

# Pitch with Production Value:

How to script, capture and edit quality video







# Goals

What will you learn today?

- Elements of a compelling **script**
- **Capture** quality audio and video
- Be aware of tools to **edit** & deliver
- Breakdown some recent work



# About this talk

Reaction to the NSF Convergence Accelerator Video Guide

- Video advice was provided by the National Science Foundation to teams competing in their Convergence Accelerator competition in a 12 page document.



# Creating a Project Marketing Video

Video is a highly effective communication tactic when envisioned and executed properly. Each team will create a short project marketing video, between 2 – 4 minutes, to be used to provide a high-level overview of the team's project and to engage new stakeholders and audiences. The project marketing video will be featured on [NSF's TIP Directorate YouTube channel](#), NSF.gov and external events.

It is vital that your team invests time and resources toward this video product. Additionally, the NSF Convergence Accelerator encourages the teams to use project funds to develop this product. Project funds may be used to pay for a video production vendor.

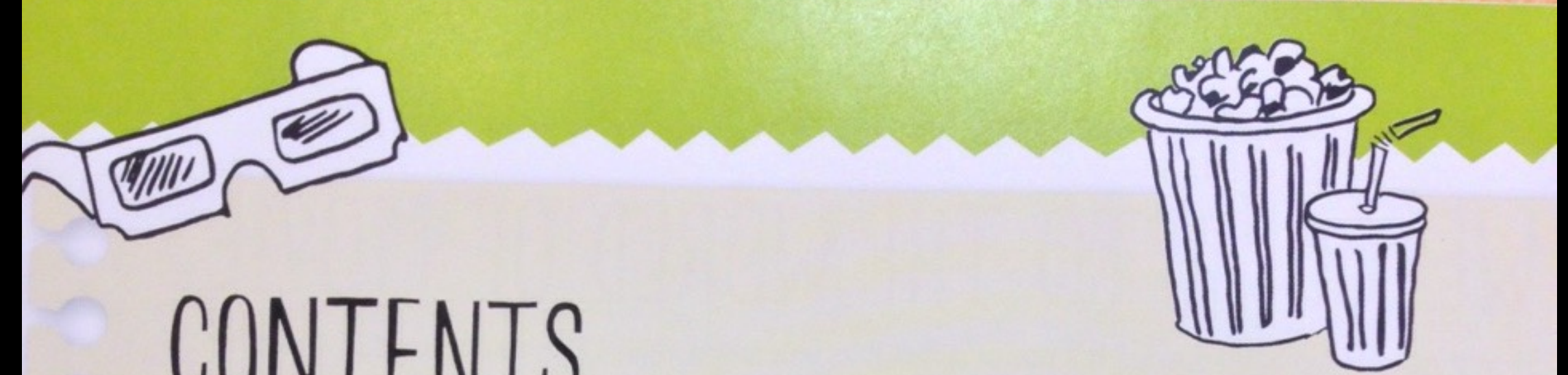
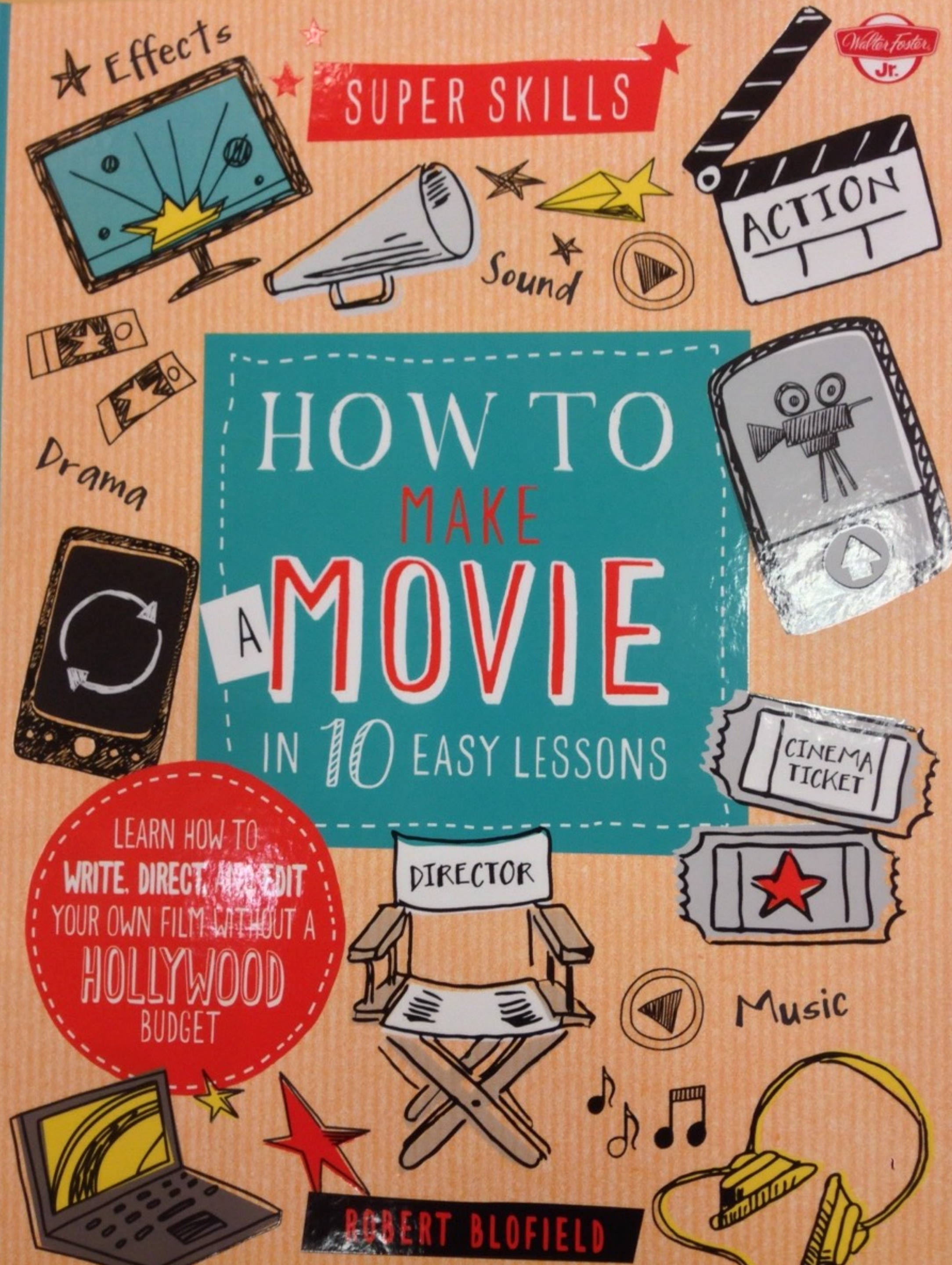
### **Best Practices for Creating a Marketing Video**

The following insights are provided to help you improve your video communication skills, avoid common mistakes, and ensure your team's project marketing video is successful.

The team can also create optional demo videos and this guidance also applies to those videos or any videos created by the team. There are three areas the team must focus on in order to create a successful video:

- I want to echo helpful parts of this document
- I will poke fun at some parts and this kind of talk





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# MOVING SHOTS

Now that you know the basics about cameras, let's talk about shots. We've discussed what certain shots look like and how you go about creating them, but the ones you've looked at so far are all static. This means that the camera doesn't move. To make your film look more interesting—and more professional—you'll need to get your camera moving. There are three main ways to do this.

## Shot 1: THE PAN

**WHAT IT IS:** Panning is what we call the camera motion when we move horizontally across a scene.

**HOW TO DO IT:** If you were to stand still and film a scene while carefully moving the camera from left to right, you would be "panning" through the scene. You can also use this technique to pan in time with a character's movements to better follow them through the scene.

**THE EFFECT:** This shot gives a little more information about the setting than a static (non-moving) shot.

**HANDHELD OR TRIPOD:** Either is fine, as long as the camera operator stays stationary and simply turns the camera left to right or vice versa.



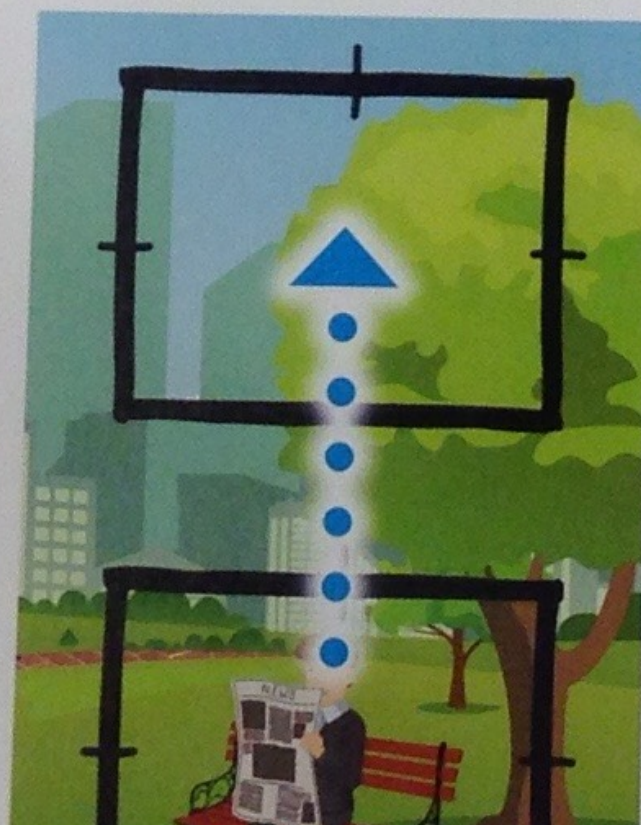
## Shot 2: THE TILT

**WHAT IT IS:** Tilting is simply the vertical version of panning.

**HOW TO DO IT:** The camera operator stays stationary while the camera is tilted up and down toward the sky or ground.

**THE EFFECT:** This shot is most notably used for creating high and low angle shots.

**HANDHELD OR TRIPOD:** Either is fine.



## Shot 3: THE ZOOM

**WHAT IT IS:** A zoom is when the image appears to become larger or smaller, depending on whether the camera is zooming in or out.

**HOW TO DO IT:** This is a feature built into all video cameras. The camera is held in one position during the zoom.

**THE EFFECT:** This technique can be used to show the importance of an event or item and to help guide the viewer's attention.

**HANDHELD OR TRIPOD:** Either is fine, though it works best when the camera is held steady, such as on a tripod.



SOME CAMERAS HAVE FISH-EYE MODES THAT ALLOW THEM TO ZOOM OUT TO ULTRA-WIDE SETTINGS, RESULTING IN A DISTORTED CIRCULAR IMAGE.

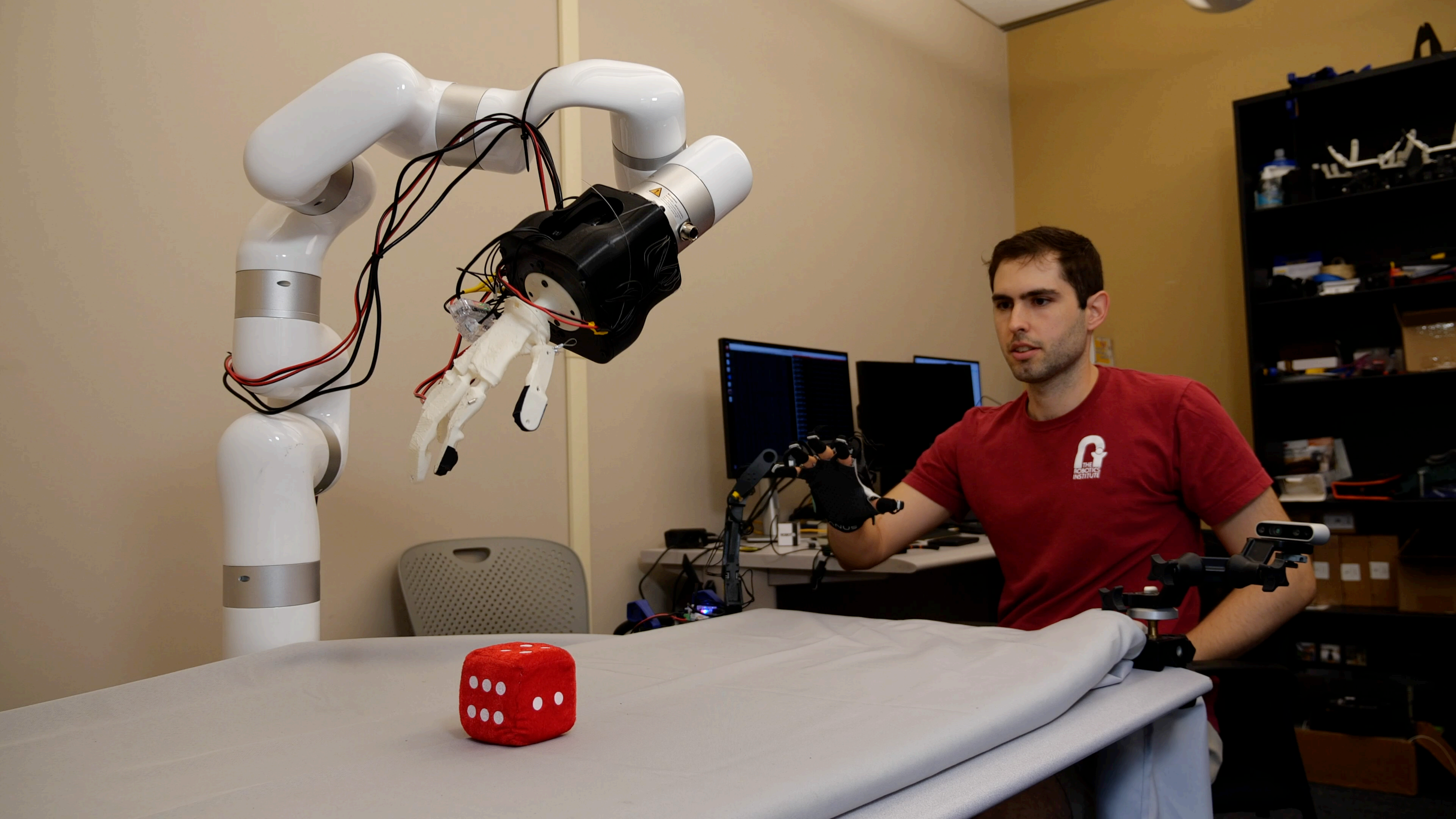
## "WOW" FACTOR!

MANY STUNTS ARE FILMED BY MOVING THE CAMERA VERY FAR AWAY FROM THE ACTOR AND ZOOMING ALL THE WAY IN. THIS MAKES THE ACTOR LOOK MUCH CLOSER TO THE BACKGROUND THAN THEY ACTUALLY ARE. EXPLOSIONS AND CAR CHASES CAN THEN BE FILMED A SAFE DISTANCE FROM THE ACTOR BUT APPEAR TO BE VERY CLOSE TO THEM ON SCREEN.

## ADVANCED ZOOMING

By zooming into an image you slightly distort its shape. When fully zoomed out, the edges of your image can be a bit circular. When you zoom in you remove this circular effect and flatten the image. In a nutshell, you make the background look bigger when zooming out and smaller when zooming in. You can use this to set up interesting shots.







Bio-inspired robotic hand

Soft

Strong

All-over sensing



<https://youtu.be/SGgP1TtcJz8>



# The video is your headline.

Not a technical manual.

- Put in the requirements.
- Leave the audience wanting more.
- 5 minutes of video can't have everything found in a 20 minute presentation.
- Actually it can have a lot if you plan and craft a good script



# Questions you need to answer to write

- **Why** is your solution compelling?
- What is the **driving need** for your solution and how will you meet it?
- When you succeed, what is the **benefit**, and for whom?
- Don't be shy—make your argument **confidently**



# Concise, focused information is critical.

Less is more.

- **Plan** and write a powerful story, succinctly delivered.
- Be creative with how you **visualize ideas**.
- Visualize your problem
- Visualize your data
- Visualize your solution



# Script

See / Hear

## Example of a script:

Sc#	We See:	We Hear:
1	Images of NSF achievements and activities on the frontiers of science and technology, 'in NSF brand' with a dynamic graphic treatment. On screen text w/NSF logo: 7 Decades Advancing the Progress of Science	<i>Music up...energetic, optimistic...after a few beats, we hear DOUG MAUGHAN off screen (OS).</i>  16:42:36:09 MAUGHAN (OS) The National Science Foundation is supporting...convergence research...
2	Transition to DOUG MAUGHAN on camera (OC) w/lower third ID: Douglas Maughan Head, Convergence Accelerator National Science Foundation	16:36:18:02 MAUGHAN (OC) The goal of the Convergence Accelerator is to have a powerful, positive impact on the American people.



# 3 column script + storyboard

## Script

Title: Project Title  
Client: Client name(s)

Time	Visual	Audio
0:00 0:02	Descriptions of imagery, image/camera movement, style of animated of type over time.	<b>Narrator:</b> <b>Music:</b> <u><b>SoundFX:</b></u>
0:05	Includes type that is seen, but not spoken.	
0:10		
0:20		
0:30		

Visuals and audio over time in text

TITLE.....  
DATE.....  
PAGE.....OF.....


Sketches: Shot size, visual details



# Good Advice from the NSF

- **Practice** before getting in front of cameras.
- Avoid competing visions. Stick to a strong blueprint.
- Do a “table read” before production to accurately assess program length, storyline and **performances**.
- It will be time well spent, and you may be surprised at the improvements achieved through this process.



# Talking to a camera

Pretend you are talking to 1 person.

- You're not looking at a lens...
- Imagine you're speaking to someone who likes you.
- Smile. Relax. Speak to one person, not a roomful.
- Do as many takes as necessary.
- Choose interview style and make it consistent.



# Slides only?

Take full advantage of what a video can do.

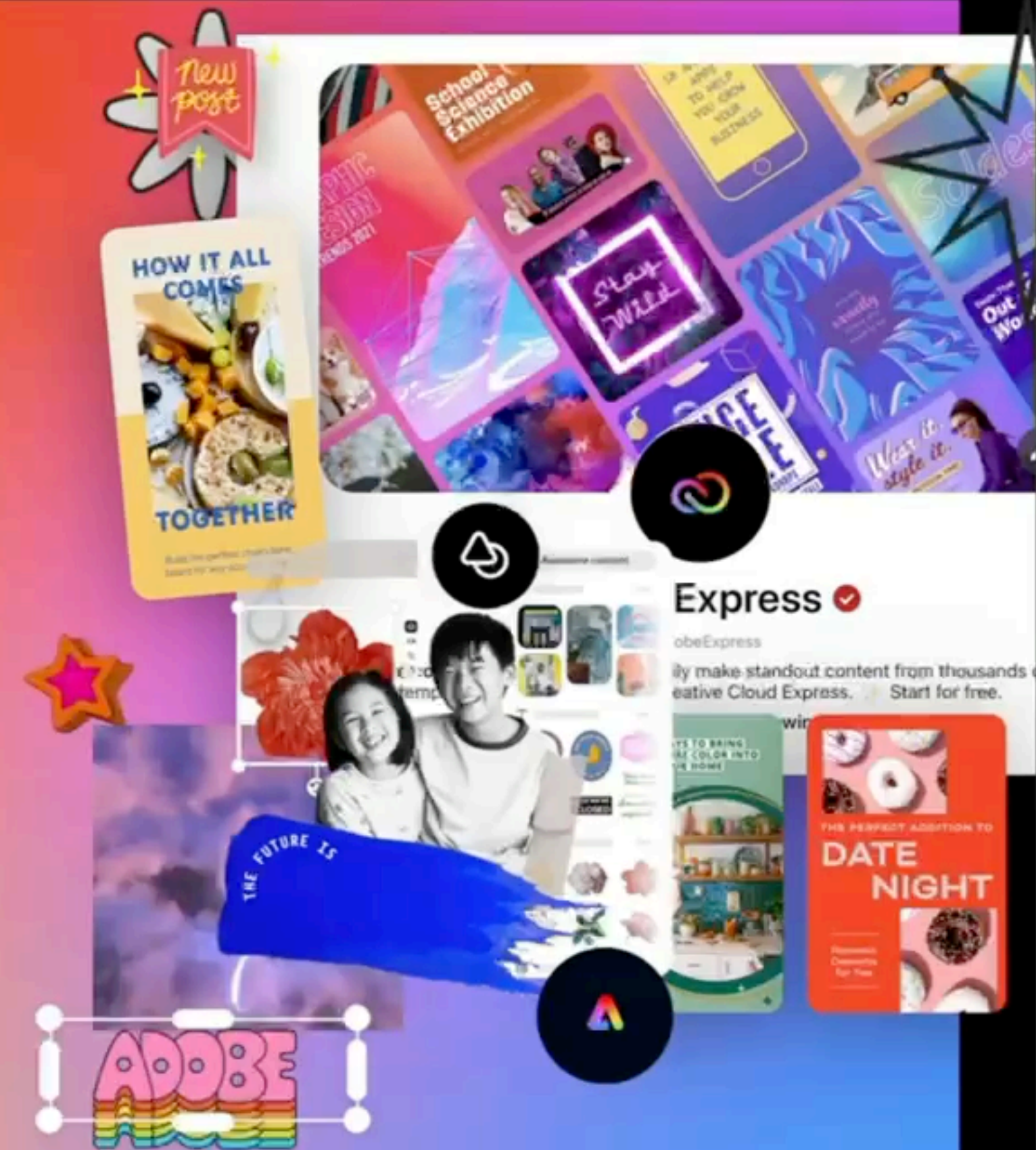
- Are you making a **video** or simply screen capturing slides?
- ScreenFlow does an amazing job at the screen capture part...
- But, your audience wants more than slides and a tiny thumbnail image of you!
- Example of slides only via Adobe Max next





# SOCIAL MEDIA GOLDEN RULES

1. Scaling word of mouth is our **ultimate ambition**
2. **Collaboration** increases opportunity
3. **Participation** increases engagement
4. **Engagement** drives reach
5. Reach drives **awareness**
6. In most people's eyes, the '**best product**' is the one they know









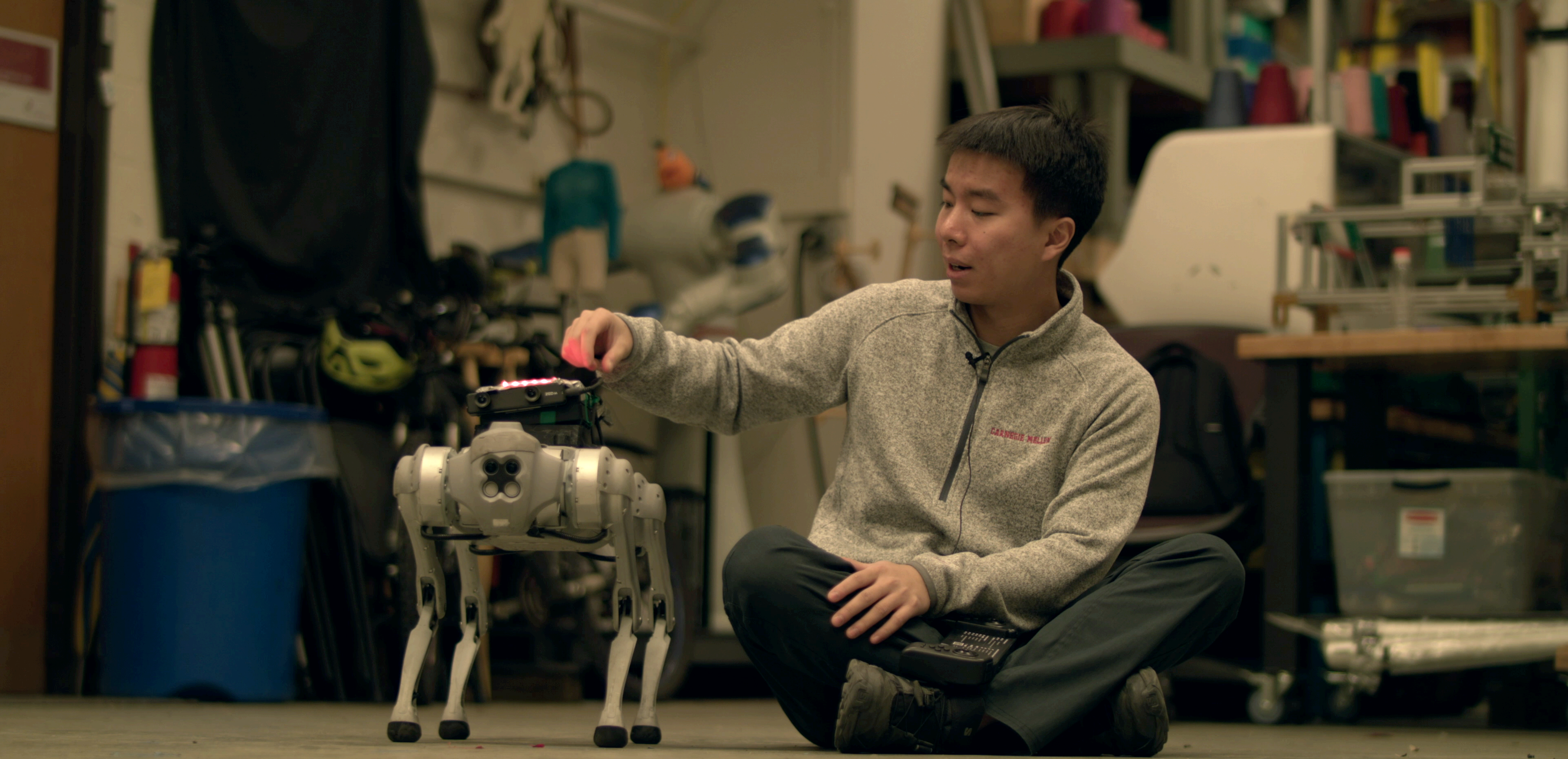


Pexels,  
Antoni Shkraba



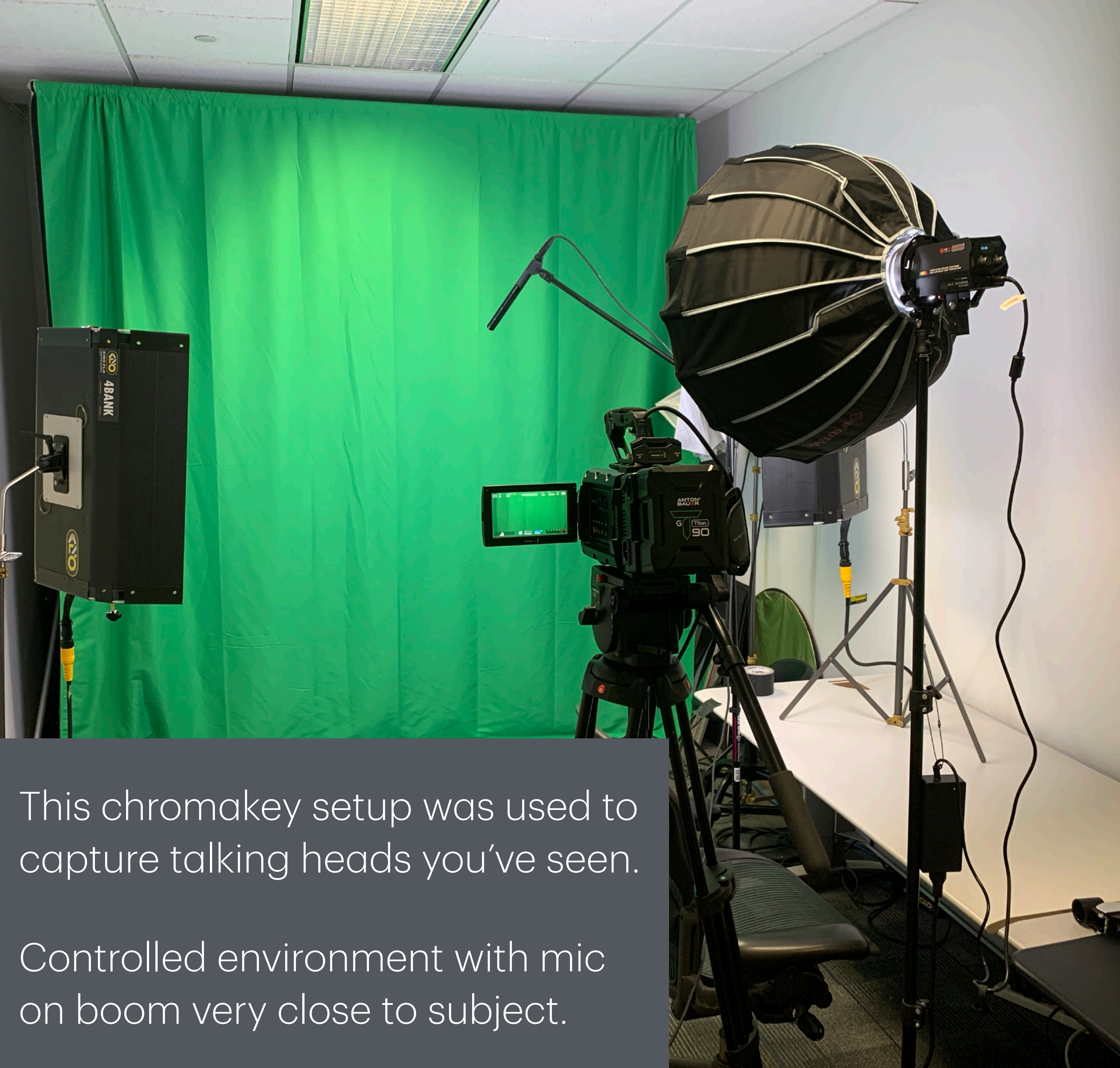
Pexels,  
Mizuno K





<https://youtu.be/oyMf-yaB2d0>





This chromakey setup was used to capture talking heads you've seen. Controlled environment with mic on boom very close to subject.





# Stock video as a design element







Pexels

Videos ▾

solar



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sun

energy

solar panels

renewable

home

solar power

solar system

renewable

# Free Solar Videos

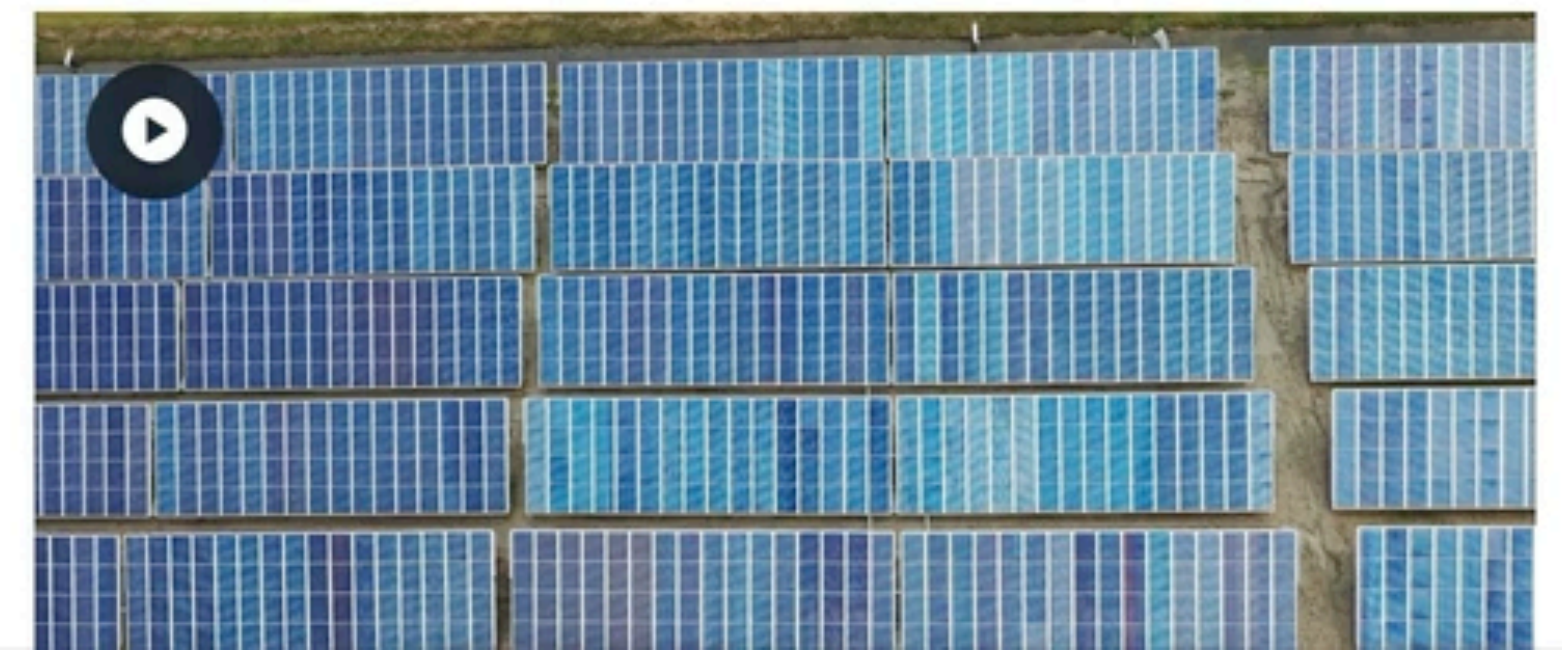
Photos 2.4K

Videos 810

Users 2K

Filters

Popular ▾





# Also in the NSF Document

Lol.

- If possible, enlist support from your organization. Most universities have media departments...
- Ingratiate yourself... they have the equipment and (often) eager potential crew members. University film schools are full of talented people who would love to add a prestigious project like yours to the resume. And...buy doughnuts. (That always helps enlist volunteers.)



# IDeATe

## Equipment in Hunt A29

- 2 nice **Canon DSLRs**, tripods, lighting kit, microphones, cell phone tripod mounts...

### Canon EOS R6 Mark II Mirrorless Camera with Stop Motion Animation Firmware

BH #CAER62SMA • MFR #5666C038 | ★★★★★ 231 reviews | 117 Questions, 138 Answers | [Share](#) | [Print](#)



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## IDeATe

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## IDeATe Lending Collection & Office

The IDeATe Lending Office in Hunt A29 has an extensive collection of equipment that can be browsed via the [University Libraries Catalog](#)—here's a direct link to the [IDeATe Lending Collection](#). Borrowers must have their Carnegie Mellon ID card ready to present when borrowing an item.

The IDeATe Lending Collection is a university-wide resource consisting of audio/video, photographic, and sound recording devices such as digital cameras, video recorders, microphones, and projectors. Items are designed to support the entire Carnegie Mellon University campus community and may be borrowed by any students, faculty, and staff at Carnegie Mellon's main Pittsburgh campus.

The IDeATe Lending Office is located in the basement of Hunt Library directly across from the elevator, in room A29. **Check the [current hours](#).**



# B-Roll

Gathering your own video clips

- Stabilize your camera.
- Think about how the shot is composed.
- Should it be a static shot?
- Pan, tilt or physically move the camera nice and slow.



# Audio is King

If you audio sounds bad, people will tune out.

- You need an audio strategy.
- Avoid noisy areas outside and use rooms with carpet/rugs.
- Can you use a wireless lav mic?
- Attach a hidden recorder to your speaker?
- Use your phone at your desk?



# Audio is King

If you audio sounds bad, people will tune out.

- It is possible to use the audio from a well recorded source instead of the audio recorded with a poor built-in mic
- This is called “dual system” and putting them together is easy
- Adobe Premiere makes this very easy using the **synchronize** option in the timeline. After selecting the two similar audio sources, it will use the poor audio to sync the good version.





# Rule of Thirds

a basic composition guide



# Editing

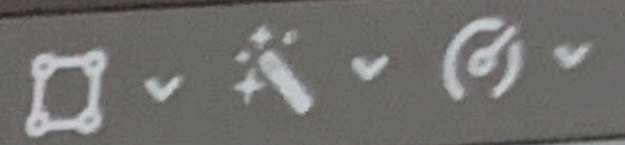
Where it all comes together.

- Final Cut Pro
- Adobe Premiere and After Effects
- ScreenFlow
- VN Editor and CapCut are two decent free video editors



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Published Parameters

Cole Herber

Undergraduate Research Assistant

Carnegie Mellon University

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Alex-Production...

Alex-Productions%20-%20Inspiring%20Uplifting%20Corporate%20%7C%20Workplace

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# ScreenFlow

## Live Capture and Edit Demo

