

Photo from the field – how to?

How can AI help? Picture generators

3rd role of universities:
Development projects

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What are the worst
photos from your
trip?



IMAGE NOT FOUND

The photos you did not take.

What are the worst photos from your trip?



The photos you did not take.

Why take photos/video?

- You are the only person who can **now** take photos
- **THIS** moment is unique and **unrepeatable**
- Think about others. They are not in the field with you
- You know the topic. You know what is important for your trip/research/work
- Without the photos, it is really difficult to present your work to the audience



Notes from the field tips

- On November 21, at Kaande community, we found a *Syndontis* 'squeaker' (*Synodontis eupterus*), medium size, good health conditions
- On November 21, at Machu community, we recorded the Mahuluhulu (*Strychnos spinosa*), not fully ripe, size of hand
- On Thursday, we observed the health conditions of *Capra aegagrus hircus* with visibility of season-feed habits

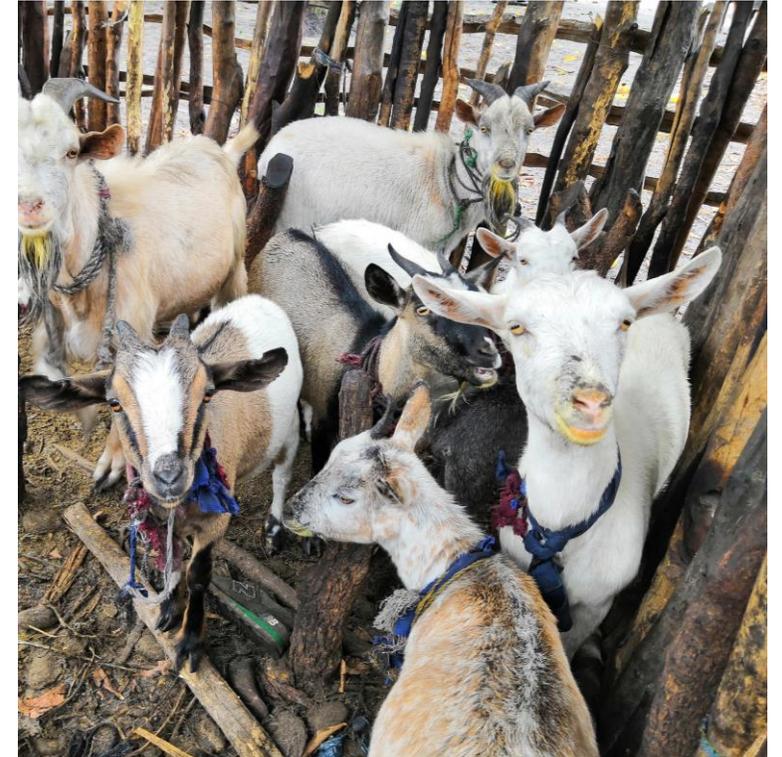


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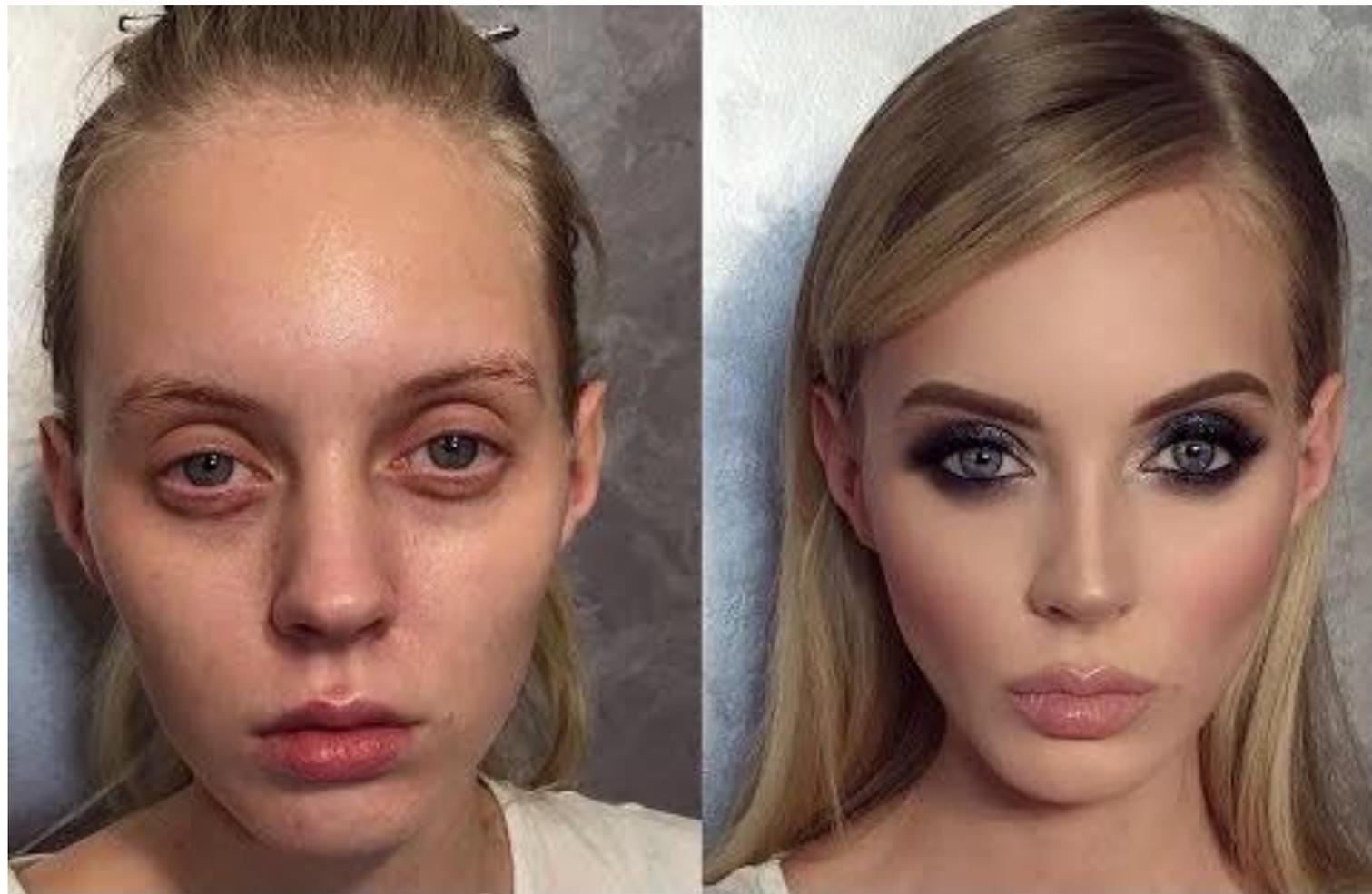


Some general rules

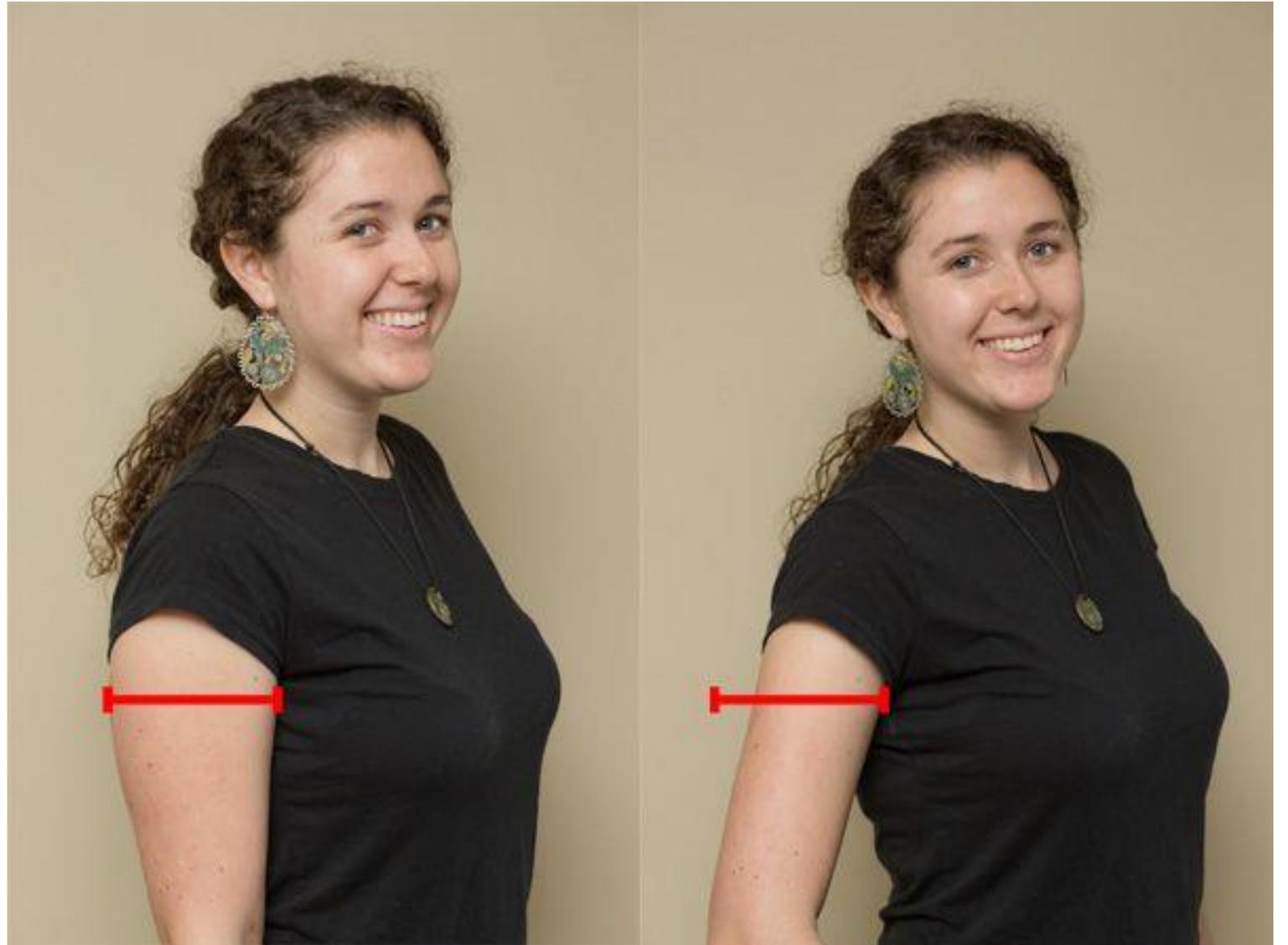
- The most important is the **light**
 - Best time is in the morning and evening
 - Always turn on the **GPS** on your device so you know the exact locality
 - If you are taking a photo of a sample, use some measurement
 - Always try to divide and **BACK UP** all the photos (online, offline)
 - When taking a photo of a smaller object (human, animal, fruit, sample etc.), try to capture it on one color, not-disturbing background
-



DO NOT
„ENHANCE“
THE REALITY
TOO MUCH



YOU HAVE THE
POWER TO
DETERMINE
HOW TO
RECORD AND
REPRESENT REAL
WORLD



Some more general rules

- Battery, storage capacity, GPS turned on, clean lenses, back-up set up
- Think about...Why? (article, socials, web news,..)
- For whom - audience? (scientific committee, the general public, your mum)
- What? (landscape, people, technology, animal, plant,...)
- The object should be in the middle of the screen (we are not artists, but scientists 😊)
- Prepare the area before taking a photo (clean, check for unwanted things, ask people,..)
- Always focus by your finger to the object
- **Do not send the photos by WhatsApp** or other messengers – decreased quality! Or set it up.

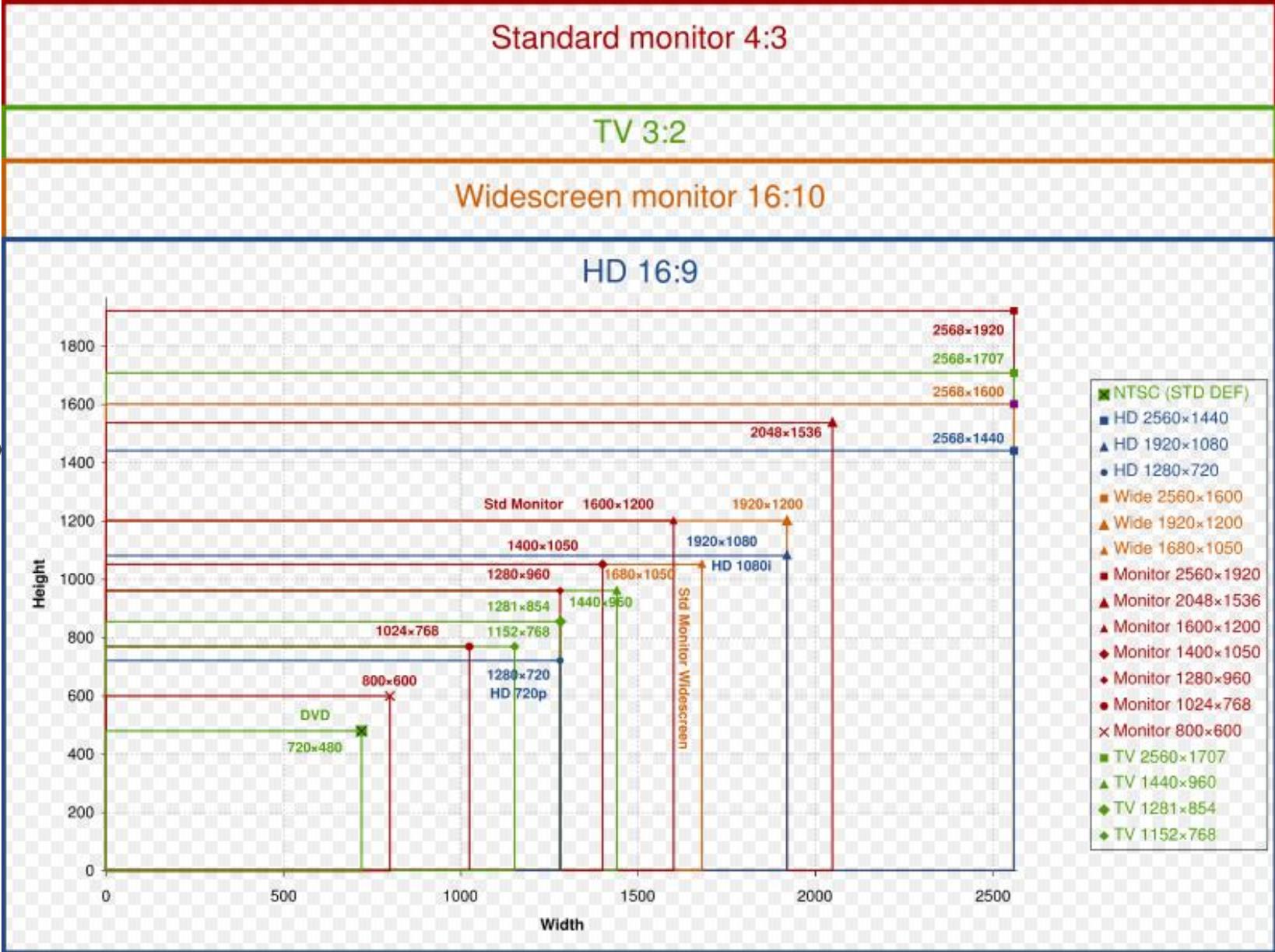


But do we really need to know all of this?

Well. No.

Not if we are using our smartphones, where all these settings are done by AI.

Even in the smartphone, we may use the PRO mode, but why to waste time...
 What is important is the resolution



Print

Image Size

3 x 5
INCHES

900 x 1500
PIXELS

4 x 6
INCHES

1200 x 1800
PIXELS

5 x 7
INCHES

1500 x 2100
PIXELS

8 x 8
INCHES

2400 x 2400
PIXELS

8 x 10
INCHES

2400 x 3000
PIXELS

8.5 x 11
INCHES

2550 x 3300
PIXELS

9 x 16
INCHES

2700 x 4800
PIXELS

11 x 14
INCHES

3300 x 4200
PIXELS

11 x 16
INCHES

3300 x 4800
PIXELS

Low res.



High res.



WHAT PROGRAM SHOULD I USE?

PAID - COMMERCIAL

- Adobe Photoshop
- Aperture
- Corel Paintshop

- Corel
- Adobe Illustrator

FREWARE

- Gimp
- ImageJ
- Picasa
- IrfanView

- SketchUp

Check the compatibility: Mac x Win x Linux

http://en.wikipedia.org/wiki/Comparison_of_raster_graphics_editors

http://en.wikipedia.org/wiki/Comparison_of_vector_graphics_editors

Some examples of photos

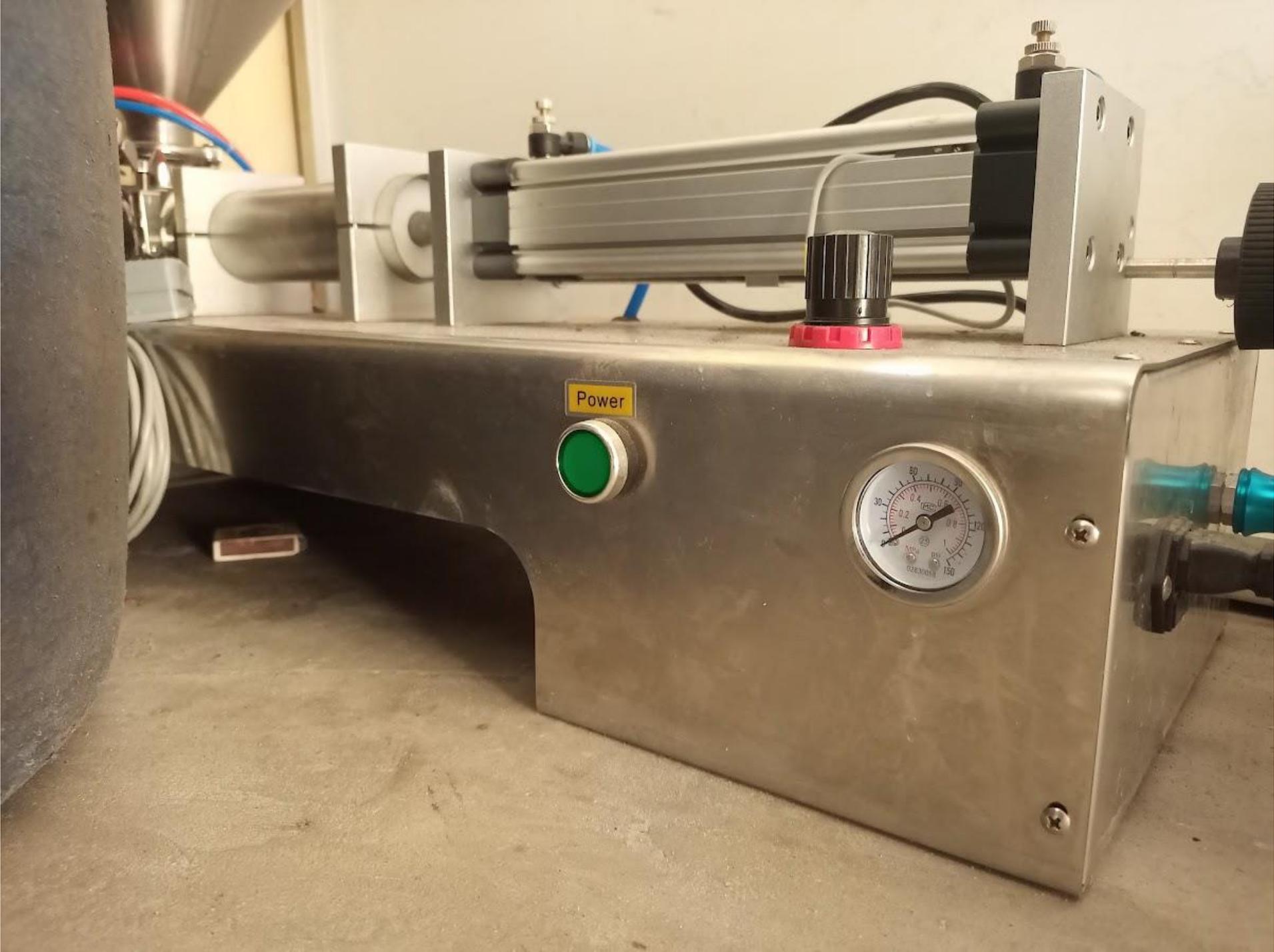




The layout/point of view is also important...

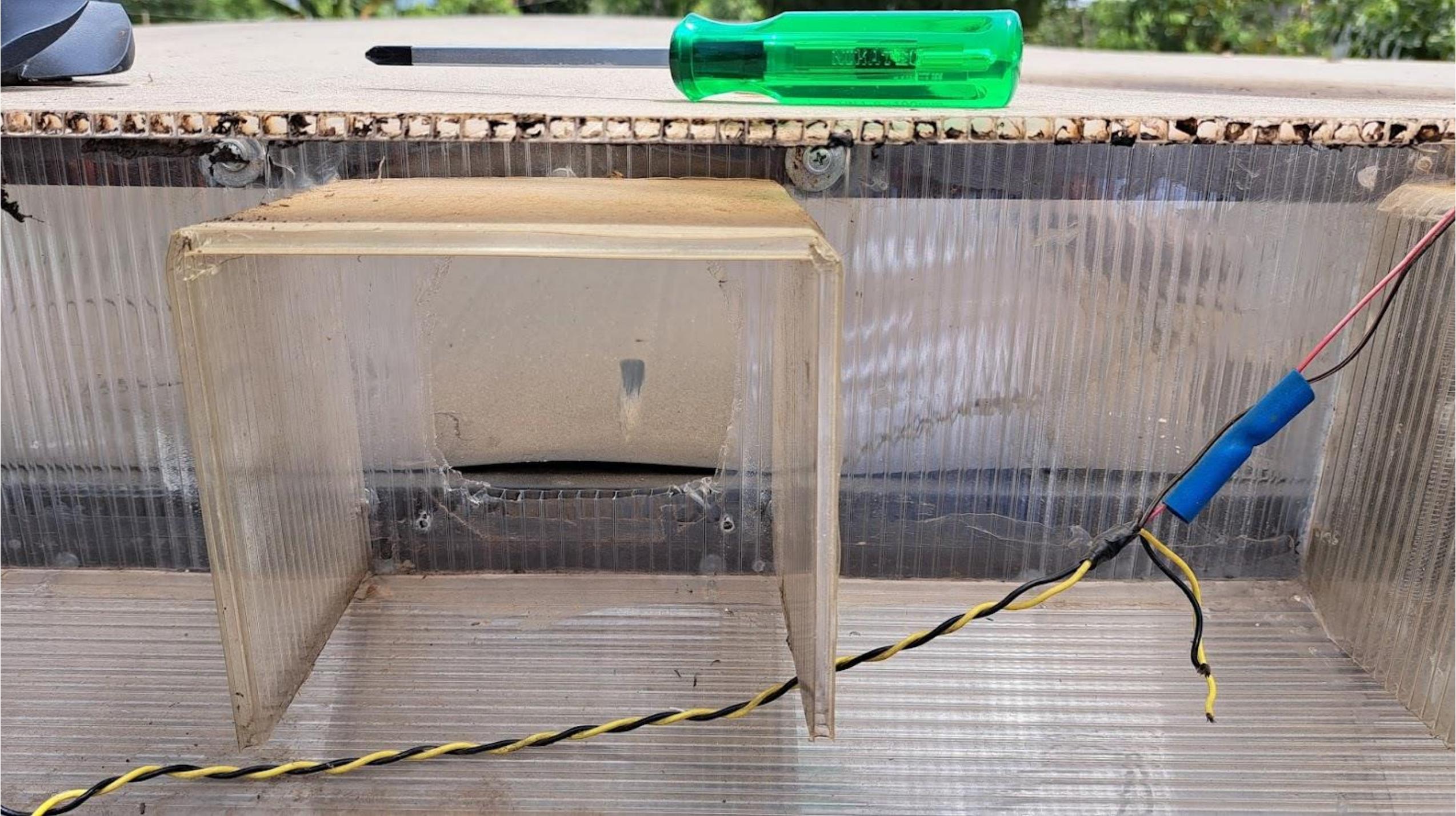
Technology













Product/animal
/smaller things















MUKĒ KĒTE
SEED



**Things and
people**





People in the field





Faculty/team promo









Group photo - normal



Group photo – wide angle



Group photo – blurry background



Picture AI generators

- Several AI generators and tools could generate or assist in creating pictures
- These tools typically use techniques like deep learning and generative adversarial networks (GANs) to create realistic images or artistic visual content
- However, please note that the AI landscape evolves rapidly, and new tools may have emerged everyday
- Here are some notable AI generators for pictures up to that point:



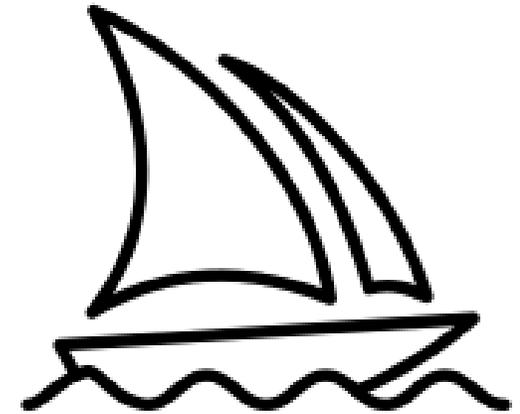


Picture AI generators

- **[DeepDream](#)**: DeepDream is a Google project that uses neural networks to generate surreal and abstract images. It's great for creating dreamlike and psychedelic visuals.
- **[Runway ML](#)**: Runway ML is a creative toolkit that includes various AI models for generating images, including style transfer, image synthesis, and more. It provides an intuitive interface for artists and designers.
- **[DALL-E](#)**: Developed by OpenAI, DALL-E is a GAN-based model that can generate images from textual descriptions. It's known for creating unique and imaginative images based on textual prompts.
- **[Artbreeder](#)**: Artbreeder is an online platform that allows users to create and explore images by blending existing artworks or photographs. It uses GANs to generate new images based on user input.
- **[HotPot.ai](#)**: AI Painter is a tool that can turn your rough sketches into detailed artworks using AI algorithms. It's great for artists looking to quickly create digital art.

Midjourney and discord

- [Midjourney](#) is a generative artificial intelligence program and service created and hosted by San Francisco-based independent research lab Midjourney, Inc. Midjourney generates images from natural language descriptions, called "prompts", similar to OpenAI's DALL-E and Stability AI's Stable Diffusion.
- Midjourney is currently only accessible through a [Discord](#) bot by direct messaging the bot or by inviting the bot to a third-party server.
- To generate images, users use the `/imagine` command and type in a **prompt**; the bot then returns a set of four images
- Users may then choose which images they want to upscale or to create variations



Discord

Lets make it easier

- By combining more AI together, we can make the results even better and safe some time
- [ChatGPT](#) + Midjourney (Discord)



SOME
AI FUN!

- How is the beer farmed in Czechia
- Annual schnitzel harvest in Germany and Austria
- Yearly Croissant Harvest in France
- The annual spaghetti harvest in Italy

