[Music]

Hello! You've made it to week three. Congratulations!

I hope you've been enjoying things so far. This is maybe my favorite week that we're gonna do because we're really going to focus on some tools and techniques, some hands-on stuff that you can use. And we're gonna break this into a bunch of different lessons. They're a little bit shorter each but we've got a bunch of stuff to cover.

So, this first lesson is in our verification and debunking module here, and I'm really gonna focus in on:
1. some some overall guidance for verification of content online and then
2. we're gonna look at photos and videos.

All right so let's talk about some of the principles of social media verification. This is adapted from information that Claire Wardle from First Draft has put out there.

The first thing is - you need to think about whether you're looking at the original piece of content. One of the things that happens online is that you know somebody shares a photo and then it's it's taken, it's downloaded it's copied and it's put up everywhere. Especially true with videos as well, people are gonna take the video and real upload it themselves.

So can you find that original first piece of content and who shared it? Really important that's that second piece source who captured it. The person that you see sharing something, there's a very good chance they're not the person who took that photo, who shot that video, you know, that is a really big cornerstone piece of all this.

So you need to find that original image or video, you need to find that original source. And that can often take a fair amount of time.

Last two things that are really important our date and location. One of the most common types of misinformation that we see online is - you know - say a real photo taken and re-shared by someone recently saying 'hey this just happened in my city five minutes ago'. But in fact the photo is four years old. So you need to make sure that the date and the location are confirmed, as well as the source and that original piece of content. Alright, so how do you go about doing that? Well let's talk about images and video. These are some of the most common and powerful types of misinformation that you're going to see online.

Some basic tips that I have for you here: the first thing is, again, you need to find the source. The person who actually took the photo, who took the video and get them to send you that original footage, that original photo, from their phone or from their camera. And I'm going to show you why that's so essential in a second.

But, please remember that this is really, really important. You need to find the person, you need to talk to them, and you need to get them to send you that and any other photos and other footage they shot. When you're looking at that actual photo or that actual video, there's so many clues in there. If it's a video what language of people speaking is there, a particular accent, are there street signs, are there license plates, how are people dressed. You know what can you see taking place in terms of any key people, who are you're interested in. These are all amazing clues and you really need to dissect what you're looking at.

The other thing that you know you can also do is, you can look at weather reports and you can try to figure out 'well is this late in the day, is this early in the day, is it raining there, was it raining in that city'. So you're really taking on the approach of a detective to look at every single clue that's in there. And that's really important.

The other thing that is super essential and you can use it for both photos and video is reverse image search. So, for example, Google Offers this: there's also a service called TinEye that offers it and so it's really important that you use this. This is one of the most useful tools out there. And basically the way it works is that search engines, in addition to kind of indexing and finding webpages and looking at the text on them, they do the same for images, So, if you go to the Google image search which is that first image there and you click on the camera (you see where my cursor is?).

If you click on that it pops up a menu where you can either paste in the exact location of an image, so not a web page but the location of the image itself, where the file is. Or you can actually upload it from your computer and then once you do that Google or these other services are gonna scan everywhere else they have found copies of that image. And the reason that this is so useful is that, it will show you where else line that image is, who else has shared it, how is it being described.

That example I gave you off the top of an old photo being reassured as new, reverse image search is probably the best way to figure that out. Because, if somebody says 'yeah I took this photo ten minutes ago' and it shows what's going on in the city, but you do a reverse image search and you see that exact photo has been online for five years, you know that it's not true. So reverse image search is super important.

Second thing that's really important, and this is in particular why one of the reasons why we're asking you to find the person and get them to send you a copy of that original photo to you, is that in addition to all of the clues you can see like license plates, street signs, landmarks, there's also the data that's embedded in the image itself.

When a camera takes a photo, there is data that is put into the file and the way you can see it is by using what's called an 'exit four'. And so this is an example of a photo I took years ago. It was taken with an iPhone 4s, we can see here, we can see other information like the date and exact time it was taken, we can even see latitude and longitude, the exact location I was and this is like the Holy Grail.

If you get an original image straight from a camera, data will be there. This kind of metadata. But, not everybody will have location, not everyone will give you lots of information. So sometimes you get a lot of exit data and sometimes you don't get as much. But the thing I want to emphasize to you is

that, if you ask somebody to send you the photo directly from their camera and they say they've done that and you put it in an exit reader and there's no metadata there, that means it's not originally from their camera. Something has happened. It has been uploaded or something has changed the metadata. And that itself, the absence of data can be a signal.

A tip related to this is that, anytime someone uploads a photo to Twitter or Facebook or Instagram etc. the metadata is stripped out. So, if they send you
something and it has no metadata, well chances are this is not the original photo.

All right let me give you a quick example of what this looks like at practice. So, I saw this tweet of a display in this guy's claiming it's in Florida. And, we wanted to figure out - is this real?

So, what we have here are few clues: one - we see him saying it's in Florida. So he's claiming that. And then two - if we look at this we see this sign which is a sign that is only used at Walmart. And we can also see a little Walmart logo up in here. So, this guy is claiming that this display was put there in a Walmart, in Florida.

And the question is: this real or is this also recent?

So one of the things I did was a reverse image search and we can see here that I don't really get any results. I don't see where else online this image has been. Here's the image here's my results. And so that's a sign that 'Yes, okay. Maybe this actually is a recent photo'. And then, I contacted the guy on Twitter and I asked him to send me that photo which he did.

I put it in an exit reader and we have the camera, we have the date the exact time, we have a large file size which indicates that its original. So now we know it's not really anywhere else online, we know that the exit data is there, we know that he's claiming he took the photo and, of course, we asked him which Walmart, he was in and he told us that. But the other thing that I could do is, I can compare the date and time in the exit data to the date and time of his tweet. So we can see here that there's about a 14 minute difference between the metadata, say when it was taken, and the tweet being sent, which would seem to confirm that he took the photo and then shared it on Twitter.

Now remember one of the things about everything online is is metadata can can be tampered with it can be faked but the average person is not going to do that so if you're if you're able to confirm that he is in Florida and he did go to the Walmart if you're able to confirm that there is a display there by calling the store then obviously you're not so concerned about someone manipulating the metadata so as always getting those multiple sources is really important.

The last thing I want to emphasize with photos and videos is a fantastic browser extension that you should be installing. It's called the InVID browser extension. This is the logo over here.

It's in the Chrome extension story. You can just search online for InVID and Chrome and you can install it.

Everything that I just showed you, reverse image search, looking at metadata and all of that, can be done through this one extension. It has different elements here of the metadata. It has different elements for reverse image search.

So this is a one-stop shop for verification for photos and video, in particular it's really good at extracting metadata from videos as well. And so, it's a really, really useful tool. Just to give you an idea here: on the metadata site you can put in an image or a video and it's going to extract that exit data for you.

And also when you put in a video, the thing that it does for you is it extracts thumbnail images from the video itself. And then it gives you the option, you can see here, to do reverse image search on Google, on Yandex, on Twitter.

So, these are all options that you can use to actually search and see where else if video is online. Reverse image search works on footage from a video too and InVID puts it at the touch of a button.

Last two things I want to highlight right now in images and video is that
InVID also has a great advanced twitter search function, which you can use to search specific accounts and within specific locations and date ranges.

Then, the last tip here, is just to let you know, this also works for Instagram, is every single YouTube video, an Instagram post has a unique code that's part of its URL.

So where I'm pointing here with the arrow, everything after the equals sign is the unique code and if you take that and you search it in Google or you search it on Twitter, you're able to see where else people have written about or reported on that particular video or Instagram post.

And in particular on Twitter, what I like to do is see the first person who shared. Maybe they're the person who shot the footage, maybe they know the person who shot the footage, but it's always a good clue.

So remember exit data, remember reverse image search, remember the in vid plug-in which is amazing, and again you've got to find the person. You've got to find the original image or footage. You've got to find the person who took it.

You want them to share that, and any other footage, and photos they may have with you. And then, you're going to run through some of your tests like reverse image search, exit data enter and try to triangulate and confirm what you can actually see in the footage and actually see in the image all right.

Thanks.

[Music]