

The Best Home Automation Ideas on the Web

 24-7-home-security.com/the-best-home-automation-ideas-on-the-web/

Smart home (or home automation) technology has been around in a serious way since the 90's, but it was generally reserved for those with big budgets or for the really geeky types who live technology. But, in the last several years, home automation hardware, standards, and more importantly, software, has gotten more and more mainstream.

Now, anyone can buy a hub and start small adding sensors and controls to their home for under \$100. More importantly, you (usually) don't need to be a tech wizard or a programmer to make it happen.

With that in mind, we set out to scour the web for the best home automation ideas that we could find and pull them into one location as a resource in case you are interested in automating some of the more tedious aspects of your daily routine.

For each idea, we've rated the usefulness and difficulty of implementing the idea on a 5 point scale. If your brain works better in story mode, you can also check out our [walk-through of a day with home automation](#) to get an idea of how a smart home could save you time and trouble.

Master List of Home Automation Ideas

1. [Welcoming Party](#) – Usefulness: 4.5
2. [Smart Garage Door Closer](#) – Usefulness: 4.5
3. [House Warming](#) – Usefulness: 4.5
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Welcoming Party

Usefulness: 4.5

Difficulty: 1

The skinny: “We’ll leave the light on for you” hospitality meets home automation.

How it works: Any time you get home, your lights will come on so that you can see to get inside your house. They can stay on for just a few minutes or until you go to bed. Of course, we recommend that you also have [motion sensitive lights to increase your home’s security](#) in addition to automation.

Click on the image to tweet: “Everything but the guy in funny pants. I want to come home to this!”

What you’ll need:

- **Location specific triggers** – Home automation companies generally call this [geofencing](#). It uses the position of your smart phone to detect your location and use that to cue other tasks that you can control from your phone. Even if your home automation hub’s app doesn’t support geofencing, you should be able to do something similar with location based tasking in another app such as [IFTTT](#) or [Tasker](#). You could even use hardware triggers such as RFID tags.
 - **Geofencing** – Your home automation hub’s app may support location based triggers directly
 - **IFTTT** – Use a location based trigger to control WeMo lights (others are added all the time) directly from IFTTT
 - **Tasker** – You could trigger the lights when your phone is in range of your home WiFi network or via GPS location with [Tasker on Android](#)
 - **Presence sensor or RFID tags** – Throw one in your car and your system can react to it when you get home (range up to 300’). There is a delay/battery life tradeoff here though.
 - **Motion sensors** – You can use motion sensors in the house along with a time delay to determine when the house is unoccupied.
- **AND A [connected light switch or bulb](#)** – There are connected wall switches as well as connected bulbs that can go into standard outlets. Add these to your exterior flood or porch lights to illuminate your “landing strip.”



Smart garage door closer

Usefulness: 4.5

Difficulty: 1

The skinny: Automatically close your garage door if you leave it open.

Click on the image to tweet: “My wife is the worst about leaving the garage open, problem solved!”



How it works: Yes, you can buy a [connected garage door closer](#) (expensive), [smart garage opener controller](#), or even an [automated closer](#) that just detects if you leave your door up (more reasonable). If you integrate those with your home automation system, you can make it even more intelligent. You can use a standard entry sensor on your garage door or a [tilt sensor](#). You could use a [vibration sensor](#), but I wouldn't recommend it. The down side is you can't tell up from down, and it will be prone to false alarms in windy conditions.

Then, if you leave the house or arm your system, it can automatically close. But, it's smart enough to know when you're just working in the yard.

We've written a detailed article on [how to make your own smart garage door opener](#) that will work with any protocol. Check it out too if you want to save a few bucks over the solutions above.

What you'll need:

- **Entry sensor** – Place it along the side of the door where opening it will separate the contacts.
- **AND Location specific triggers** – Only shut the door if you aren't at the house.
 - **Geofencing** – Your home automation hub's app may support location based triggers directly
 - **IFTTT** – Use a location based trigger directly from IFTTT
 - **Tasker** – You could trigger the door when your phone leaves your home WiFi network or via GPS location
 - **Presence sensor** – Throw one in your car and your system can react to it when you leave
 - **Motion sensors** – You can use motion sensors in the house along with a time delay to determine when the house is unoccupied. They won't help when you come home though.
- **MAYBE time triggers** – Relax the rules on Saturdays when you do yard work and make them more strict at night.
- **AND a connected garage door opener** – Control the closer from your system (such as the Chamberlain MyQ enabled openers).
- **OR connected garage IO module** – Most garage door closers allow for auxiliary inputs to control the door that you can use to make your dumb controller a smart garage door opener.

House Warming

Usefulness: 4.5

Difficulty: 1

The skinny: Warm up your house (or cool it down) a few minutes before you get home.

How it works: This one's pretty easy. Just use your location feature to turn your thermostat up or down 15 minutes before you get home. The tricky part is accounting for anyone without a presence sensor on them, like a phone or some other tag. Of course, you could have an override for when the system is placed in the "home" mode. The downside is that only you benefit from the warm welcome!

What you'll need:

- **A connected thermostat** – If you have the money for a Nest then go for it, but there are other options too.
- **AND Location specific triggers** – Queue up the thermostat when you're on the way home for the day.

Automatic Leak Mitigation

Usefulness: 4

Difficulty: 3

The skinny: The water turns off if a leak is detected in the house.

How it works: This one is great for people with second homes and could save a lot of money for people that sleep too! You place water/moisture sensors around sinks, toilets, water heaters, clothing and dish washers to determine if there is a leak. Then, the leak can trigger a valve to shut off water to the entire house.

What you'll need:

- **Moisture or leak sensors** – Place them in likely leak areas in bathrooms, kitchens, and laundry rooms
- **AND a smart water valve** – Install this after the manual shut off for the water main to your house.
- **OR an electronically controlled valve and a smart control unit** – If you don't want to spring for a smart valve, you can use a smart IO module with an electronic valve.

Have home automation envy? Your friends are here for you.

Improvised Triggers via NFC

Usefulness: 4

Difficulty: 1

Head's Up

There's a much better way to automatically trigger actions based on location. Check out this guide to

[setting up Tasker and AutoInput.](#)

The skinny: Work around software limitations and trigger automated actions through your phone.

How it works: NFC lets you place your phone against a special tag and perform an action (with a compatible app, of course). You can use that to integrate with any of the other recipes above to enable location based actions with a little manual effort.

Such as:

- Arm your alarm system when you set your phone down in the car or a tap on the door as you walk out
- Turn on your ringer, WiFi, or Bluetooth when you get home
- Turn them off when you leave
- Turn on GPS and start maps when you get in your car and dock your phone
- Turn off social network notifications when you're at your desk working
- On your nightstand to turn off your ringer and activate your alarm

What you'll need:

- **NFC (near field communication) tags and a phone that supports them** – Put this wherever you want the trigger.
- **AND Tasker or another NFC enabled app** – The NFC tag can trigger a Tasker task.

Automatic Shower/Laundry Room Fan

Usefulness: 4

Difficulty: 1

The skinny: Your bathroom fan automatically runs when the humidity is high.

How it works: Mold is bad. Objections? In case you or someone in your family forgets to use the bathroom exhaust fan, you can add a humidity sensor in the bathroom and trigger the fan from a smart switch. Yes, you can buy a fan with a sensor for over \$100 bucks that's a pain to install. But, this is something you could get done for much less, and it's more customizable.

What you'll need:

- **Humidity sensor** – You only want it to run when it's needed.
- **AND A connected light switch** – Just wire in a new smart switch in place of the dumb switch that used to control your fan.

Somebody's monkeying with my safe

Usefulness: 4

Difficulty: 1

The skinny: You get a notification somebody messes with your safe.

How it works: Say you want to know if your kids are trying to get into your safe. Or, you need an extra layer of defense for your security system. You can add a motion/vibration sensor to your safe to let you know when it's being tampered with.

What you'll need:

- **Motion sensor** – Place it directly on the safe or where it will only be triggered by access to the safe.
- **OR vibration sensor** – Same as the motion sensor, except triggered based on vibration.
- **AND notification integration** – Get a notification when the sensor is triggered.
- **OR SMS integration** – Get a text when the sensor is triggered.
- **OR email integration** – Get an email when the sensor is triggered.

The Ultimate Alarm Clock

Usefulness: 4

Difficulty: 1

The skinny: Force yourself to get out of bed in the morning.

How it works: This one speaks to me since I have a hard time getting moving in the mornings. You have to scan a tag with your phone to get the alarm to turn off. The catch is, the tag is by the shower!

Click on the image to tweet: “Tweet: Man, I could really use something like this! No more #snooze for me.”



What you'll need:

- **NFC (near field communication) tags and a phone that supports them** – Put this in the bathroom.
- **AND Sleep As or Puzzle Alarm Clock apps** – The phone goes off and requires a unique NFC tag to disable the alarm.

Laundry's Done!

Usefulness: 4

Difficulty: 1

The skinny: You get a notification when the laundry finishes.

How it works: Who's ever left a load of wet clothes in the washing machine until the next day? Raunchy smell, right? If you're outside, upstairs, in the shower or deaf, then you can use a notification or SMS message to remind you to put it in the dryer.

What you'll need:

- **Vibration sensor** – Place it directly on the washing machine and use the transition from motion to no motion as the trigger.
- **OR audio sensor** – Same as the motion sensor, except triggered based on sound.
- **AND notification integration** – Get a notification that the laundry is finished.
- **OR SMS integration** – Get a text when the clothes are done.
- **OR email integration** – Get an email when the clothes are done.

Move it, maggot!

Usefulness: 3.5

Difficulty: 1

The skinny: An extra kick in the pants to remind you to no be lazy before watching TV.

How it works: The TV won't turn on until you log 10,000 (or your goal) steps on your fitness tracker. You use IFTTT integration with your fitness tracker to control a connected outlet.

What you'll need:

- **Fitness sensor** – You need one that integrates with [IFTTT](#), like Fitbit, Misfit, or Jawbone.
- **Smart outlet** – Just turn on the outlet when you meet your goal. You'll still have to turn the TV on manually, but it'll actually turn on when the outlet is on!

Light the Beacon

Usefulness: 3.5

Difficulty: 1

The skinny: Broadcast an alert to your neighborhood watch when your alarm is triggered.

How it works: For alarm systems with IFTTT integration, you can easily connect a community watch Facebook page and post an alert when your alarm goes off. This requires a neighborhood that's more into Facebook than I am but maybe that fits your situation. But with IFTTT, you can post to Twitter with a unique hashtag, send notifications via Pushbullet and Slack, or stick with plain old SMS text. The choice is yours.

What you'll need:

- **Alarm system** – You need one that integrates with [IFTTT](#), like iSmartAlarm, Scout, SmartThings,

or possibly WeMo.

- **Neighborhood watch** – Again, the ability to integrate is key here. Obviously, you need an active group of friends and neighbors.
 - **Email or SMS without IFTTT** – You could send an email or SMS directly from the security system to an email list for your neighborhood watch.
 - **Too many to list with IFTTT** – You could post to Facebook, Pushbullet, Twitter, Slack, etc. You get the idea.

Smart Water

Usefulness: 4

Difficulty: 1

The skinny: Only water when you need to, no intervention required.

How it works: You'll need a connected water valve and integration with a weather forecasting service. Then, you schedule watering in the mornings when there isn't rain in the forecast for the next couple of days. You can really raise the game of this idea by using a soil moisture sensor to determine when your grass and beds need water.

What you'll need:

- **A smart water valve** – Install this after the manual shut off for the water main to your house.
- **OR an electronically controlled valve and a smart control unit** – If you don't want to spring for a smart valve, you can use a smart IO module with an electronic valve.
- **AND Weather forecast integration into IFTTT** – IFTTT has a weather channel that can pull forecast data from Yahoo Weather.
- **MAYBE a soil moisture sensor** – There are WiFi and Zigbee units, but you may have trouble integrating them with your hub since they're pretty new.

Night Watch

Usefulness: 3

Difficulty: 2

The skinny: If you open an outside door at night, turn on exterior lighting.

How it works: This one is all time keeping and switches, integrated with your existing door switches. When you open a door outside at night, your system checks the time and turns on the outside lights on the side of the house of the door you opened. After you shut the door, the lights stay on for a few more minutes

and then go off.

What you'll need:

- **Entry sensors for your doors** – If you're into security, you likely have these already.
- **AND connected light switches** – You'll need switches for every outside light around your place.
- **MAYBE light sensors** – You don't usually want the lights coming on in the middle of the day. So, you can override the light trigger with a light sensor that determines if there is already adequate lighting.
- **OR time integration** – You can set the trigger to only be active at night. The down side is that it won't account for time changes or changing sunrise and sunset times. But, you can integrate with a forecasting service that has sunrise and sunset times.

Garage Butler

Usefulness: 3

Difficulty: 2

The skinny: When you open the interior door to your garage, the door automatically opens. It closes once you leave.

How it works: Add an extra sensor to your interior garage door. That way, when you open it within the window of time you normally leave in the morning. After your phone leaves your home WiFi or exits your geofenced area, the garage door closes again.

What you'll need:

- **Entry sensors for your interior garage door** – What's an extra entry sensor, right?
- **AND connected garage door opener** – Control the closer from your system.
- **OR connected IO module** – Most garage door closers allow for auxiliary inputs to control the door that you can use to make your dumb controller a smart garage door opener.
- **AND time integration** – Only open the garage door if it's the time that you normally leave for the day.
- **AND location specific triggers** – Shut the door after you pull away.

Personal Lighting

Usefulness: 3

Difficulty: 3

The skinny: Lights come on (and go off!) as you move about your house.

How it works: No explanation needed, right? On the surface, this one seems like a 1 star for difficulty.

But in some rooms, you may sit pretty motionless for a couple of hours during a movie and you might want a light on while you do that. And, you should also consider natural lighting.

What you'll need:

- **Motion sensors for every room** – They make “dumb” motion sensor switches, but you'll need smart ones to override the timer in rooms that you stay in without moving a lot or to alter the level of lighting in the middle of the night, etc.
- **OR presence detection fobs** – Some home automation and security companies offer key fobs that are used to determine where you are. They have the advantage of covering your whole family.
- **OR Bluetooth presence detection** – If you're by yourself or don't care if your family stumbles around in the dark, you could use Bluetooth on your phone to let your system know where you are.
- **AND A connected light switch or bulb** – Again, there are connected wall switches and connected bulbs that can go into standard outlets that you could use. The wall switches will likely make the most sense for the amount of lights that you would want to automate.
- **MAYBE light sensors** – You don't usually want the lights coming on in the middle of the day. So, you can override the light trigger with a light sensor that determines if there is already adequate lighting.
- **OR time integration** – You can set the override to be time dependent. The down side is that it won't account for cloudy days, time changes, or changing sunrise and sunset times. In other words, you'll have to fiddle with the times several times during the year or manually turn on the lights when the weather is bad (Ugghh! Who wants to operate a light switch? /sarcasm).

High Security Network

Usefulness: 3

Difficulty: 1

The skinny: Your WiFi network is disabled when you aren't home.

How it works: So maybe I'm the only paranoid one, but I love this idea. We all know that home wireless networks (and business networks too) can be hacked fairly easily by capable criminals. Once they're in, they could sniff network traffic to get passwords to your bank accounts and do all kinds of nasty things. So, why not have a switch to turn the WiFi off when you aren't at home. If other things in your home depend on WiFi to have a constant connection or your internet router and WiFi device are on shared hardware, then this would obviously be a lot harder to implement.

What you'll need:

- **Location specific triggers** – Your home automation system needs to be able to tell when you're away from home. That could be with the location feature on your phone, a presence sensor, when your phone is not connected to the network, or some other RFID tag.
 - **Geofencing** – Your home automation hub's app may support location based triggers directly
 - **IFTTT** – Use a location based trigger to control WeMo switches (others are added all the time) directly from IFTTT

- **Presence sensor or RFID tags** – Throw one in your car or on your key chain and your system can react to it when you get home (range up to 300')
- **OR alarm/home automation system integration** – You could control the switch for your router whenever you arm your alarm system.
- **AND A connected light switch or bulb** – There are connected wall switches as well as connected bulbs that can go into standard outlets. Add these to your exterior flood or porch lights to illuminate your “landing strip.”

Automatic Fart Fan

Usefulness: 3

Difficulty: 1

The skinny: Your bathroom fan automatically runs when the ODOR is high.

How it works: How many times have you forgotten to turn off the exhaust fan? Have guests that you wish would use the exhaust fan? Worry no more! **This home automation tip is just for you.** How does it work, you might ask? You can use motion and humidity sensors in the bathroom to determine occupancy and activity, and then run the exhaust fan to evacuate unpleasant odors. In a half bath, you wouldn't even need to bother with the humidity sensor. You could just turn the fan on when somebody stays there longer than 5 minutes.

You can debate whether or not it's a faux pas to automatically turn the fan on when your guests stink up your bathroom in the comments.

What you'll need:

- **Motion sensors in the bathrooms** – Determine when the room is occupied
- **AND A connected light switch** – Just wire in a new smart switch in place of the dumb switch that used to control your fan.
- **MAYBE Humidity sensor** – Make sure someone isn't just taking a shower.

Great ideas are perfect for sharing!

Homework First

Usefulness: 3

Difficulty: 2

The skinny: Your kids have to send an email or text saying their homework is done before playing games or watching TV.

How it works: Use a text or email trigger to activate a switch that controls the TV, gaming console, or

computer. The software looks for a code phrase (eg. “#homework”) and then turns on the switch to the TV or computer, allowing it to be turned on. Of course, there are workarounds, but sometimes just a hurdle is enough of a deterrent.

What you'll need:

- **Smart outlets** – Control power to the devices that you want to restrict
- **AND SMS integration** – Use [IFTTT](#) SMS integration to trigger off of a text with #Homework.
- **OR email integration** – Similar to SMS, send an email to trigger@recipe.ifttt.com with subject #homework.

Smart Humidifier

Usefulness: 3

Difficulty: 1

The skinny: No more dry skin and nose bleeds in the winter, run the humidifier only when it's needed.

How it works: Use a smart humidity sensor in a bedroom to control a connected outlet that has the humidifier plugged into it.

What you'll need:

- **Humidity sensor** – Soggy carpets are bad, only run the humidifier when it's too dry.
- **A smart outlet** – Control power to the humidifier when you want it to come on and off

Perfectly Timed Weather Forecast

Usefulness: 2

Difficulty: 1

The skinny: Set the color of your lights when you open your closet to tell you what tomorrow's weather will be like.

How it works: If you go into your closet to pick out your clothes for the day, the light initially comes on at a particular color to let you know what the weather will be like. As an alternative, you could have this task triggered at a certain time every day when your alarm goes off.

What you'll need:

- **Entry or motion sensor for the closet** – You could either put an entry sensor on your closet door or use a motion sensor in the closet (that may come in handy to keep an eye on other valuables too).
- **AND A color enabled smart bulb** – You could set blue to be cold, red for hot, green for rain . . . you get the idea.
- **AND Weather forecast integration into IFTTT** – IFTTT has a weather channel that can pull forecast data from Yahoo Weather.

TV Zombies

Usefulness: 2

Difficulty: 4

The skinny: Your kids are reminded to take a break from the screen when on the computer or on gaming consoles.

How it works: Use a power sensor on the TV or computer to determine when they're on in the afternoon before you get home from work. Then, every 20 minutes or so, you flash the lights as a reminder for them to pause what they're doing and walk around a bit. I don't see this one actually working, but you can try!

What you'll need:

- **Power sensors/switches** – Determine when the devices are on
- **AND a connected light switch or bulb** – Use these for the light that you want to flash.
- **AND time integration** – If you don't want to be interrupted in the middle of your movie, you'd better set up an override.

Resources (What You'll Need)

Home Automation Software

IFTTT

[IFTTT](#) – A great (free) app to help you automate all kinds of interactions but watch out for latency between triggers and actions

Available Channels that are Helpful:

- Location
 - Android Location
 - iOS Location
- Notification
 - Android SMS
 - iOS Notifications
 - iOS Reminders
 - SMS
- Date and Time
- Systems

- Homeseer
- Honeywell evohome
- Honeywell Single-zone Thermostat
- [iSmartAlarm](#)
- Nest Protect
- Nest Thermostat
- Netatmo Weather Station
- Philips Hue
- Revolv (bought out: not open to new customers)
- [Scout Alarm](#)
- SmartThings
- WeMo Insight Switch
- WeMo Light Switch
- WeMo Maker
- WeMo Motion
- WeMo Switch
- Wink Aros
- Wink Egg Minder
- Wink Nimbus
- Wink Pivot Power Genius
- Wink Porkfolio
- Wink Shortcuts
- Wink Spotter

NFC Apps

- NFC Task Launcher (can also trigger Tasker)

Tasker

[Tasker](#) is an Android app (paid, but worth it) that lets you automate tasks on your phone

Hardware

Smart Bulbs with Colors

We've moved these!

See our [full comparison of smart bulbs](#) of all types.

Presence detection tags

- See our [home security sensor comparison tool](#) to see the latest information on companies that offer presence indicators
- Here are a few:
 - [iSmartAlarm](#) – site
 - [SmartThings](#) – site

Bluetooth presence detection

- The only solutions I've seen are very home grown – please help me out with suggestions

Humidity sensors

- Zigbee
 - [Smarten-it temperature and humidity sensor](#)
- Z-Wave
 - [Aeon Labs Multi Sensor](#)

Vibration sensors

- Z-Wave
 - [Vision Vibration Sensor](#)

Water/leak sensors

- Use the [sensor comparison tool](#) to see the latest information on companies that offer leak detection sensors
- Some examples:
 - Honeywell
 - FrontPoint
 - Insteon
 - Iris
 - [SimpliSafe](#)
 - SmartThings

Water Valves

- Z-Wave
 - [Fortrezz Water Valves](#)

- Electronic Valves
 - [Floodstop Water Valve](#)

Garage Door Openers

We've moved these!

See our full [comparison of smart garage door openers](#)

Credits: Several of these were pulled and improved from other places like the [home automation subreddit](#) and [CocoonTech forums](#). Check them out too.

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