need for alarm, it's just the weekly test run.
- 3:00 PM - One of the kids go out to back door to play outside, but leaves the door open. I get an alert to close the back door.



In the evening



- 5:00 PM - Outdoor lights, christmas lights and decorative LEDs turn on at sunset
- 6:00 PM - After dinner, the family gets together to watch TV. I ask Google to turn on the TV. To make it cozy, I also ask Google to turn on the fireplace
- 7:30 PM - Google tells the family, “Time to turn the fireplace off. It’s too hot.” The temperature in the room is above the threshold and Google automatically turns the fireplace off.
- 9:00 PM - Lights in the family room flash telling the kids it’s time for bed. Their mobile devices lock for the night and their bedroom LED night lights turn on.



In the evening continued...



- 9:30 PM - Time to head upstairs for bed. We press a button that arms the alarm, turning off all the lights on the main floor, turns on lights that light a path going upstairs, and locks the doors. And it announces all of this while saying good night via a Google Home speaker.
- 10:30 PM - The deadbolt doors automatically lock. Just in case we forgot to lock them or arm the alarm.
- 11:00 PM - The holiday lights and themed LEDs turn off.
- 11:30 PM - The robot vacuum runs starts cleaning the main floor as we sleep.



Short Demos



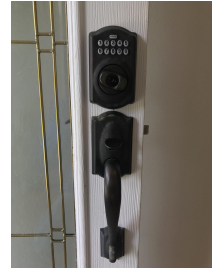


Key Automations For My Family: Security





Home Security



- Alarm system (Alarm.com) integrated with Home Assistant and other motion sensors
- Alarm triggers lights and warning from Google Home
- Smart deadbolts
 - Doors lock when alarm is armed and automatically at 10:30 PM
 - Alerts that tell me when a door is unlocked using a code
- Security light automations when in vacation mode
 - Automatically turns off with presence
- Panic buttons strategically placed throughout the house (outdoor panic light)
- Door, garage door, and generator notifications



Key Automations For My Family: Entertainment





Home Entertainment

- A/V Receivers, subwoofers, and TVs controlled by Home Assistant
 - Can turn them all on, control volume, and put them on the right inputs
- WLED powered LED lights controlled via Home Assistant





Key Automations For My Family: Comfort and Convenience





Comfort and Convenience

- Robot Vacuum automation
- Integration of temperature sensors and 2 HVAC systems
- Fireplace automation
- Almost all light switches are smart switches, motion activated, and/or on timers
 - Flexibility with light control
- Most equipment controllable by voice
- Power monitoring
- Irrigation control





Thank You!





For More Information

- I have articles with details and how-tos about my automations, integrations, and Home Assistant at my blog:
 - <https://HomeTechHacker.com/>
- You can find me at:
 - Twitter: [@HomeTechHacker](https://twitter.com/HomeTechHacker)
 - Facebook: <https://facebook.com/HomeTechHacker>
- You can find my book, *The Smart Home Manual* on Amazon and:
 - <https://TheSmartHomeManual.com>