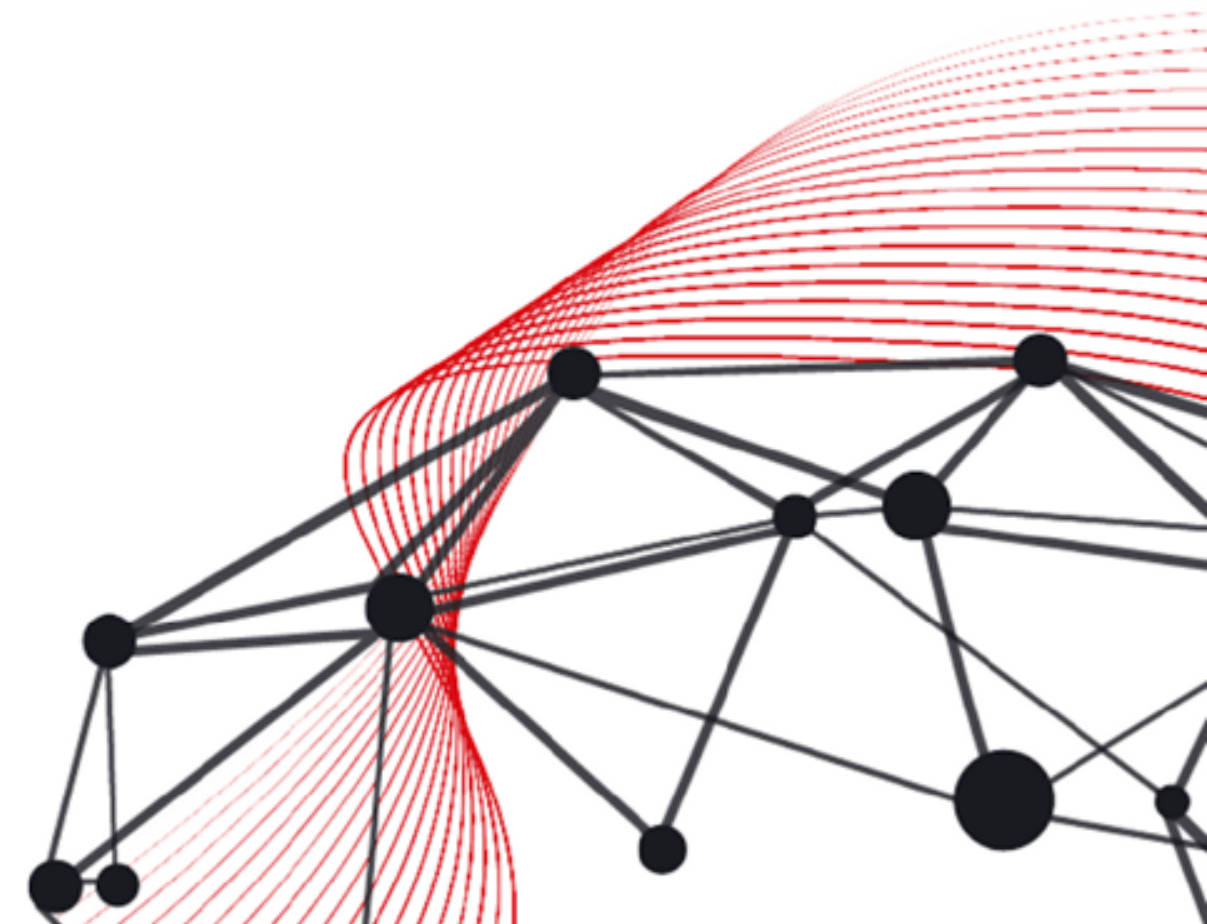# AI Media Production Lab:
Gen AI in Action
Final Showcase Session

# Generative AI realm

Gen AI techniques in content production are still evolving

Multiple players and technologies in the market are being announced across territories, and not all of them at time of writing have fully fleshed out models, capabilities and skilled teams with the experience to use them

Setting the challenge of creating a concept from first principles, involving new techniques, reinventing the way that content is produced is an appealing challenge that applies to the whole industry, and the learnings here are available to share
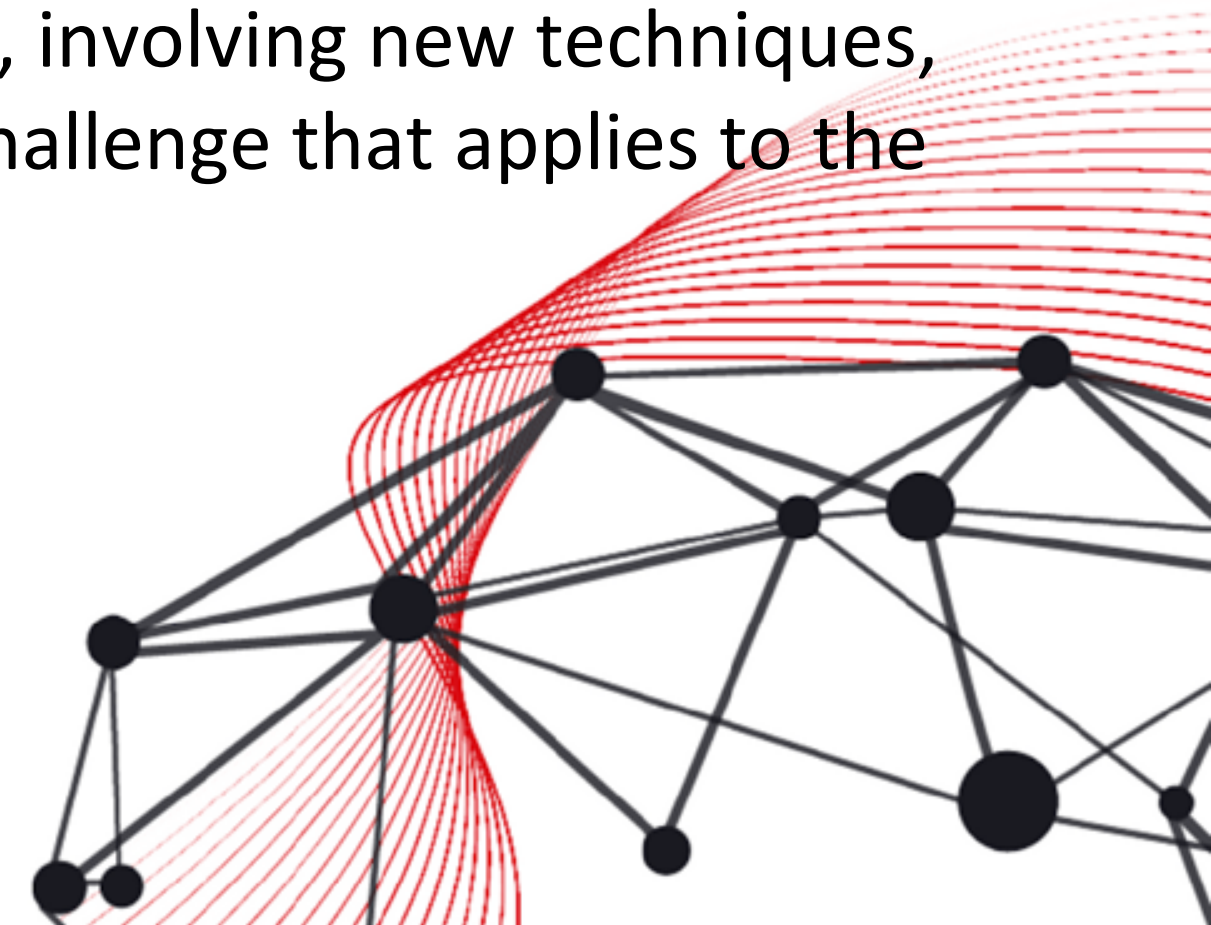
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Who is involved in this accelerator?

Creative agencies
Animators
Video editors
Graphic Designers

Technologists
Broadcasters
Producers
Technology providers

EBU OPERATING EUROVISION AND EURORADIO

IET The Institution of Engineering and Technology

itv

Rai

verizon business

yle

Pluxbox

PLANIX LABS
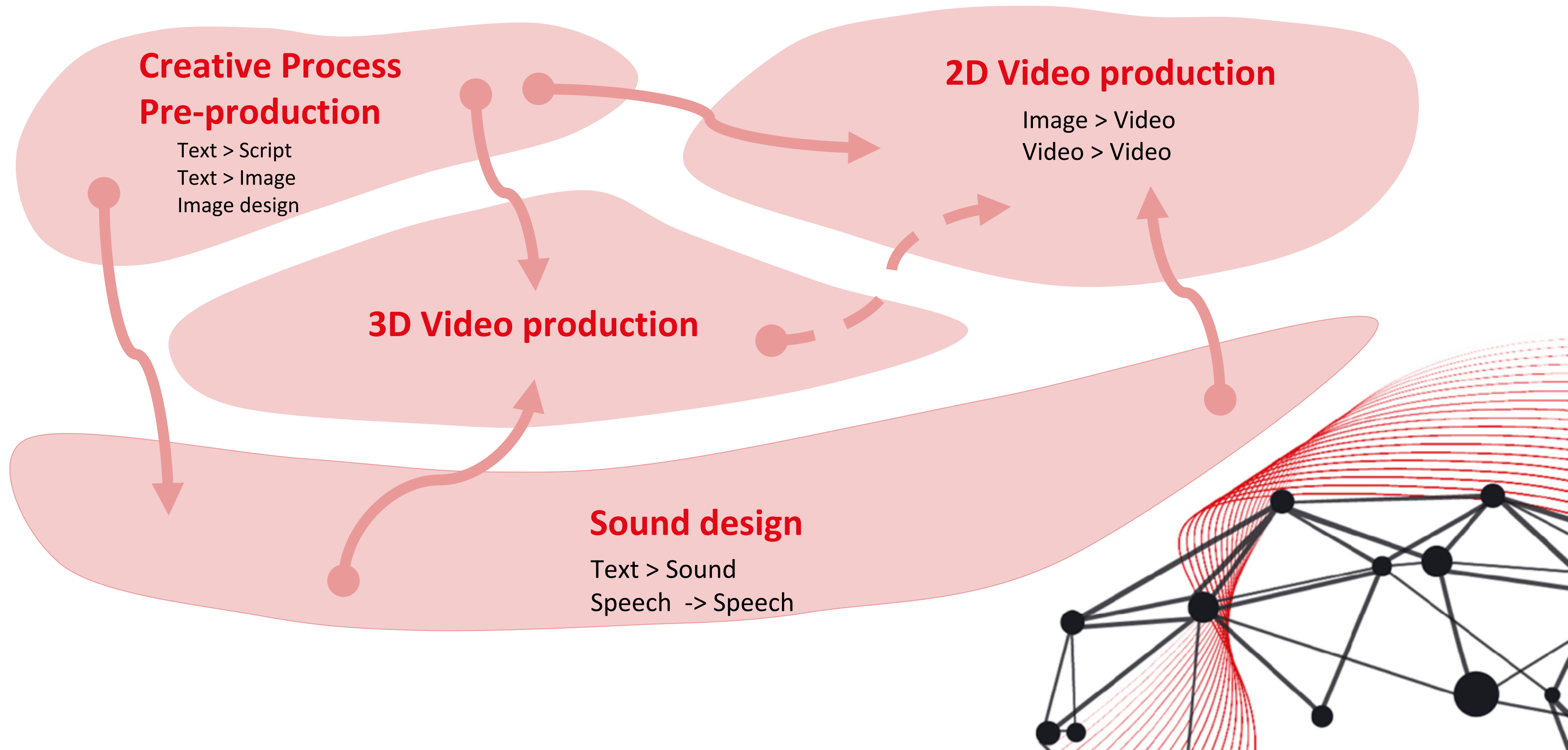
respeecher

somersault

Xansr Media

The challenge:

A futuristic take of The tour of the world in 80 days by Jules Verne re-told using Generative AI techniques

The fluid creative process - Orientating the workflows

Creative Process Pre-production

Text > Script
Text > Image
Image design

2D Video production

Image > Video
Video > Video

3D Video production

Sound design

Text > Sound
Speech -> Speech

Pre-production: Storyline and Script production

Phileas's Odyssey: 80 Days Around the Earth

By

IBC - Gen AI in Action

Date: May 25, 2024

Version 1.0

FADE IN:

TITLE SEQUENCE

NARRATOR (V.O.):
The year is 2255. Earth is a
wasteland; polluted skies, rising
seas.

Amidst the chaos, hope rises.

Phileas, resilient and determined.
PassP2, scanning for hope.

Their journey begins Across the
remnants of civilization.

Seeking survival and purpose. An
odyssey of survival and hope.

FADE IN:

EPISODE 1

INSERT - PHILEAS'S WRIST METER

PASSP2: (V.O.)
(Quirky) Maybe today we'll find
something. Keep your circuits
crossed, Phileas.

PHILEAS:
(Picking up a broken device)
Useless. Just like everything else
here.

PASSP2:
(Trying to stay positive)
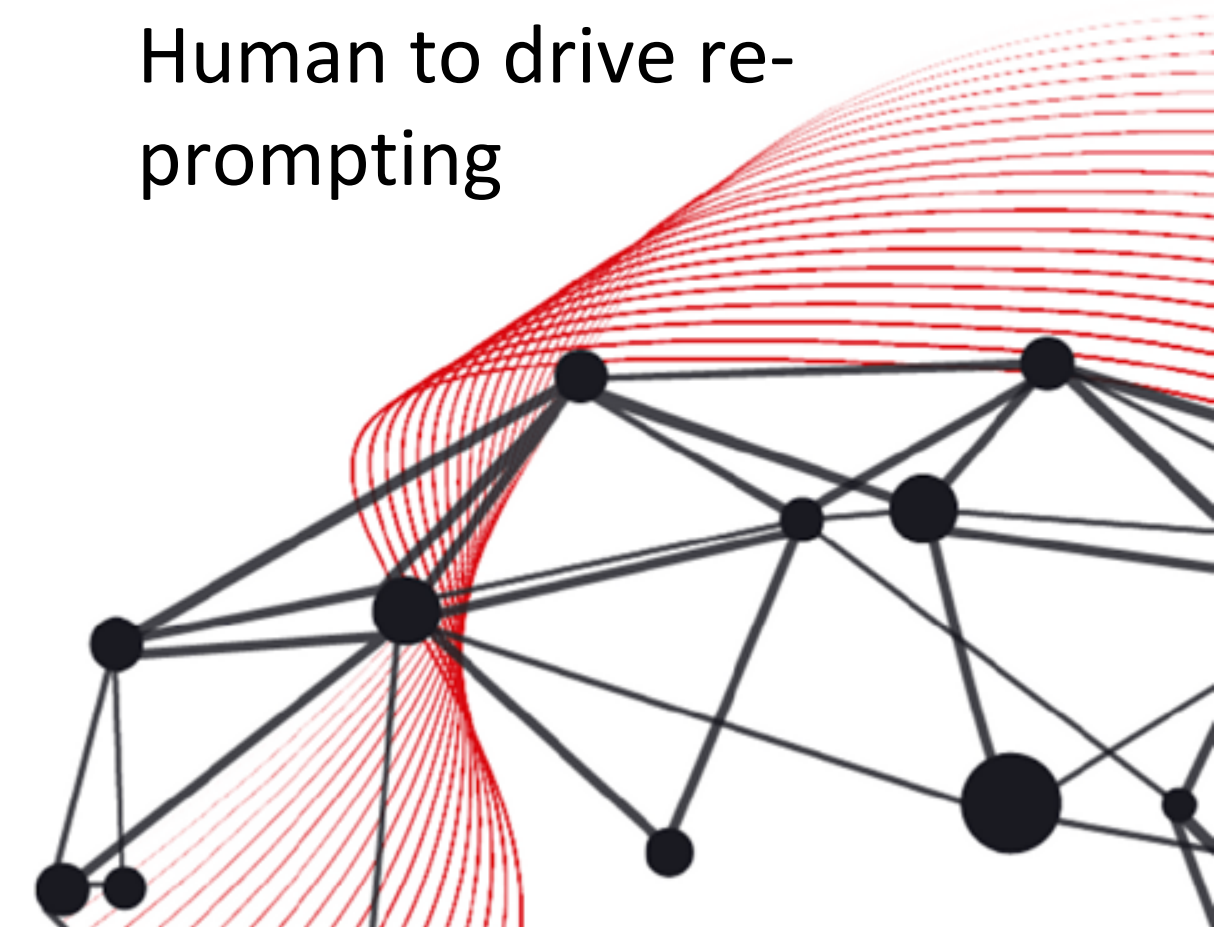We have to keep looking. There has to
be something left.

PHILEAS:
(Sighing, more to himself)
What's the point of all this? Just
wandering through junk… I was built
for more than this.

PASSP2:
(Gently)
We'll find something, Phileas. I'd
give you my own power if I could.

CUT TO:

PASSP2:
(Maybe this has some power left… Let
me try something.)

ChatGPT, Gemini, Dramatron

Main learnings

Using multiple agents worked best

Fully fledged text to script was restrictive

Human to drive re-prompting

Pre-production: Story concept

It's 2255 and Phileas Fogg and his companion are two robots who are left in a junkyard.

Phileas is running out of batteries: only 80 days left.

They find a hidden portal capable of teleporting them in other places and decide to embark on a journey through it searching for batteries.
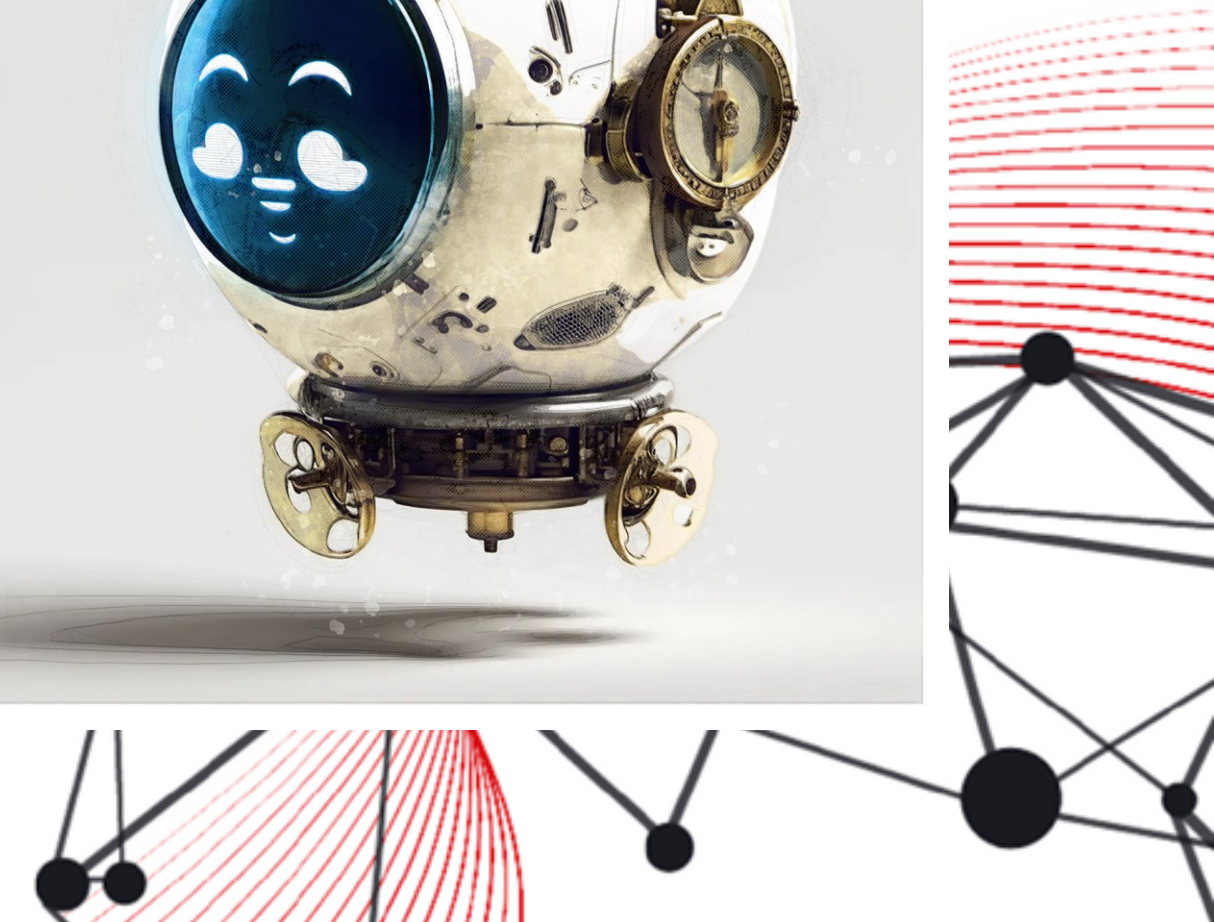
Pre-production : Character Design

Original concept | Image2Image output | 3D Model

Pre-production : Character Design

Tools and techniques tested :
- Dall-e
- 3D AI
- Adobe Firefly

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Pre-production: Concept Art

Techniques tested :

Generative Fill
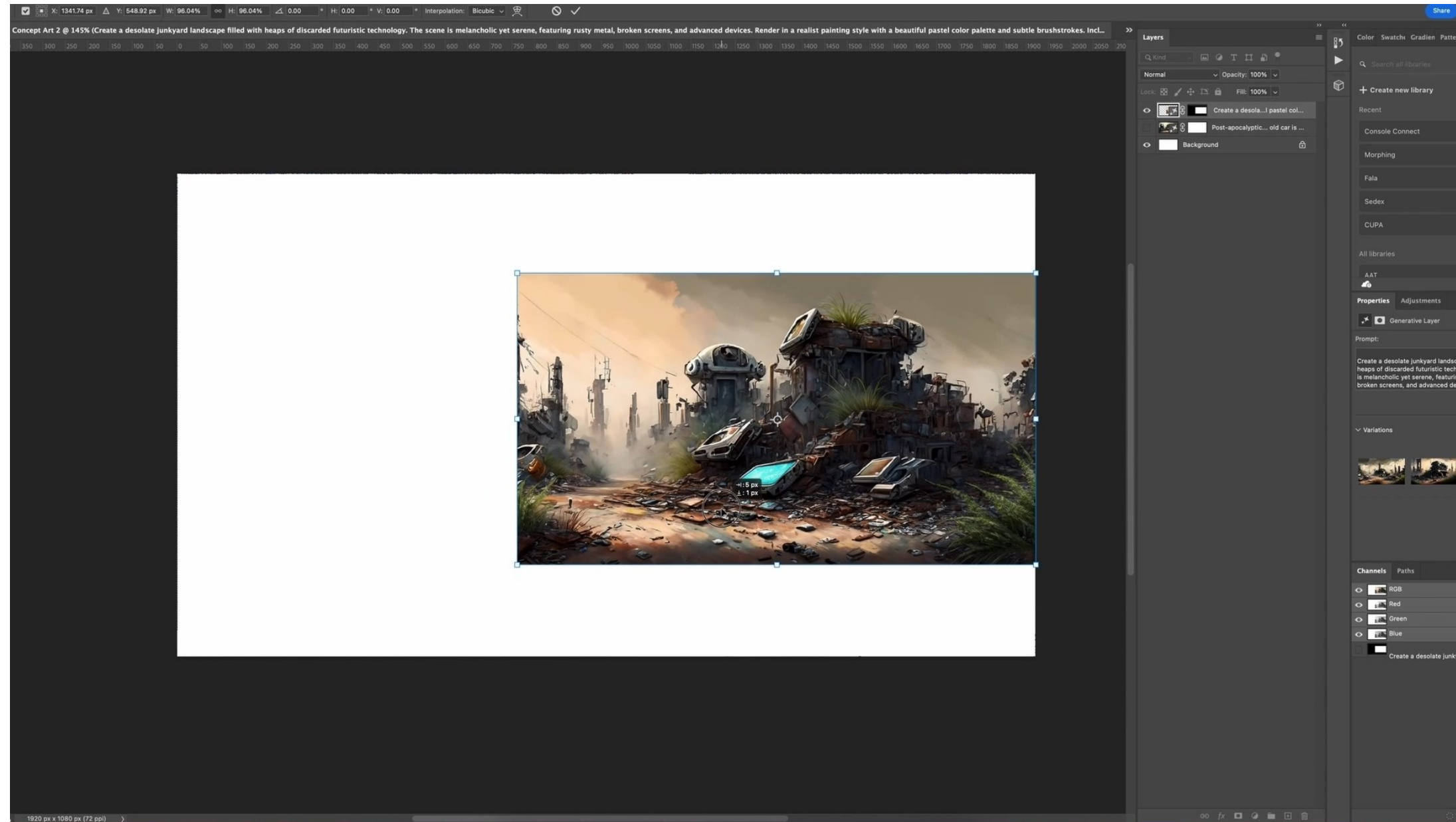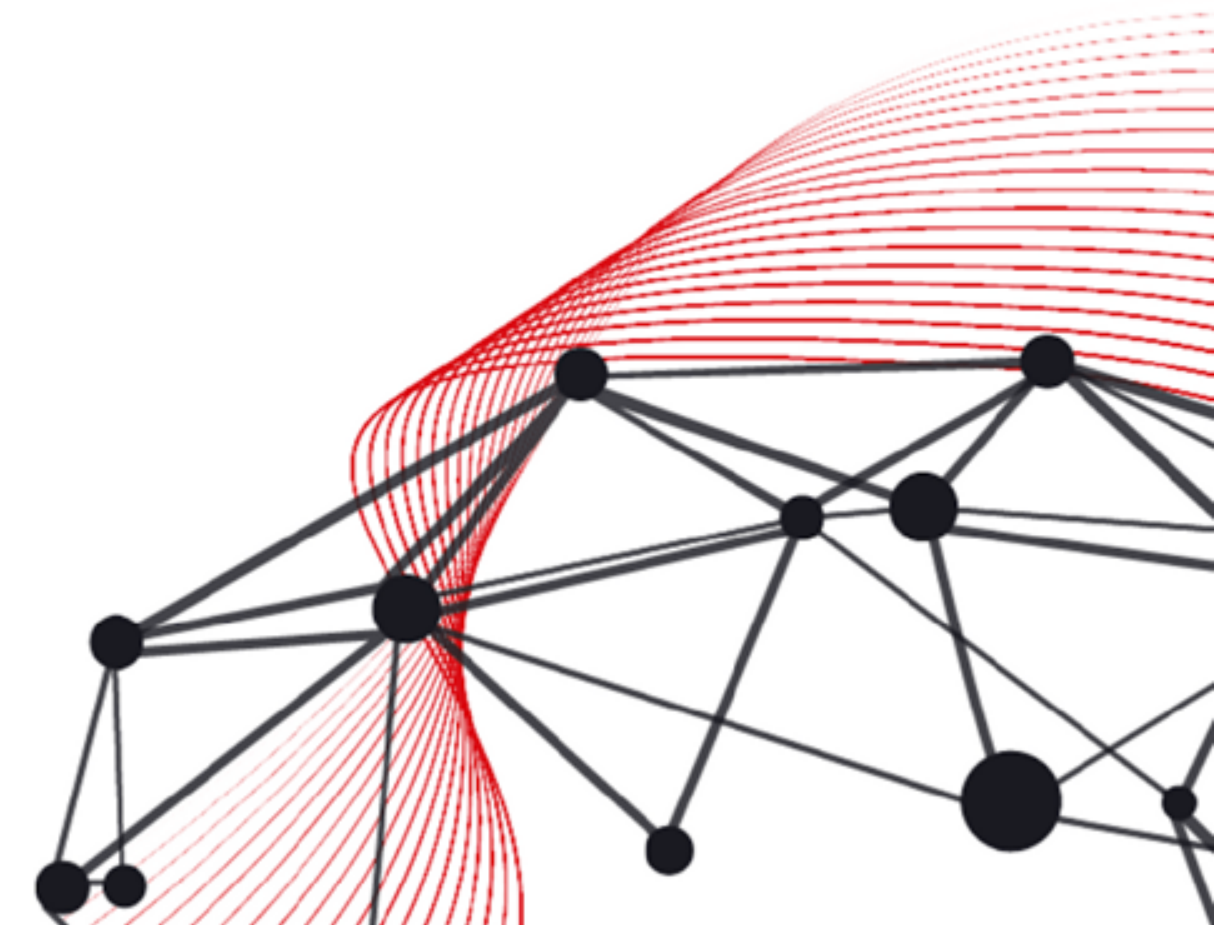
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Pre-production: Storyboard

Main learnings

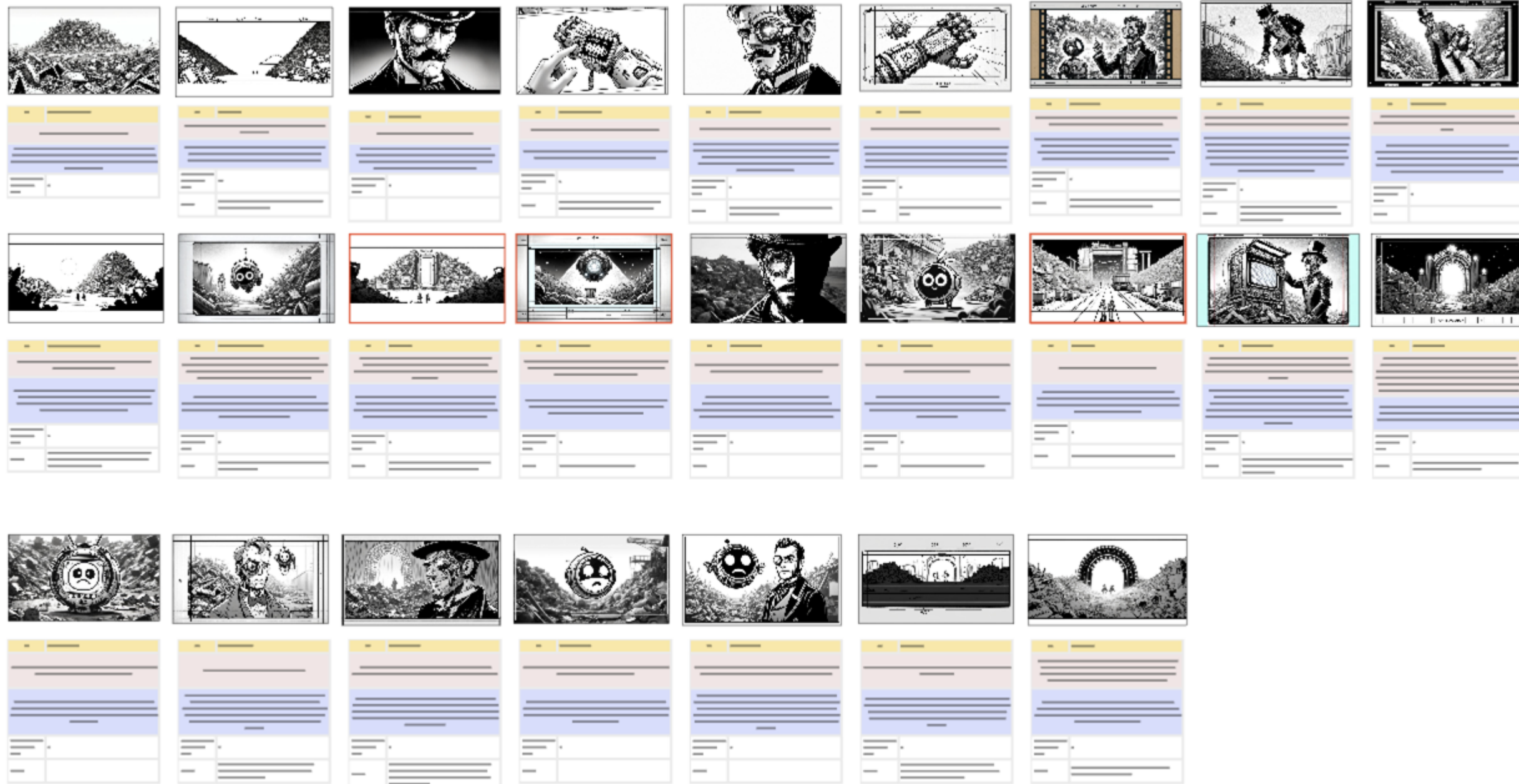- Auto generated storyboard tools hard to control and quite restrictive to generate images that match the scene

Pre-production: Storyboard

The most usable was using : Dalle-E for images
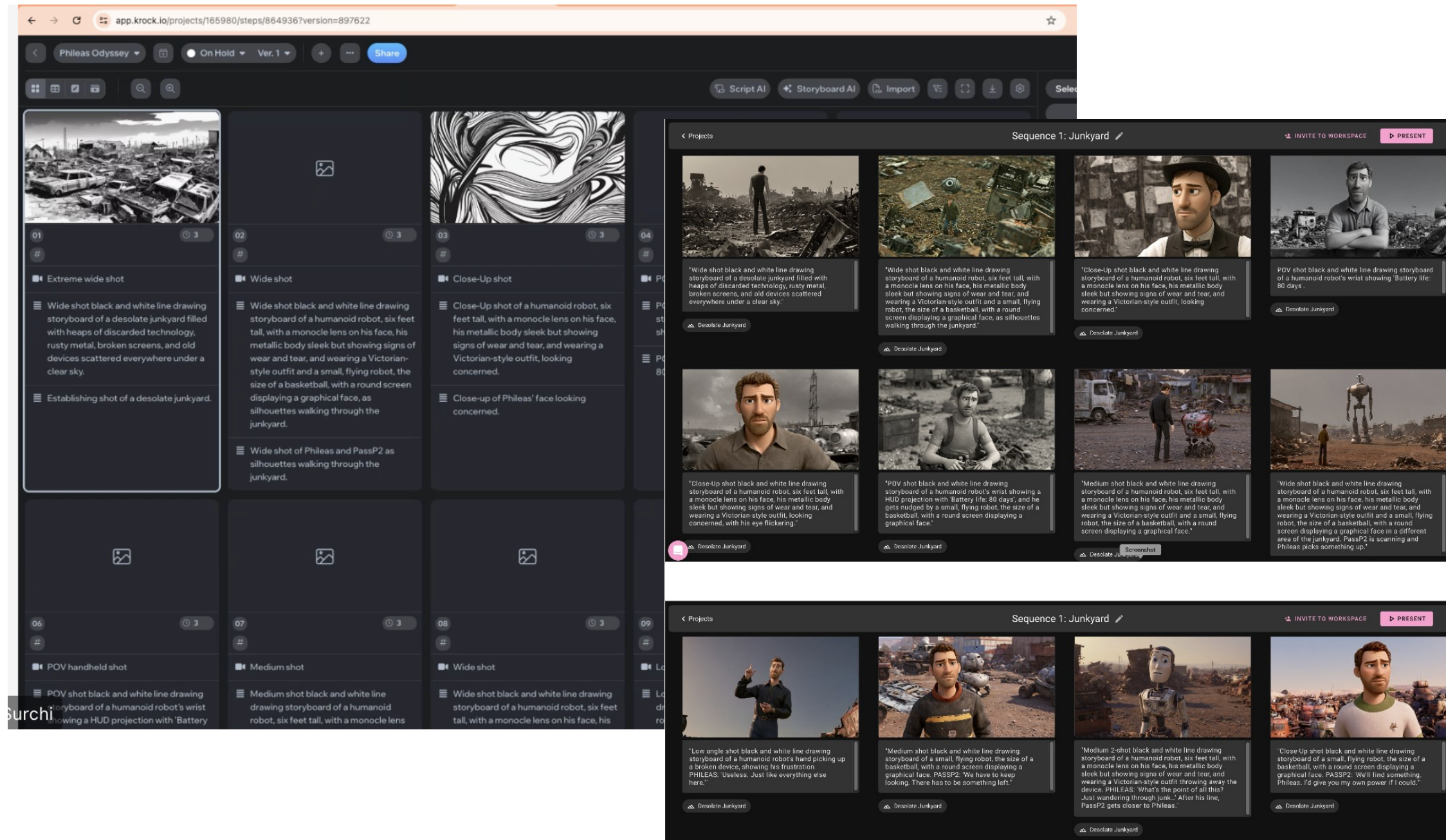
Challenges

- Consistent style and look of characters
- Camera angle positioning
- Trouble with the side view
- Text on image doesn't work
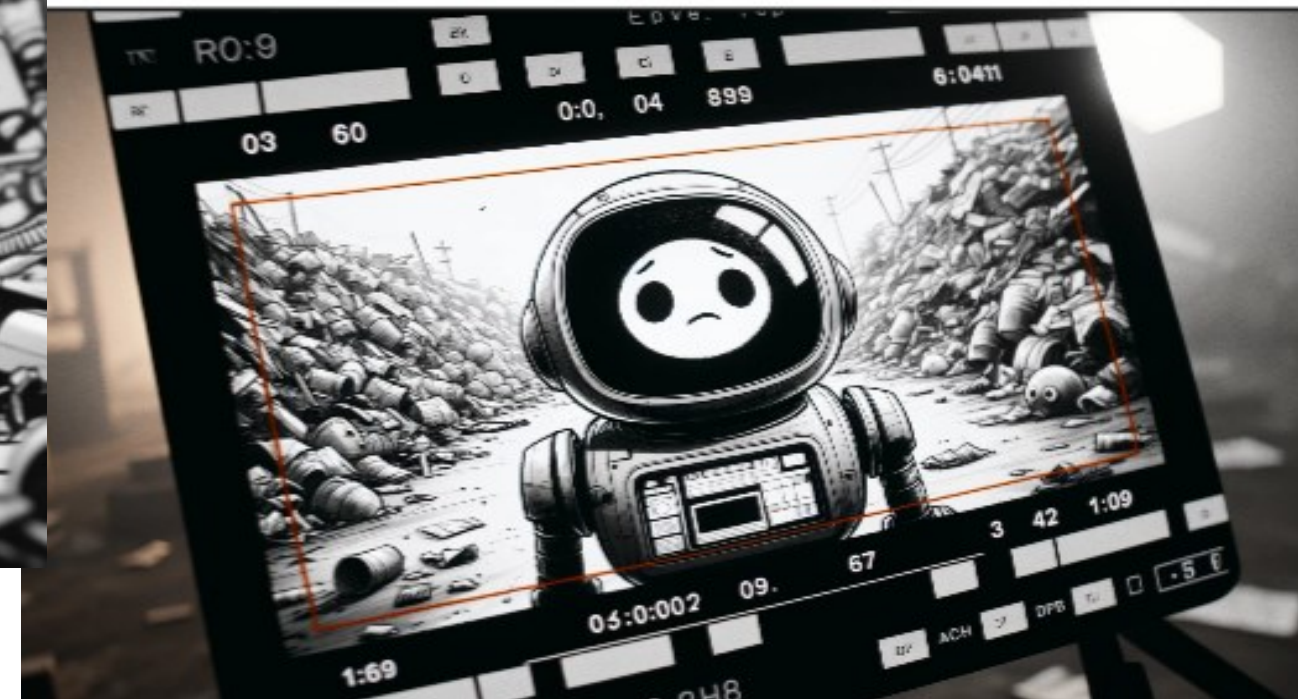- Some missing images had to be prompted by hand or drawing
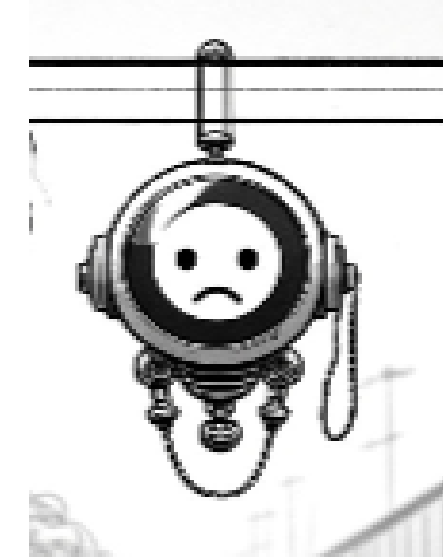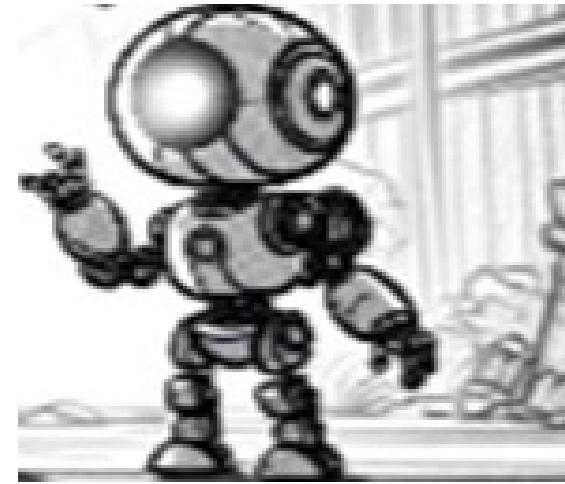- Many attempts to get the right one

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Pre-production : Story concept & Consistency issues
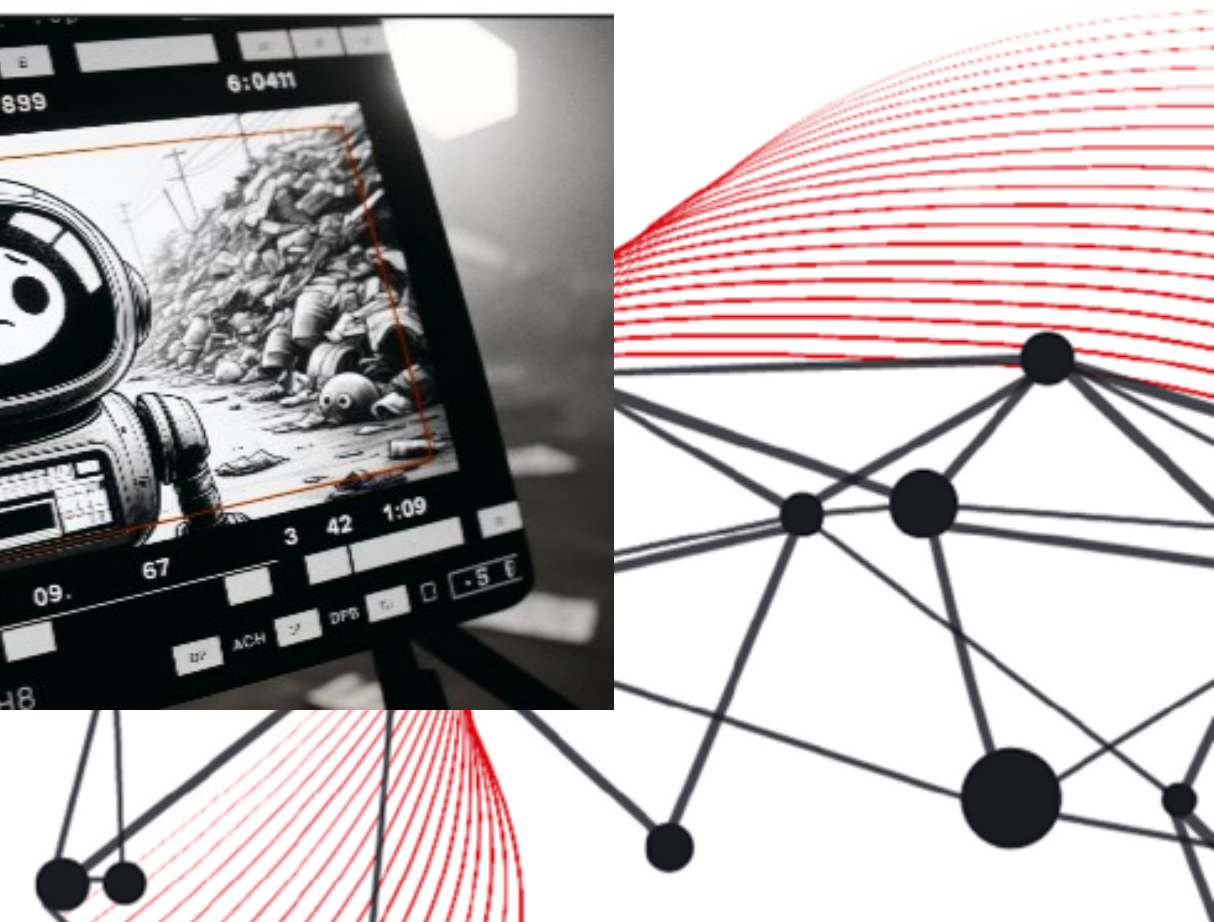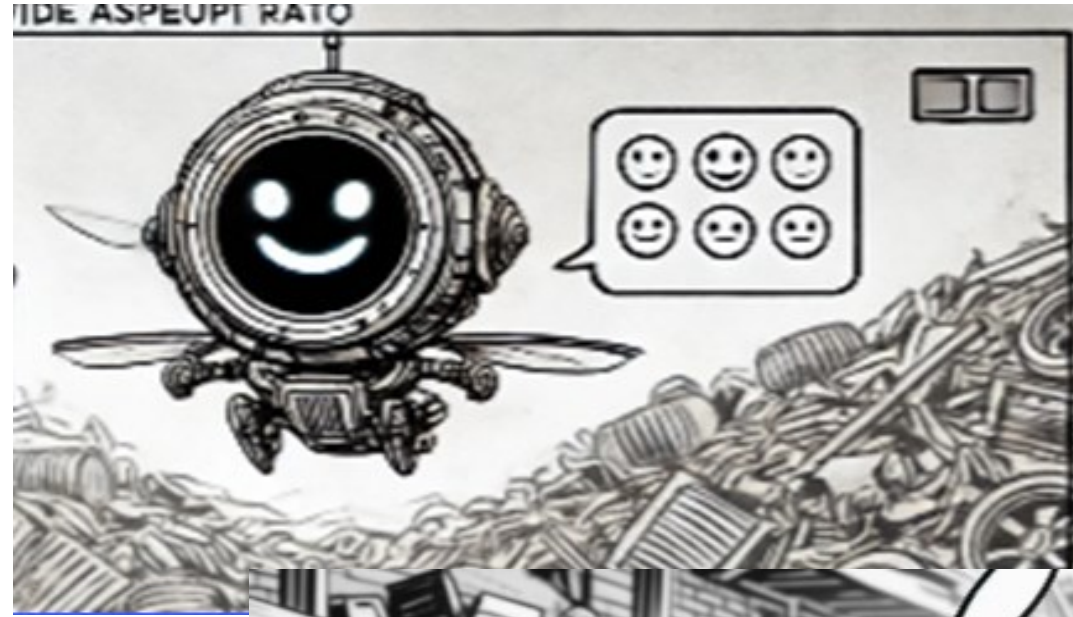
Pre-production: Drawings used to fill in
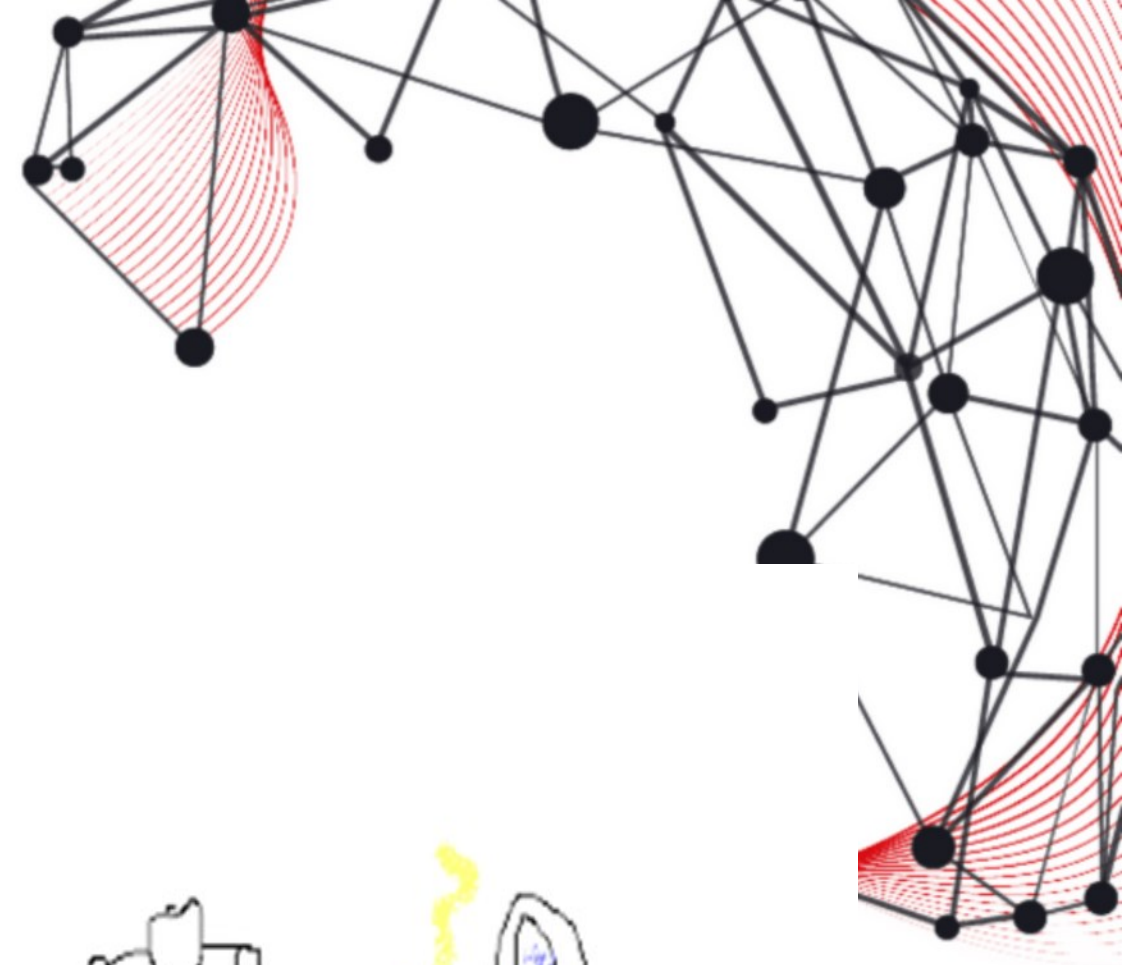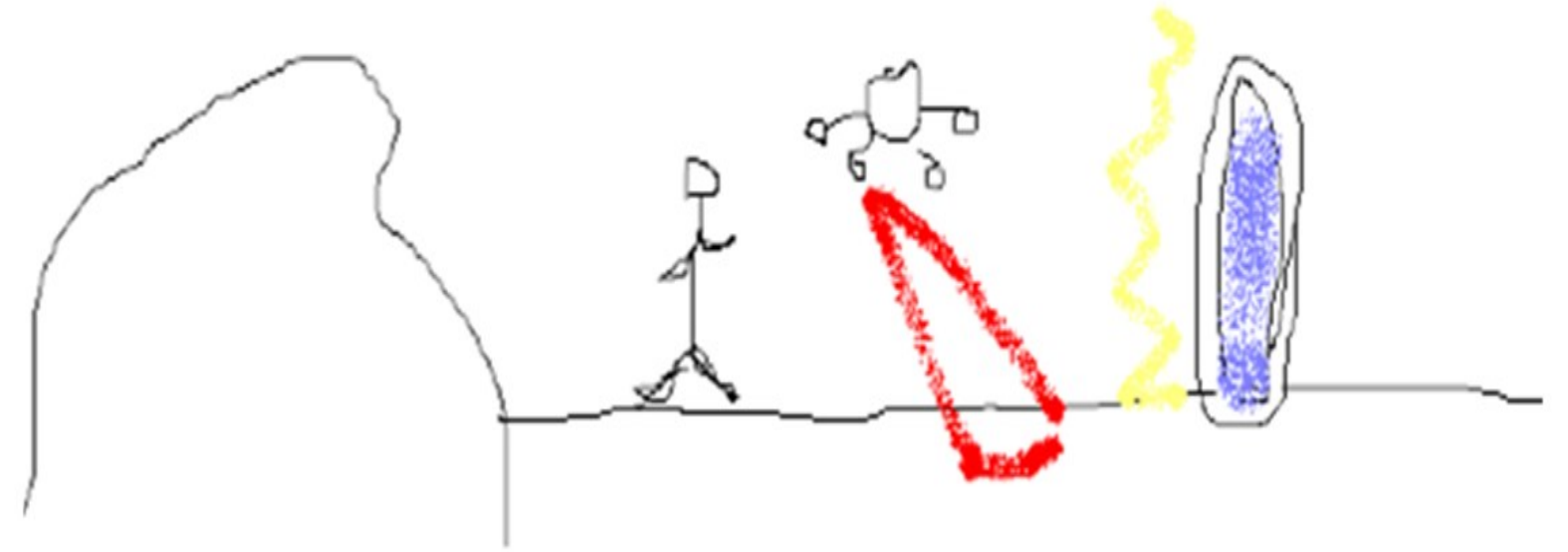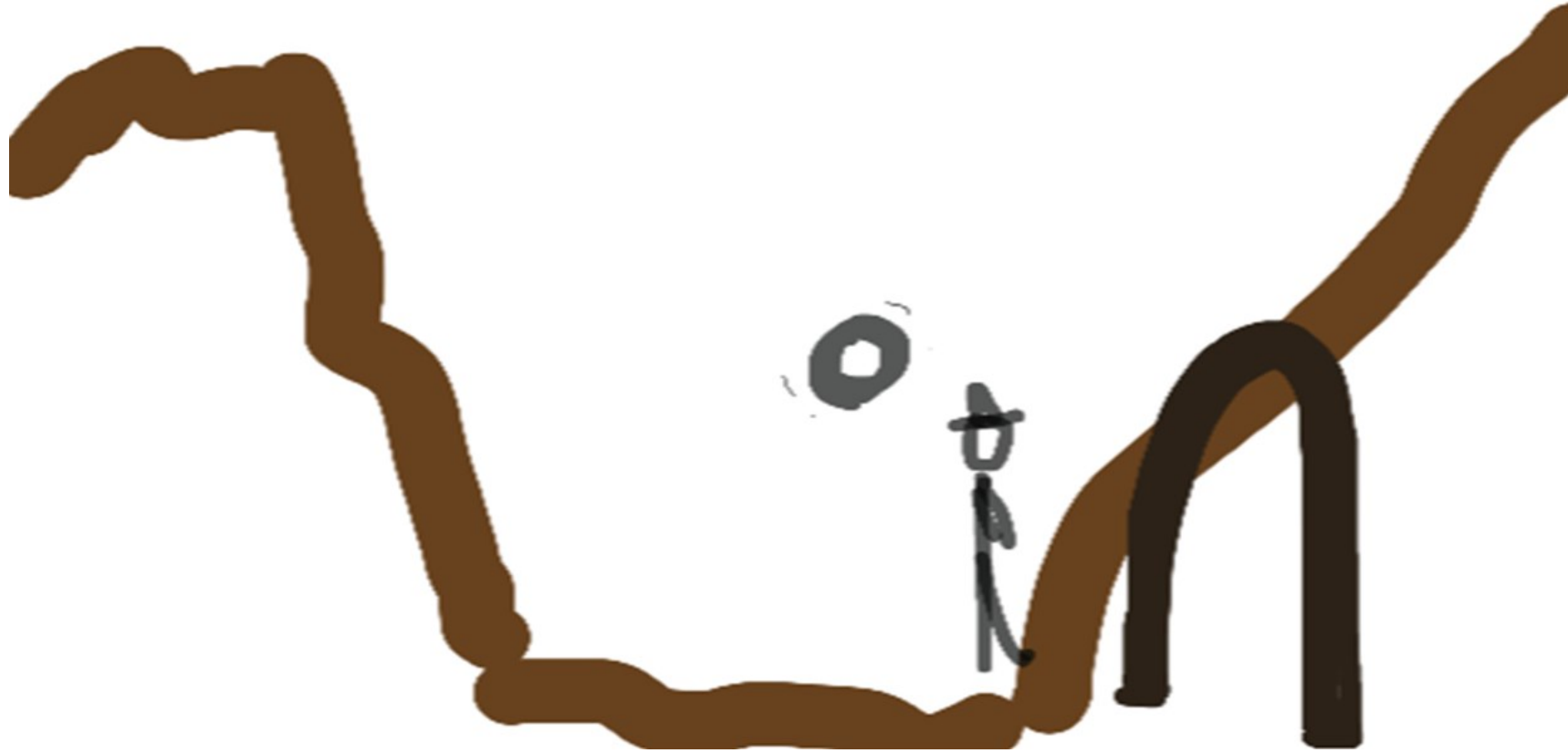
Video production : Style Images   > Video
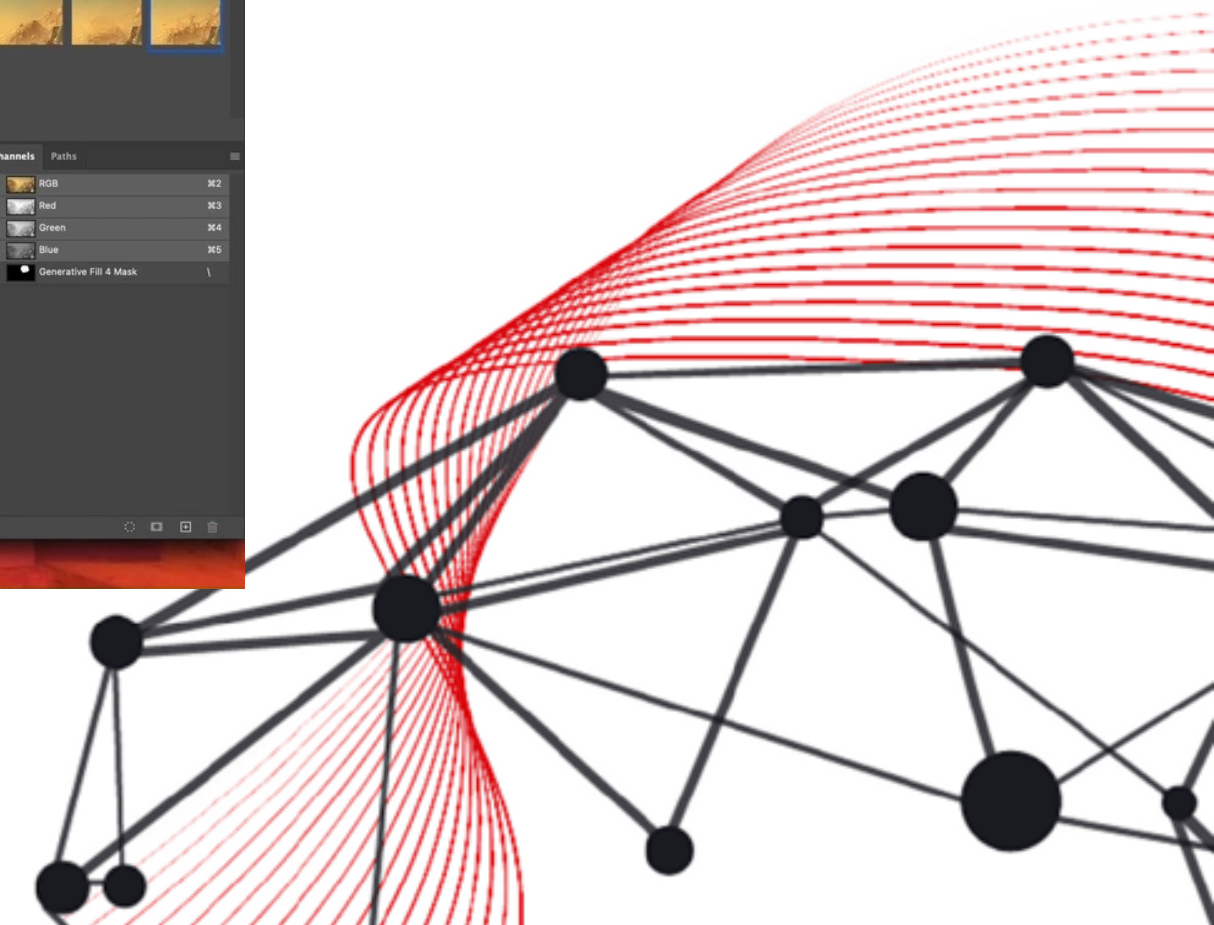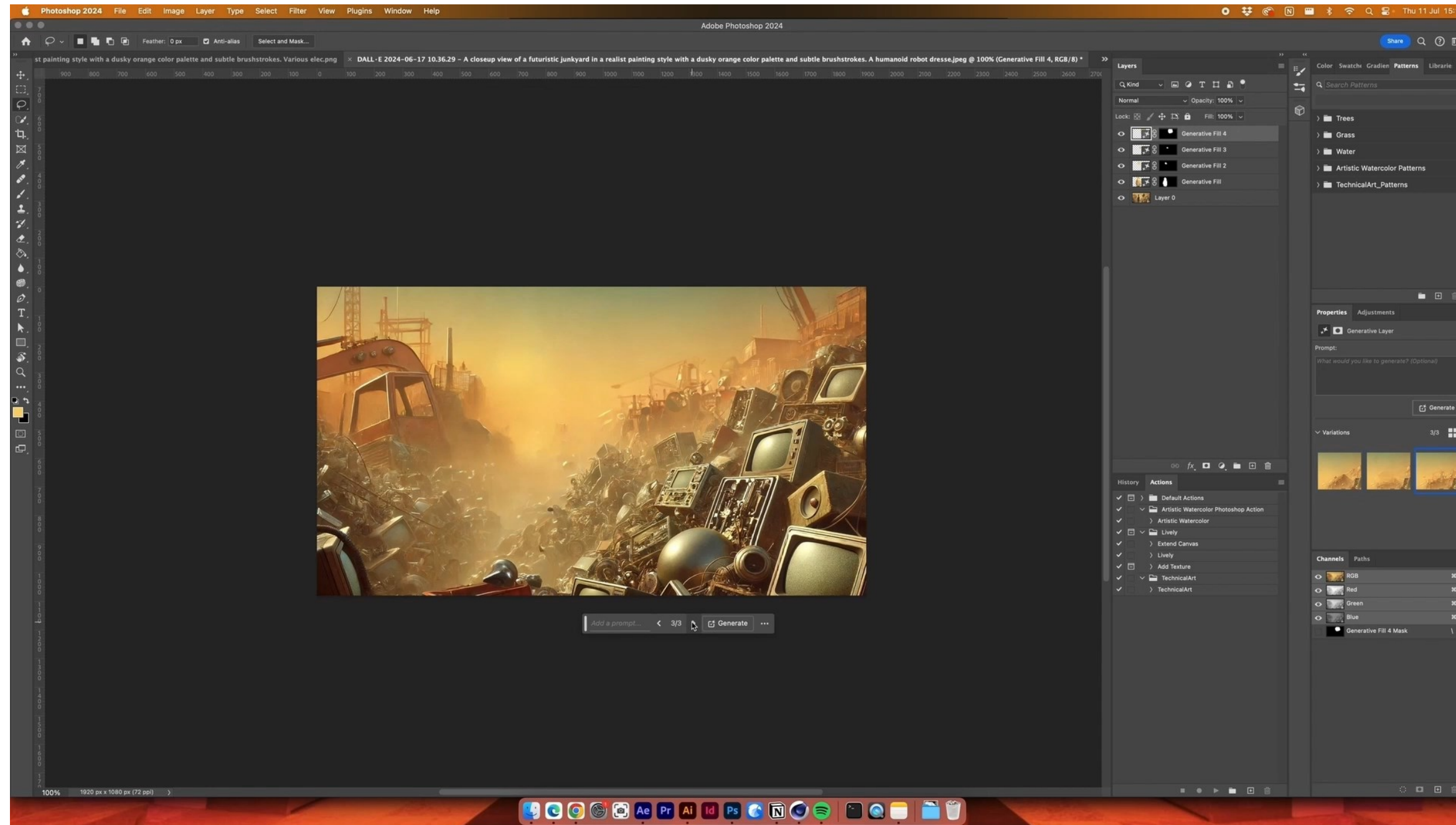
Video production: Image to video technique in action

Original image   Image   ⇨   Video
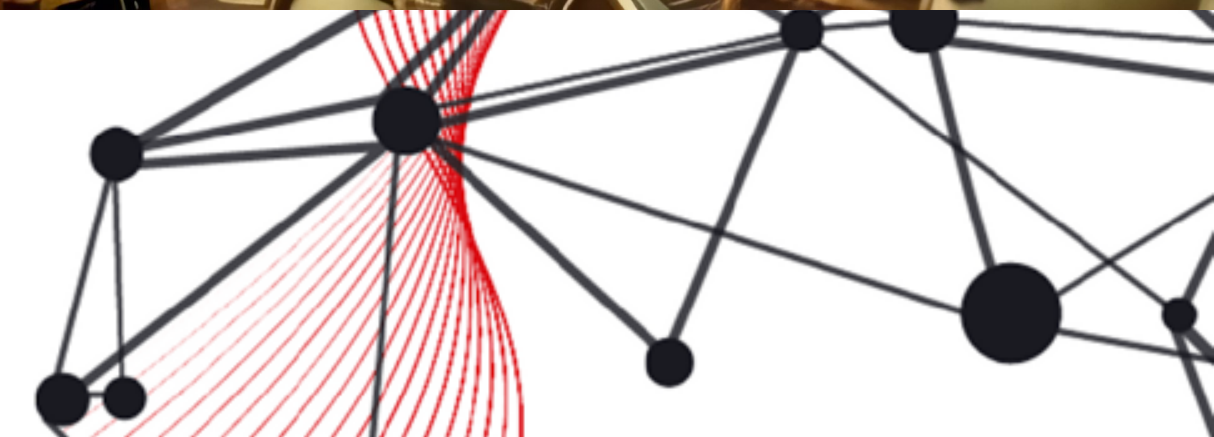
Video production
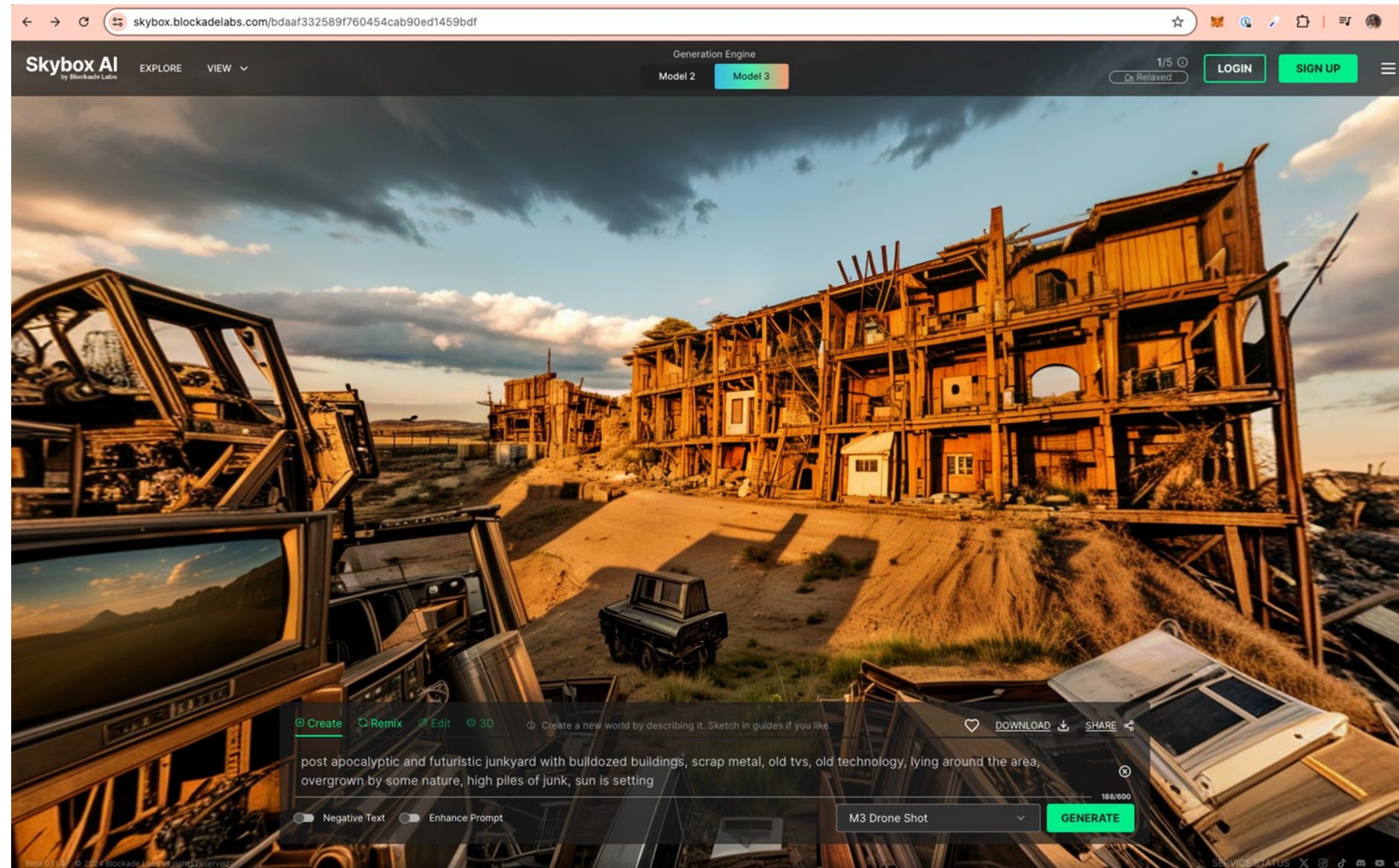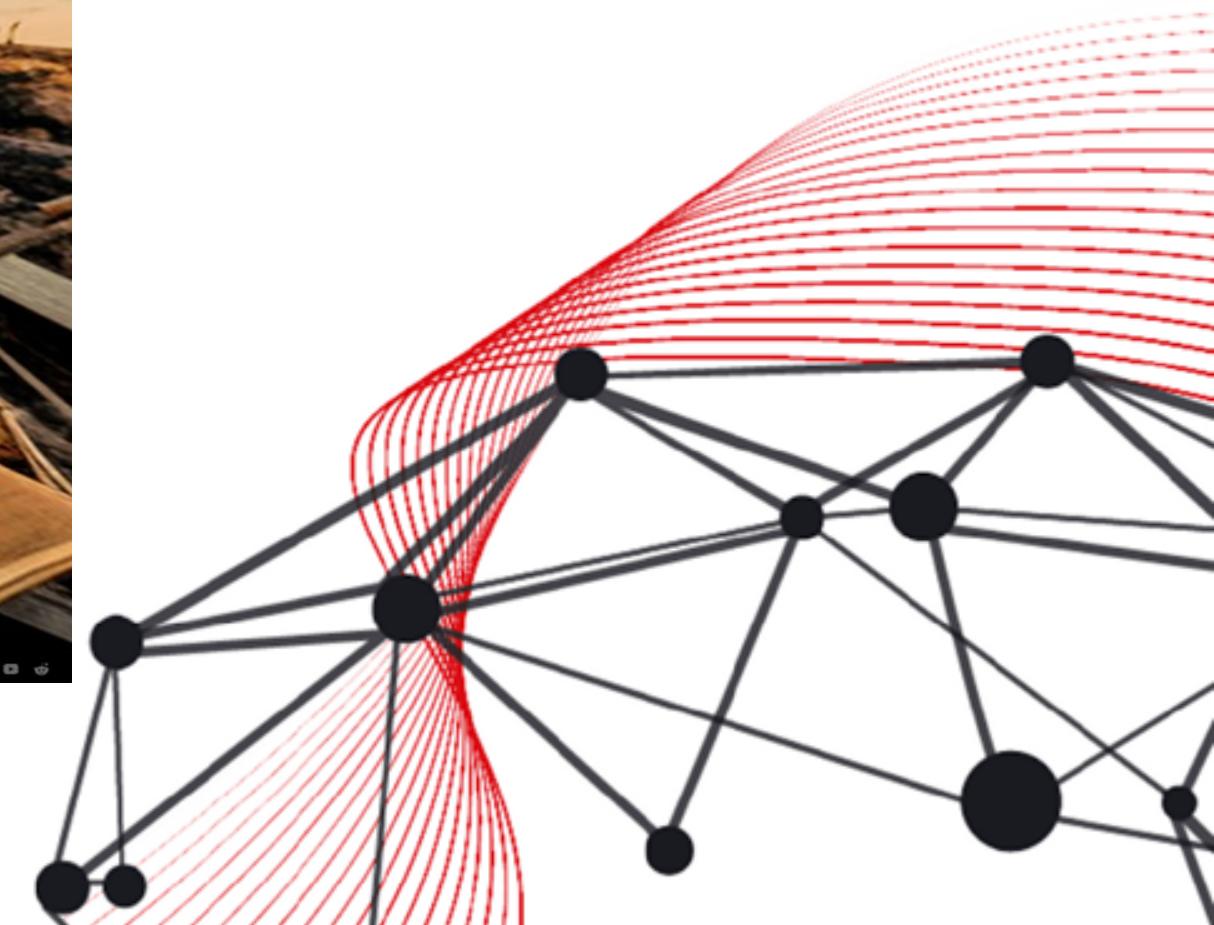
3D Video track

Techniques tested :

Gen AI tools to produce 3D assets and animations for Unreal engine based workflow

Video production 3D track
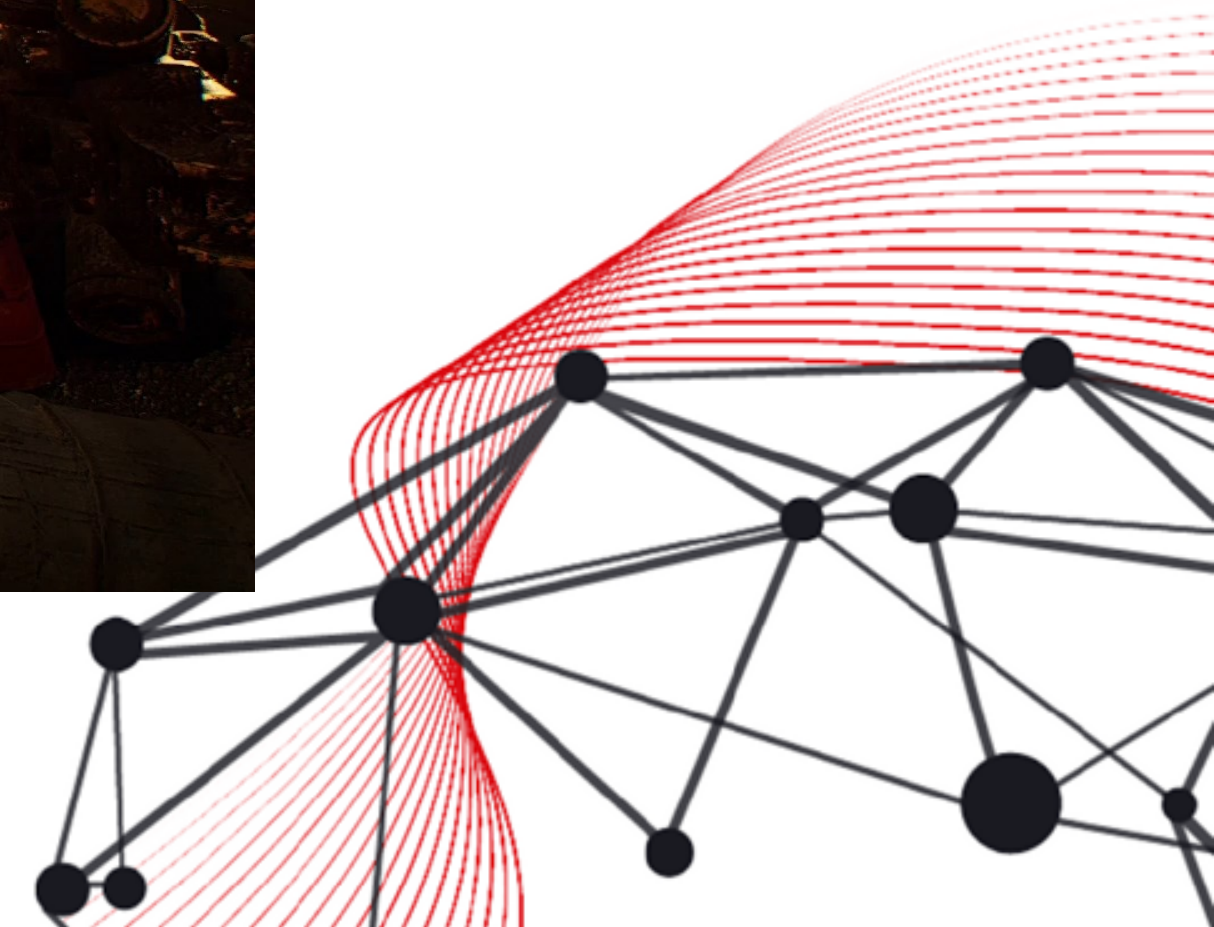
Wall of learnings

Area	Main challenges and learnings	Time to make
Text Generation Story ideas Full Scripted episode	• Multiple agents used • Full text to script in one tool is possible but not beneficial, it's an iterative technique to get the control and quality	• Concept - 2-3 weeks of story concept • Scripting - 1 week
Image Generation Concept art Character design Full storyboard and style images to guide video	• Storyboarding possible with limited need for dedicated artist • Camera angles an issue • Consistency an issue • Many attempts to get the right one	• Storyboard - 2-3 weeks • Concept art - 1 week between 3-4 people
Video Generation 60 Seconds of video 30 Title sequence	• Text to video was challenging • Image to video had better results • Consistency hard • Issue with the animation	• 10-15 Attempts to get 1 good quality shot • render time: around 2 minutes per shot • 7 days in total effort developed over 4 weeks
3D Generation 90 seconds of video 3D Environment, Character and animation	• Requires Unreal Engine • Set up time longer but more control of scene • Animations required a lot of cleanups and stitching of small animations • The key challenge was to keep the consistency across various prompts	• 2-3 attempts to get 1 good quality of props. Total time between 2-3 hours • 5-6 attempts to get environment and skybox. Total time 1-2 hours • Animation time 7 mins per 30 secs and <1 min per animation • Unreal project development: around 60 hours
Sound Generation Voice design and generation	• Speech to speech to capture the emotion and expression • Text to speech did not give the control needed, too many attempts needed	• Voices creation time: 3-4 days • 0.5 days -1 for the music

Conclusion

Creativity: AI can enhance and accelerate the creative process, but it is human insight and imagination that drive true innovation and cultural impact.
Control and quality: Human direction and supervision is still a must
Data and IP: Choosing the right tool to avoid copyright issue - know where the data comes from
Appropriateness for the length: It can work for short content (e.g., commercials) more tricky for longer video sequence because of character consistency and extraneous/not coherent character motion
Skills and timing: Different techniques require different skillsets and time to iterate

Looking ahead

For traditional production workflow and game engine based workflow

Keep exploring new tools becoming available on the market
Keep an eye on the integration of gen AI tools into production and automation pipeline
Pay attention to the evolution and performances of the multimodal input workflow (style images, text and audio)