

Share Your World

A tech hack to your eye gaze device

By Stephen Cronin & Kelsie Munion



A caregiver pushed me to write what I am calling a tech hack. The caregiver explained that this would be a game changer for many people

who use an eye gaze device. You will relate to the following if you have an eye gaze device. Most of the time, you don't mind sharing your thoughts and screen with other people, so they see that you are responding to something. What you don't enjoy is people hovering over you and trying to complete your sentence because they are impatient. I understand your frustration. I can't fix the impatience, maybe the hovering. The goal was how do I share my world with other people without them looking at my screen. I solved this by sharing my screen with a screen that people could see.



So, here is my hack; I am not saying there is not a different way to do this; that is the way I did it. First, I will explain what I did, and then in part two, I will explain how I did it. I want to say that this would not have been possible without the help of my favorite caregiver Kelsie. Kelsie puts up with my mind that races. Kelsie is more than my hands, she is responsible for making this happen, and I would not be able to share it with you if not for Kelsie.

The first thing I showed was what I typed; people can see. Below is what I see and what people can see. When you look at the picture, you can see the benefits. I love it because, for the first time, people can see what I am doing. They are no longer looking at a person who looks dazed and confused; instead, they are looking at a person responding with their eyes. The smiles you get, and they tell you how cool it is, are fantastic. They are so impressed that they share the information with the next person. If you get kids, they will watch all day long.

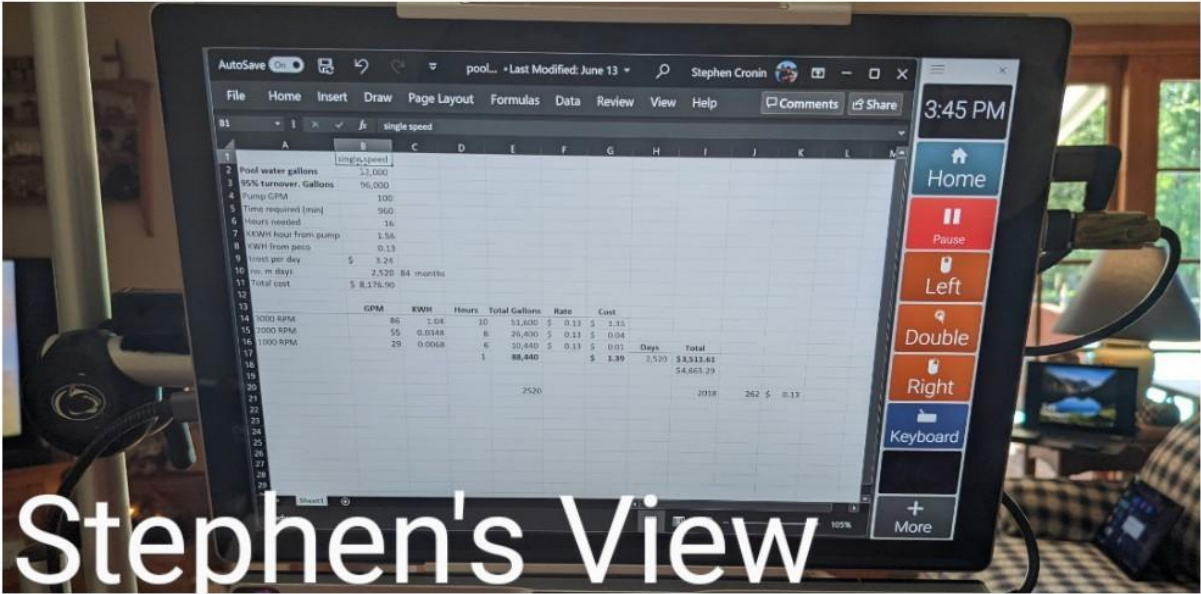
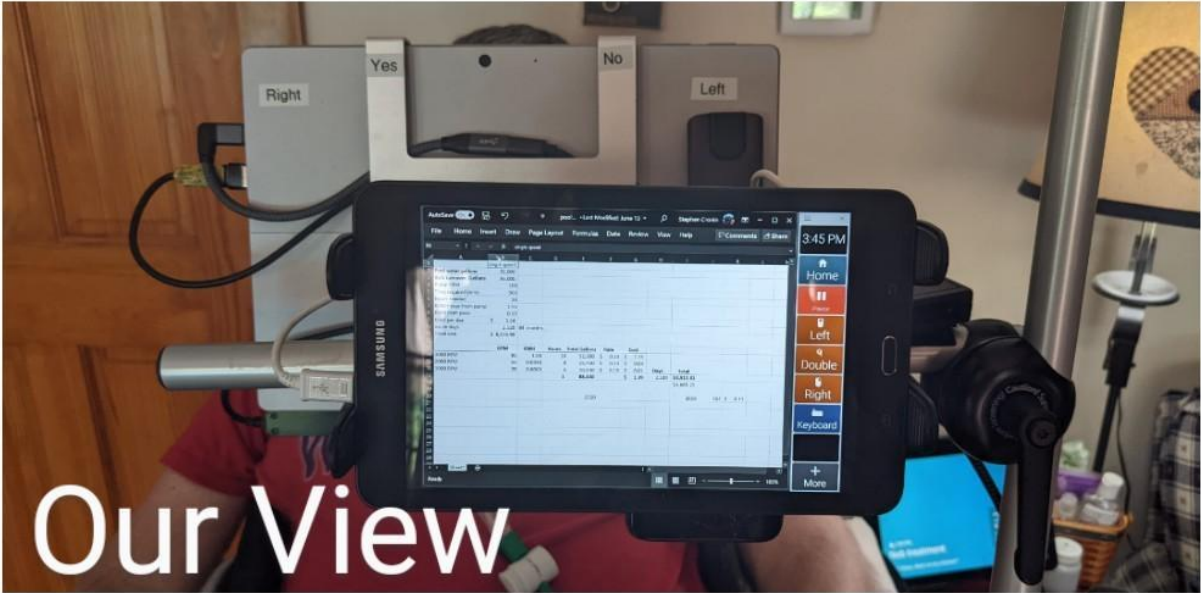


I have other things that I share with people:

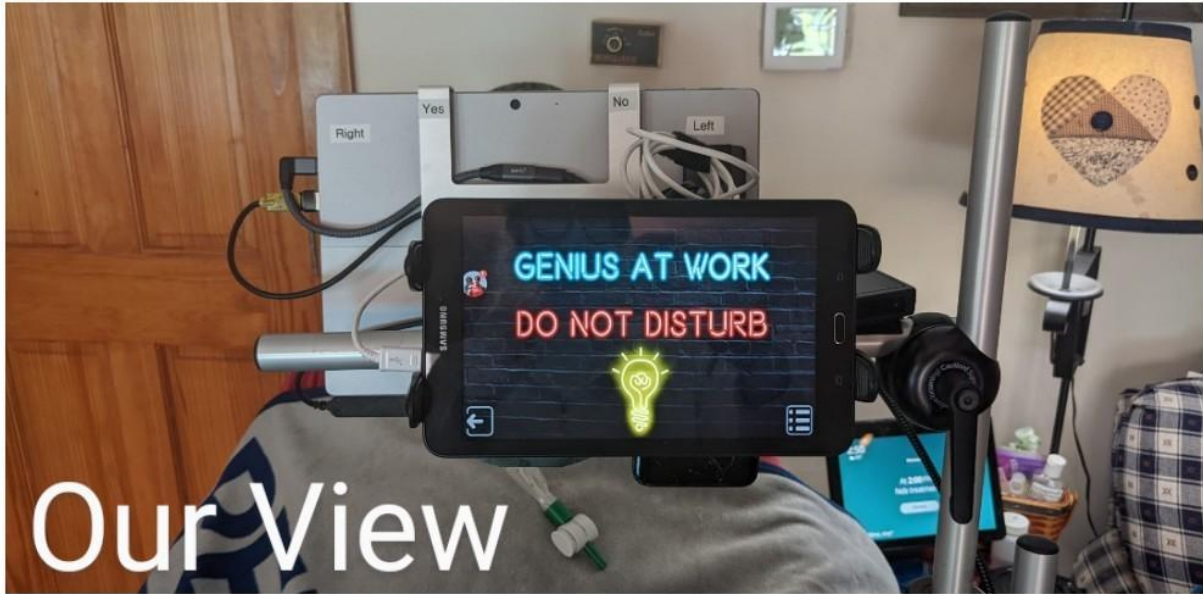
Here I am showing pictures.



I am sharing a spreadsheet on the savings I would achieve by buying a variable speed pump for the pool.



The final view is what I do when I don't want people to see what I am doing. This is my time.



I came up with my top ten reasons Why you may consider this hack:

- You don't have people behind you trying to read your screen
- You can turn it on and off
- You can show people pictures
- You can show people emails, documents, presentation
- You can have a face-to-face conversation
- The caregivers will know you are not ignoring them
- Teaching tool, they can see what you are doing
- People won't breathe on you
- People can put information into your computer without touching the screen
- A whole bunch of apps you can use on the tablet

Part 2 – How I did it

You made it this far; my writing could not be that bad.

What you need :

1. A tablet
2. A Google account
3. Google Chrome
4. Google chrome remote desktop for the computer and the tablet
5. Internet access
6. A free USB port on the computer
7. A way to mount the tablet in front of your device

Setup a Google account

The first thing you have to do is set up a Google account. What I did, just for this reason, was set up an account for this particular project. I would not recommend that you use an existing account. It will become apparent later on in the usage.

Internet Access

You have to have access to the Internet for this to work. You have to set up a Google account and access Google, and both devices need access. If you don't have access to the Internet, government funding programs are available that you most likely qualify for. I would recommend that you look into them. Your local chapter should be able to help you out.

A device

The device that I used was a Samsung tablet that I received five years ago. I tend to recycle technology. I don't think you should get rid of it because you have a new toy. So you can use any tablet. You can use an old one, a new one, Apple, Android, mini, big, whichever floats your boat.

You will need to mount the tablet so that people can see it. I have mine mounted in front of the device I use for my eyes. That way, people can stand in front of me, and I can see their reactions to what I say. Mounts are personal items, so find one that will work for you.

The final thing on the tablet, you have to power it. This is a great thing about a tablet; you can plug it into a USB port for the device you are using to track your eyes. I have attached a hub with my tablet going through other things, which can be another hack. It's my recommendation that you power the tablet using a USB port.

Google remote control for the tablet

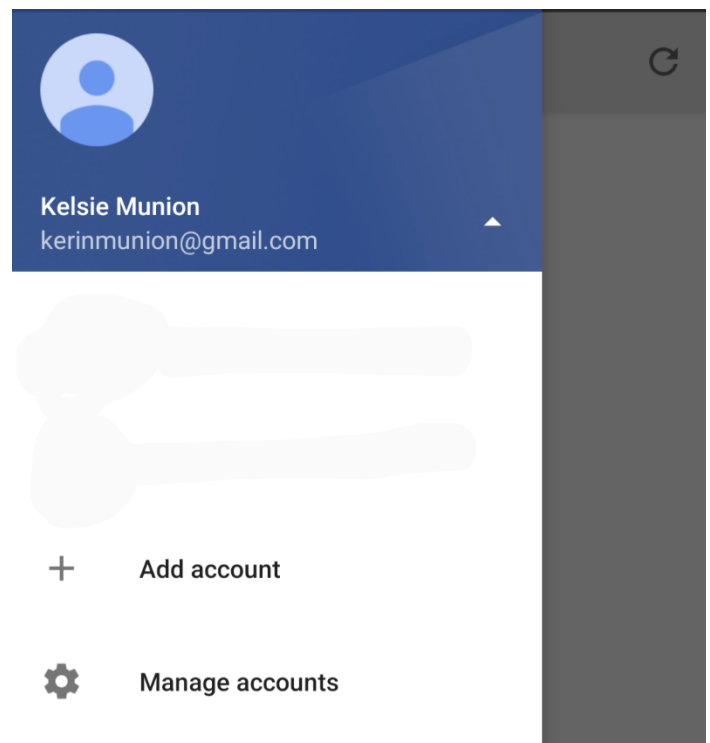
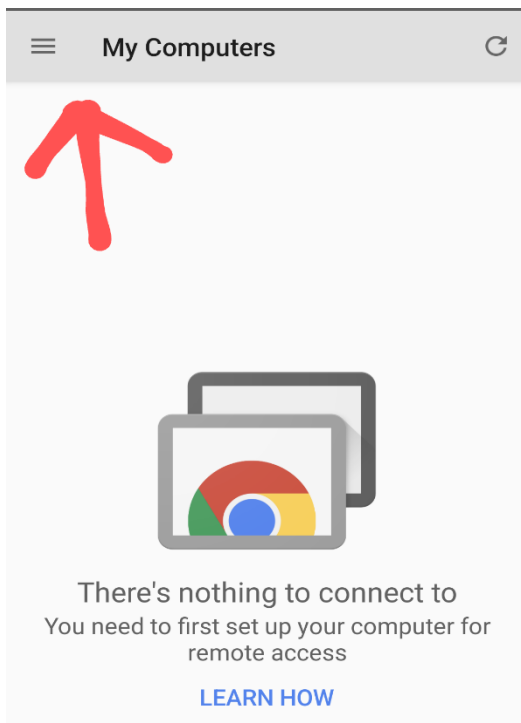
You will have to get the app from Google play or the apple store. You want to get a chrome remote control. It's an app on the tablet side.

First, you have to locate your device's App store. We use Google's Play Store, so you search for Chrome Remote Desktop after opening that.

(For the Chrome Remote App to work, the email that the app is downloaded on must be the same email used to add the extension to chrome)

Once you find the app, click "install." As long as the app was downloaded on the same email as the chrome extension was set up, all devices should appear in the app.

If you do not see your devices, you can check the email by clicking on the three stacked lines on the top right-hand side of the screen.



You can check which email is signed in and manage the linked accounts.

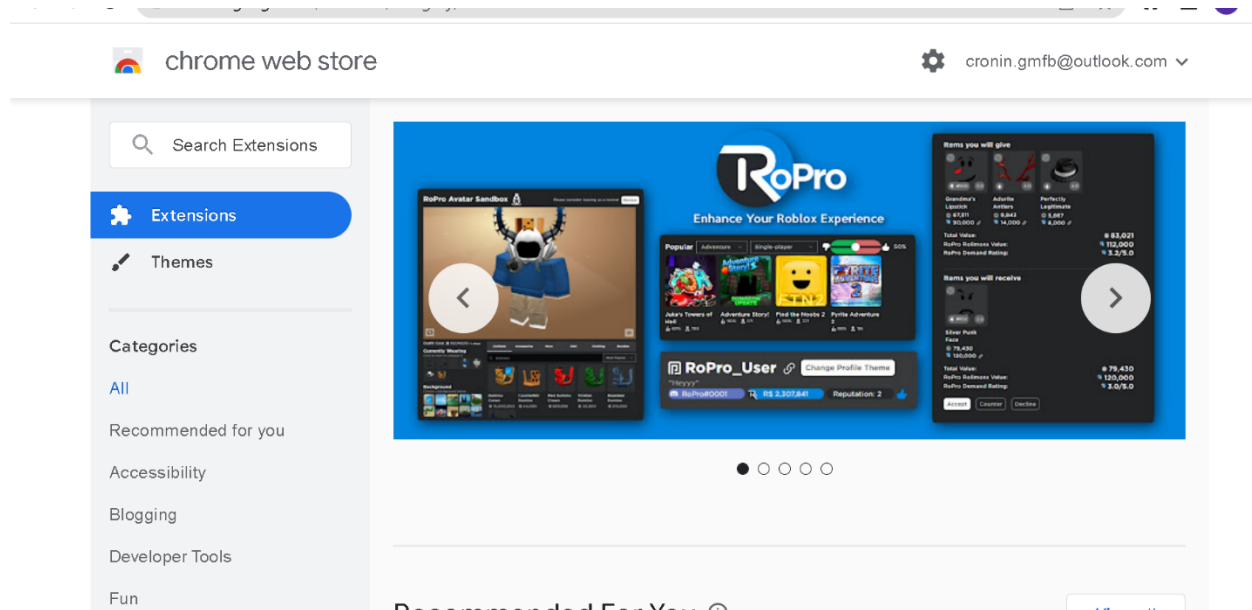
Google remote control for the Eye gaze device

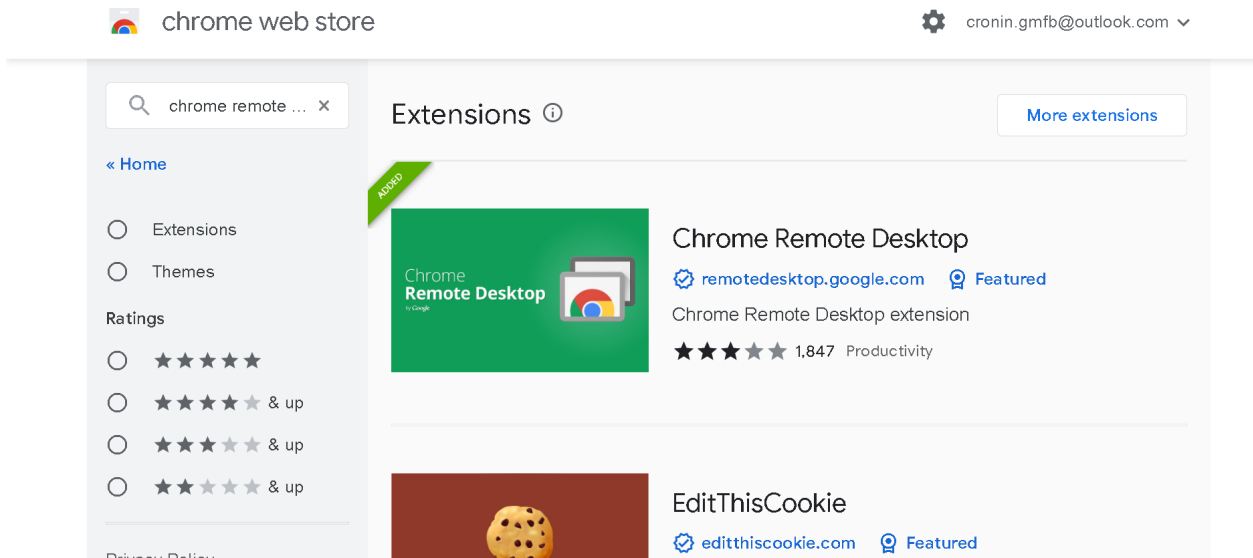
On your eye gaze device, you have to install chrome on the device. You or your caregiver can do it. Once chrome is installed, sign in under the account you create with Google.

After you sign in, you must add the extension Chrome Remote Control.

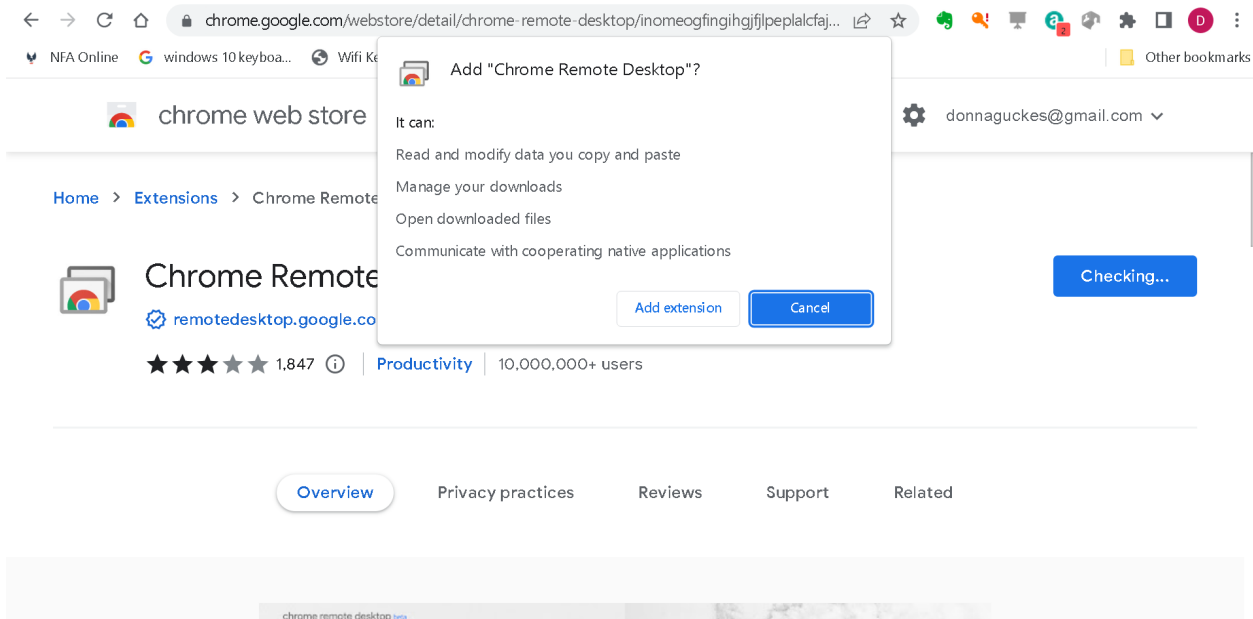
To add this extension, open the chrome browser and search for “Chrome Extensions.”

The Chrome Web Store should be the first link. After entering the Chrome Web Store, use the search bar on the left of the screen to search for “Chrome Remote Desktop.”

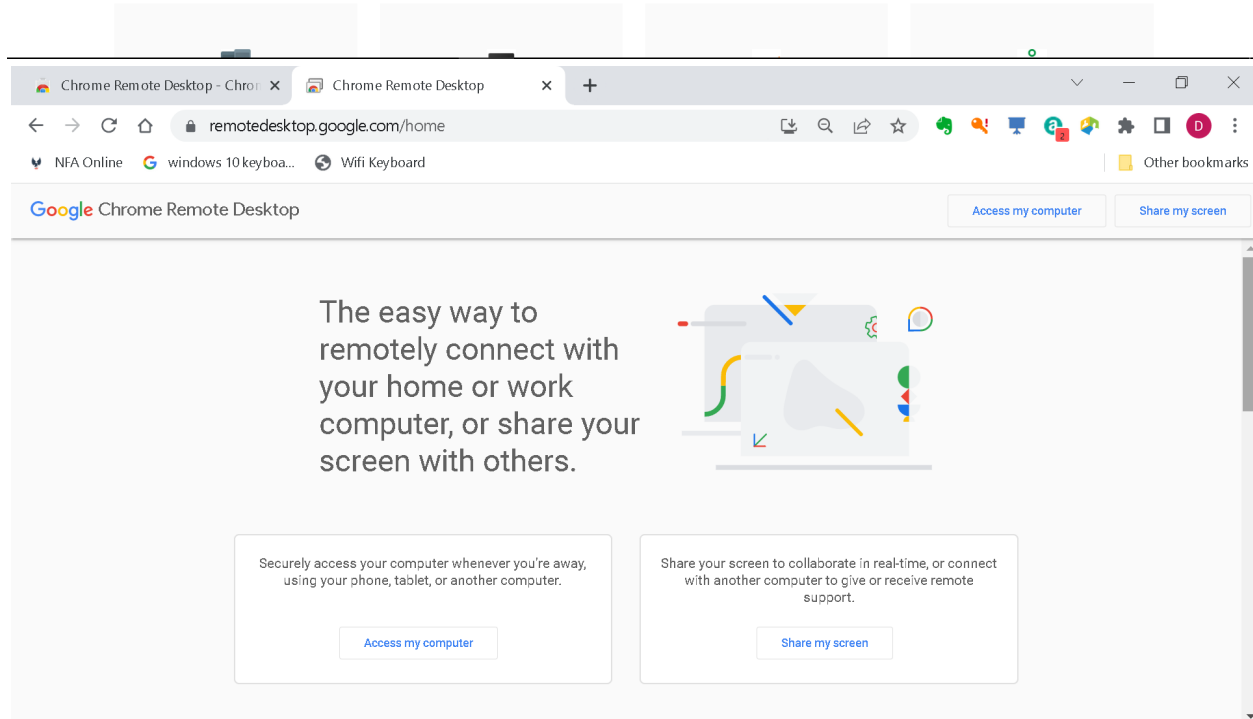
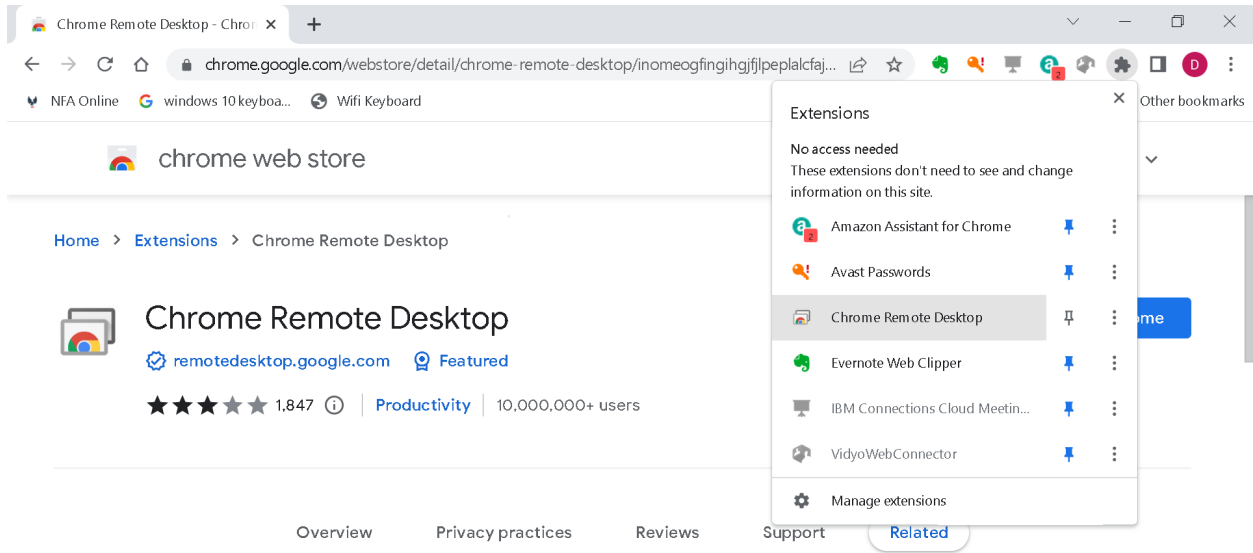




After opening Chrome Remote Desktop, click “Add to Chrome.” A dialog box will pop up; click “Add extension.”



Once the extension is installed, you can access the extension from the Extensions icon to the right of the search bar in the browser. (Look for a puzzle piece icon) After opening the extensions, clicking on the Chrome remote will open a new window.

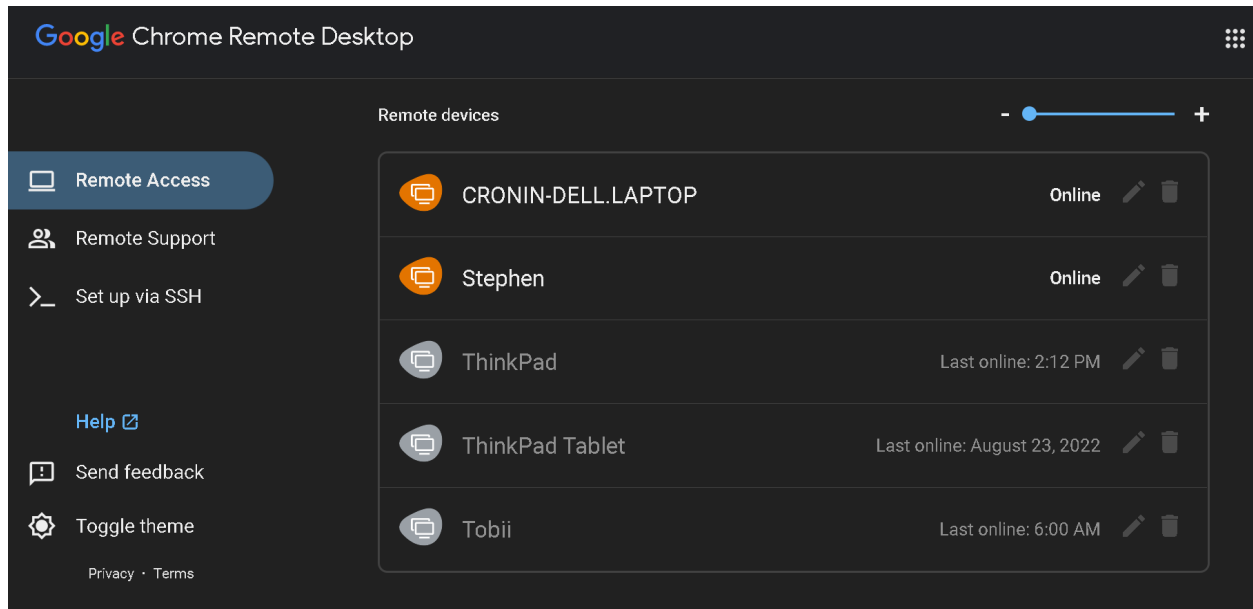


Once the chrome remote extension is open, click “Access my computer.” This will open to a screen with a box that says, “Set up remote access.” You’ll want to click “Turn on.” You’ll be asked to name your device; this comes in handy if you set up multiple devices. Then, you’ll need to enter a 6-digit security code.

(Once set up, a box can be checked to remember the code, so you don’t have to re-enter it every time you log in.)

Once the pin is set up, you'll be returned to the Devices page. If you are currently on the device, it will be listed under "This Device."

Below is what it looks like with multiple devices in use.



From this page, you can remote into any of your set-up devices, see the screen and interact with it.

If you need to change the name or pin for your device, you can do so by clicking on the pen icon next to each device name. If you wish to delete a device altogether, you can do so by clicking the trash can icon.