

# How to Detect Hidden Surveillance Cameras With Your Phone



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A family recently [discovered](#) a rude surprise at their Airbnb: a hidden camera disguised as a smoke detector in the living room. Here are two ways to check for cameras—in an Airbnb or elsewhere—using only an iPhone or Android phone.

## **Hidden Cameras Are a Real Danger**



AMCSXH

If you're staying in a hotel or an Airbnb, hidden cameras can be a worry. In the case of Airbnb, [your host is required to list any cameras](#) they have, whether or not they're turned on. Additionally, Airbnb does not allow hosts to place cameras in bathrooms or sleeping areas, even if that's a living room with a foldout bed.

But, as this one family found out, the occasional creepy host can still hide a camera and not tell you. Hidden cameras in an Airbnb [aren't a new thing](#). The problem isn't limited to Airbnb, either. A recent news story described the harrowing tale of [hidden cameras live-streaming in South Korean hotels](#). More than 1500 hotel guests were filmed and live-streamed over the internet. As hidden cameras become even more inexpensive, they seem to be popping up more and more.

Manufacturers design cameras disguised as other everyday objects, like [smoke detectors](#), [clocks](#), [USB hubs](#), even [wireless chargers](#). These can be used for legitimate reasons in your own home—for example, to hide a camera a burglar can't find or to monitor a nanny with that person's consent. But how do you ensure someone isn't targeting you with a hidden camera? With a single app and your phone's camera, you can do a sweep for hidden cameras when you check in.

There are two ways to scan for cameras with your phone. First, if you have access, you can scan the Wi-Fi network for devices that look like cameras. But this will only find cameras connected to the network. Second, you can search for night vision cameras using your phone's camera. If a hidden camera isn't connected to the network and doesn't have night-vision capabilities, neither method will spot it—but these tricks should spot most cameras.

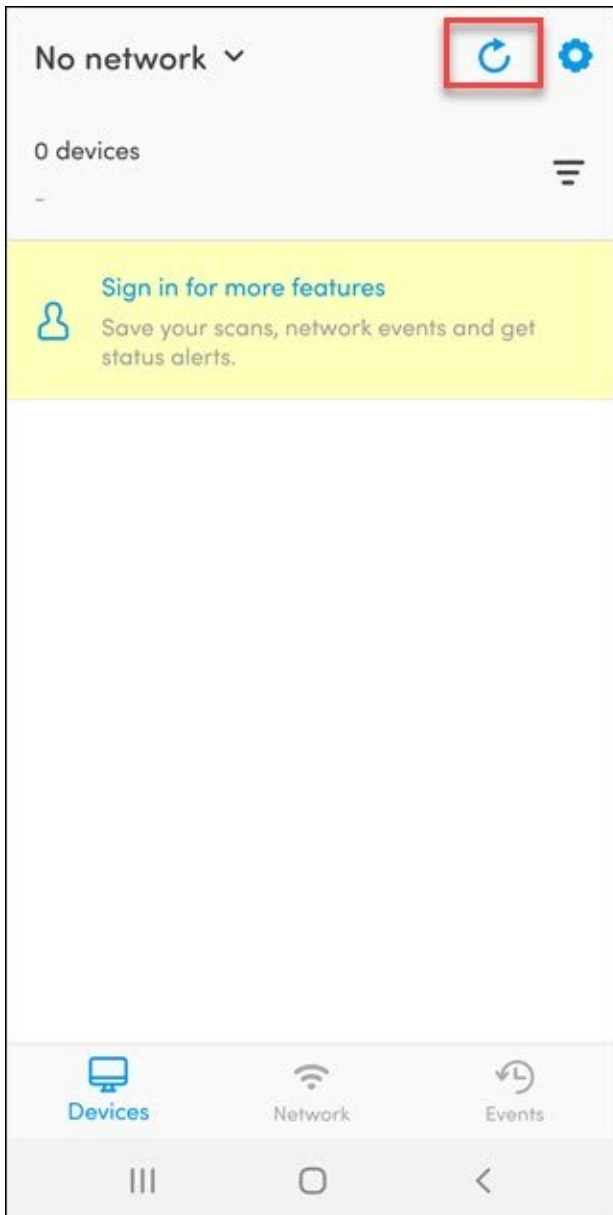
## How to Scan for Networked Cameras

Many places you stay give you access to the local network. You can use this to your

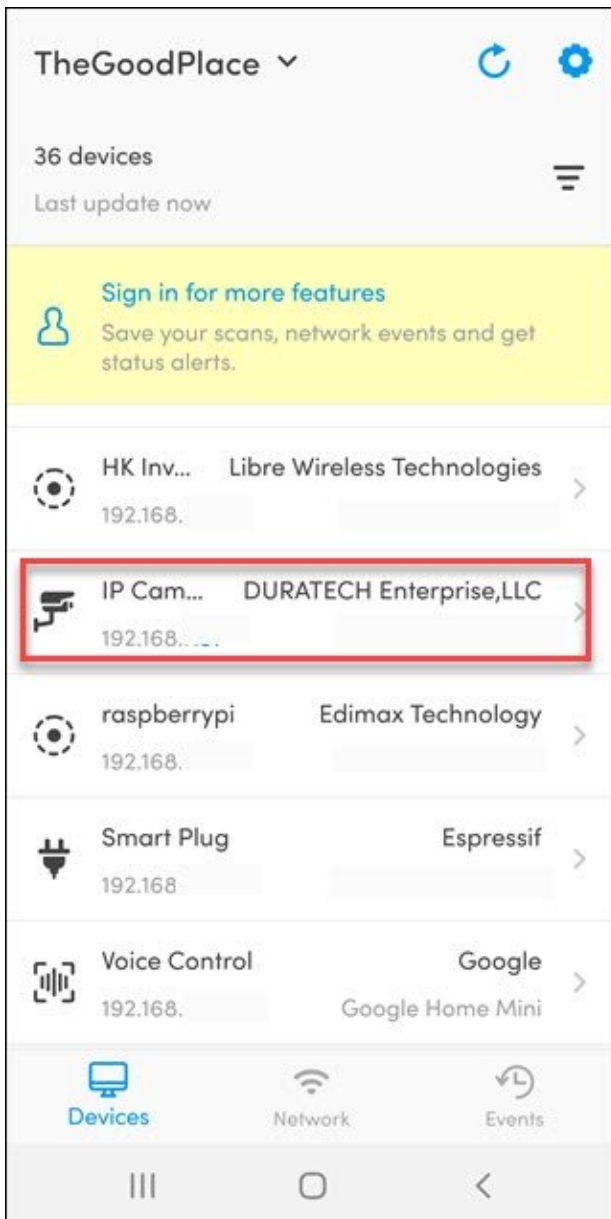
advantage with an app named Fing. Fing makes both [iPhone](#) and [Android](#) apps. Better yet, it's free and doesn't have ads. Fing does ask you to sign in for more features, but you won't need to do that for the device and port scanning.

The idea here is to look at all the devices connected to the local network. We recommend disconnecting all your devices except the phone or tablet running Fing so that you'll have fewer things to sort through. Connect your phone or tablet to the network and then open Fing.

On Android, tap on the "Refresh" button at the top-right of the app's screen to get started and agree to give the app location permissions. The iPhone app performs this step automatically.

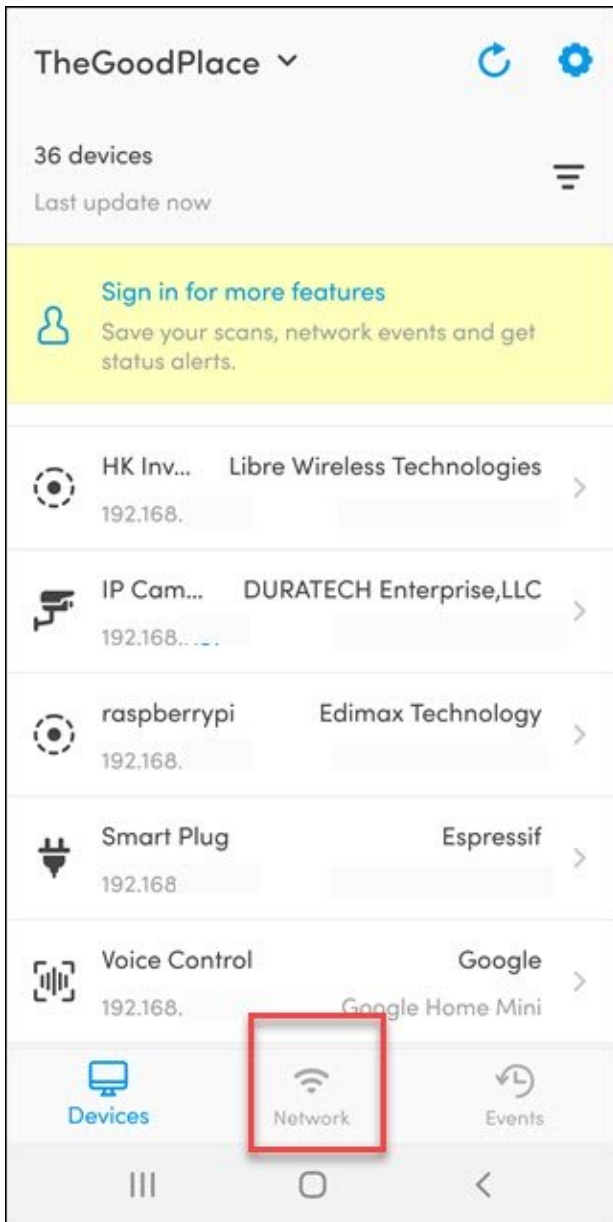


Wait for the app to finish scanning, then look through the list of found devices. You're looking at devices on the network the app identified, you'll want to keep an eye out for anything that shows a camera manufacturer (like Nest, Arlo, or Wyze), or lists as "IP Camera."

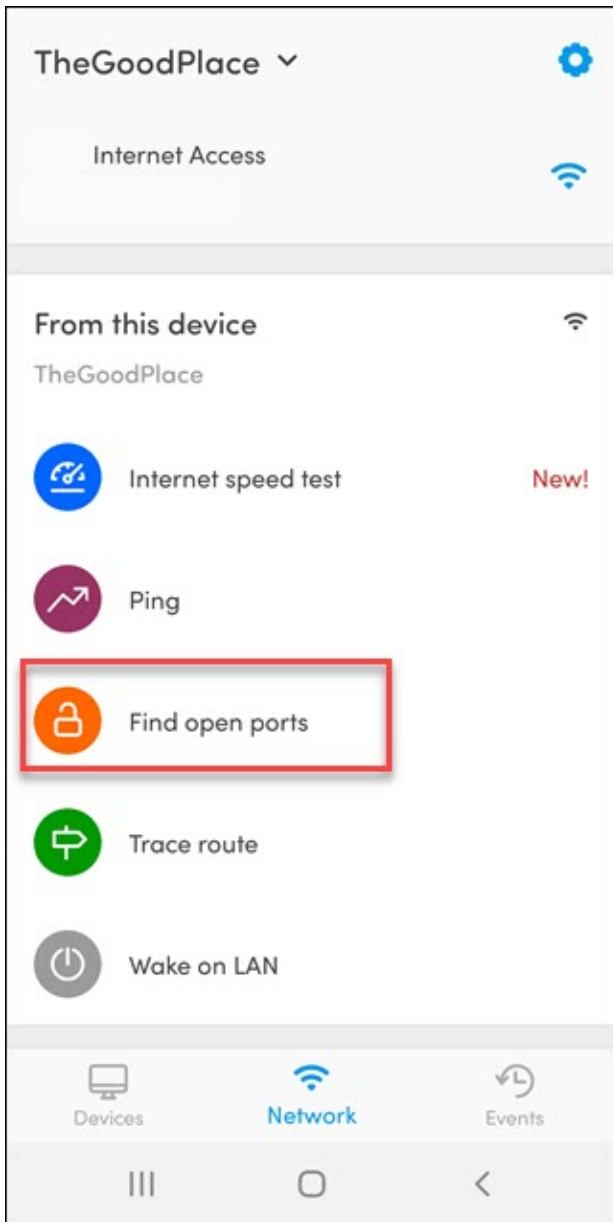


Even if you don't spot a camera on this list, take stock of how many devices you do see listed and what you can find around the place you are staying. If something stands out as unusual (perhaps with no recognizable details), and you can't locate a good source, write down the IP address. The next step is scan for open ports.

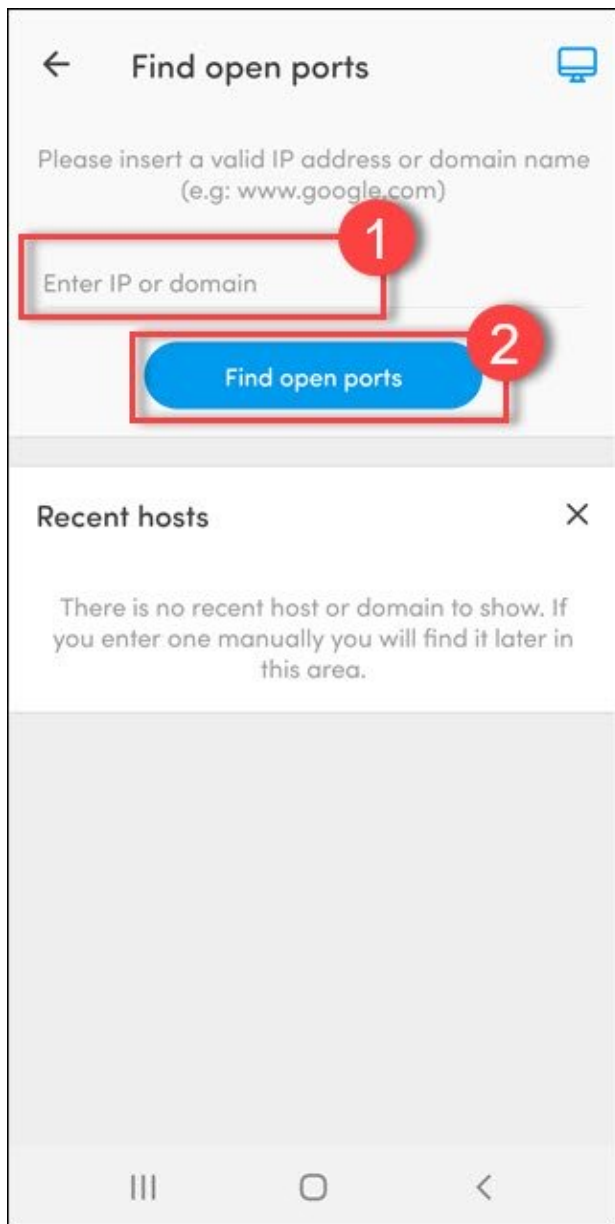
If you find any suspicious devices on the network, you'll want to scan for any open ports those devices are using. First, tap the "Network" button at the bottom of the screen.



Then tap “Find Open Ports.”

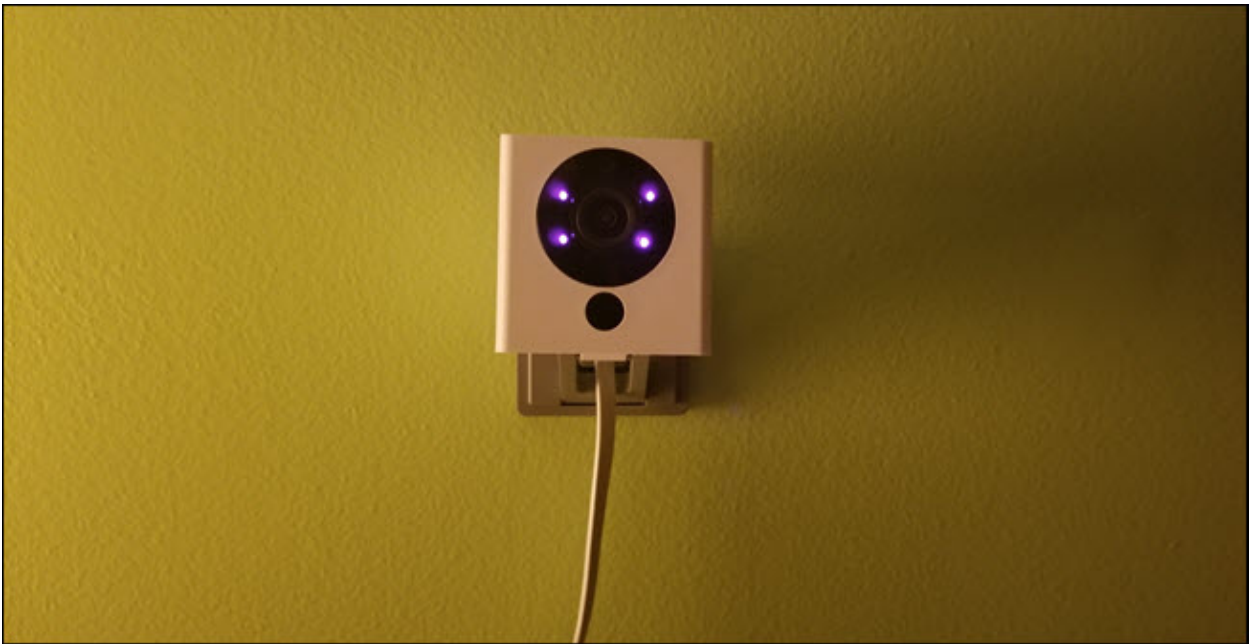


Type the IP address you wrote earlier and then tap the blue “Find Open Ports” button.



The list will show what ports are open, and what services they use. Keep an eye out for RTSP and RTMP; those are common for streaming video. Anything with HTTP or HTTPS as a service you can try to connect to with a browser, which may reveal video streaming. Just type the IP address into your browser, followed by a colon, followed by the port listed (i.e., 192.168.0.15:80).

## **How to Spot Night Vision Cameras**

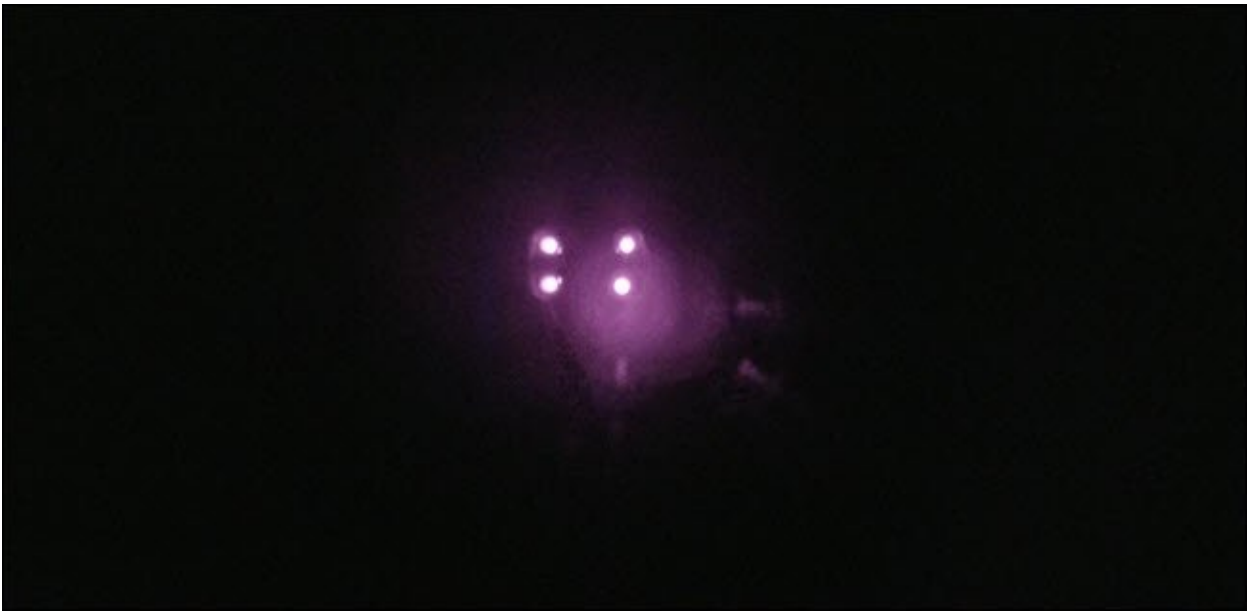


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You won't always have access to the local network to try the above steps. Even when you do, they might not help. A hidden camera could be on a separate network, or too obscure to recognize easily. If you haven't found any cameras yet, you can try looking for infrared lights. Most IP cameras use [infrared for night vision](#). While infrared rays are invisible to the naked eye, you already have a device that can help—your smartphone.

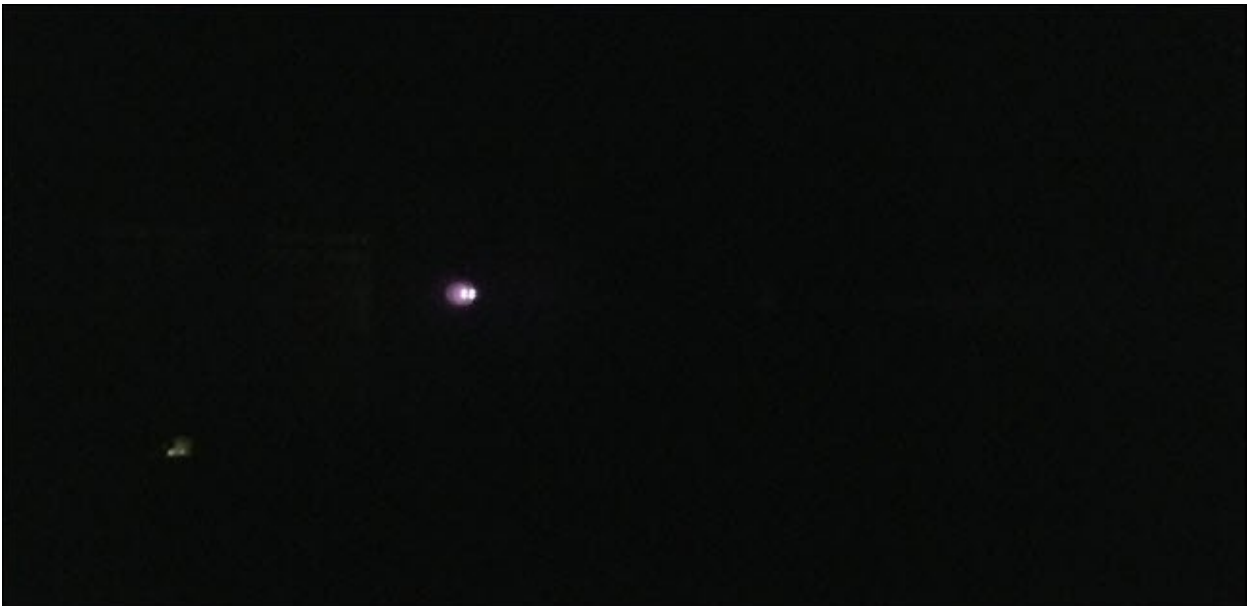
Some smartphones have filters to block out infrared light on their primary camera, but very few of them have filters on the front camera. To determine which camera will work for you, grab an infrared remote like the one you use for your TV. Point it at your smartphone's primary camera and press a button. If you see the light on the screen, then it can detect infrared. If you don't, try again with the front-facing camera.





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Once you determine the best camera to use, turn off the lights in the room you want to sweep. Then turn on your smartphone's camera and start looking for any glowing lights. IP cameras don't come in any standard configuration so you might see just one, four, six, or some other combination of lights. They'll typically be purple but sometimes can look white. You won't necessarily need to be near the hidden camera. In the above image, the camera is just a few feet away. But take a look at another picture from the other side of the house:



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The lights in the center of the image are the same camera, just three rooms away (a dining room, a living room, and a study). That's bright enough to be noticed and

warrant closer investigation. Don't just look at the center of walls though, point your smartphone at the ceiling, vents, even outlets. When the lights are on, look for anything unusual. Does a room have more than one smoke detector? Is there a USB hub in a place with no other electronics? If you touch a standard mirror and look at your finger from an angle, your reflected finger won't "contact" your actual finger. If you do the same with one-way glass, your reflected finger and real finger will contact (seem to touch), and that could be hiding a camera. Noticing out-of-place things can help you find hidden cameras.

Unfortunately, there's no guaranteed method for finding a hidden camera. But taking these extra steps when you arrive will give you fighting chance, and hopefully some peace of mind.



### **JOSH HENDRICKSON**

Josh Hendrickson has worked in IT for nearly a decade, including four years spent repairing and servicing computers for Microsoft. He's also a smarthome enthusiast who built his own smart mirror with just a frame, some electronics, a Raspberry Pi, and open-source code