

Virtual Production Pipe-Line

고도화를 위한 입체 미디어 콘텐츠 테스트에 관한 연구

DMStudio / KIM CHANGHO

The background is a dark blue gradient with a complex network of glowing white and light blue geometric shapes, including triangles and polygons, connected by thin lines. Some shapes are brightly lit, while others are dimmer, creating a sense of depth and movement. The overall effect is a futuristic, digital aesthetic.

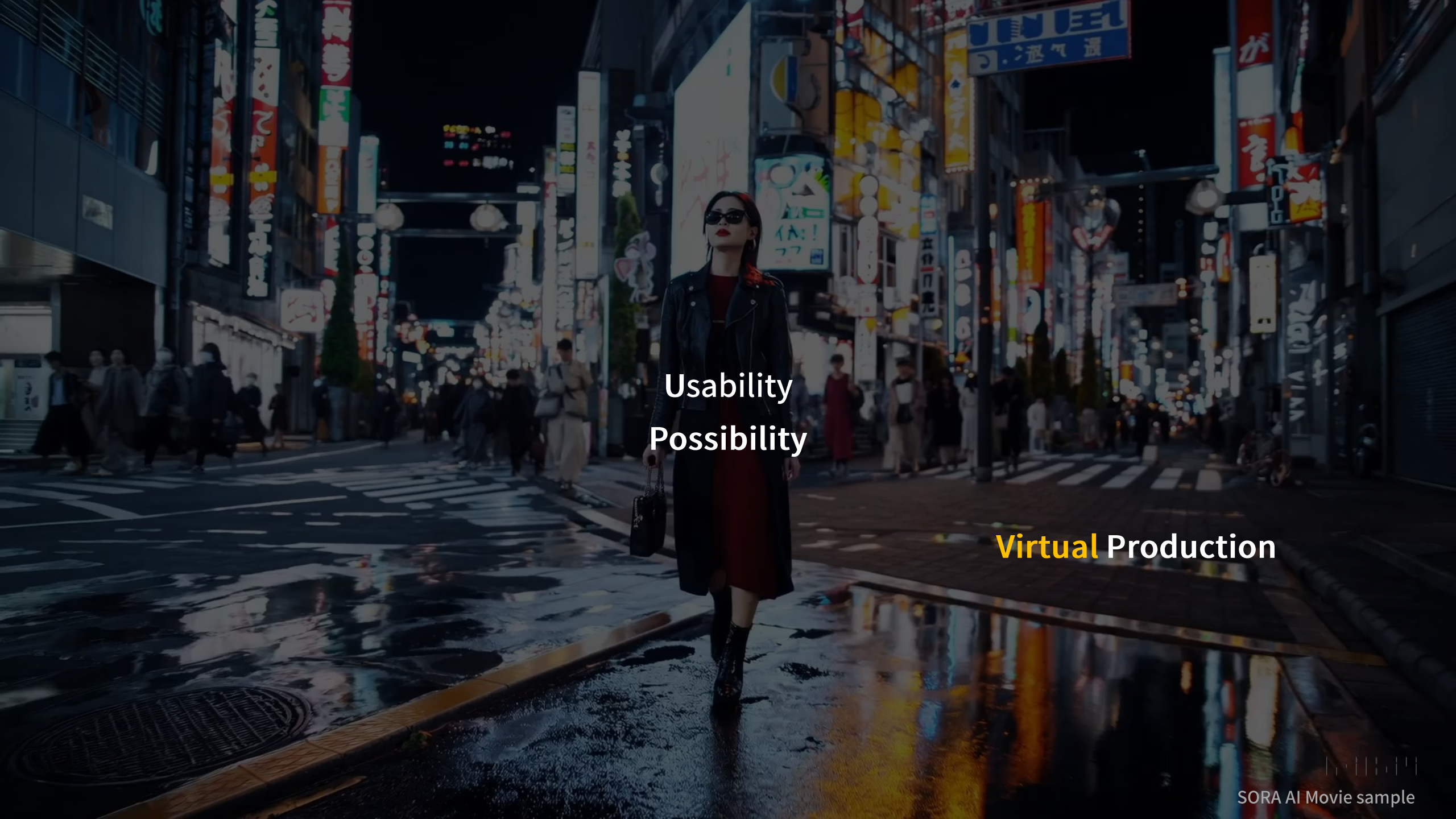
Virtual Production



Virtual Production

Virtual Production

- 저렴하지 않은 비용
- 촬영할 수 있는 앵글의 한계
- 명확하지 않은 사용 방법 - 사용성의 한계

A woman with red hair, wearing a black leather jacket, a red top, and a dark skirt, walks down a wet, neon-lit street at night. She is wearing sunglasses and carrying a black handbag. The street is filled with people and illuminated by numerous colorful signs and lights, creating a vibrant, futuristic atmosphere. The wet pavement reflects the lights, adding to the visual richness of the scene.

Usability
Possibility

Virtual Production

Vocal
Source

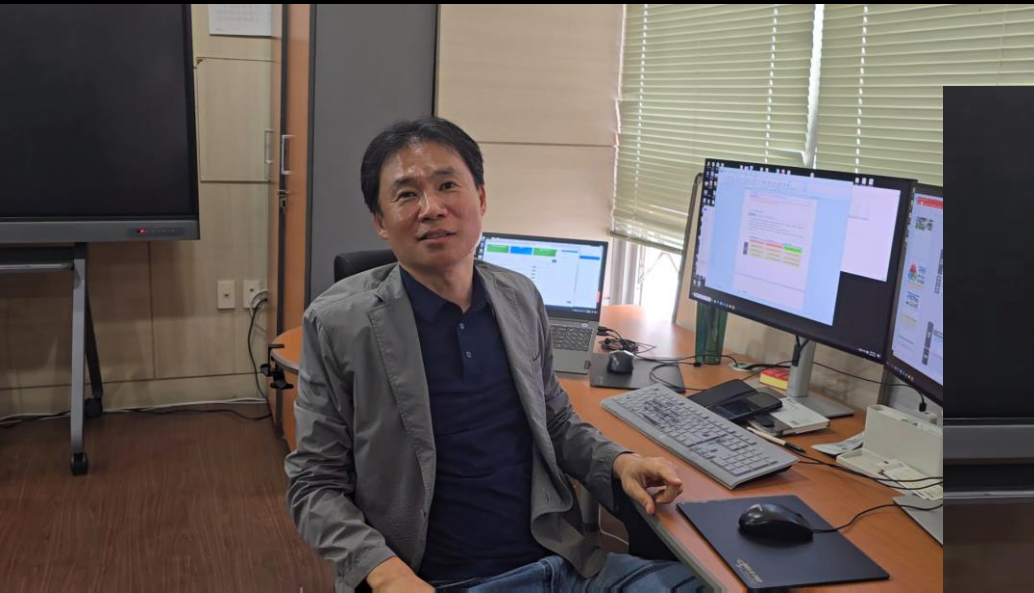


Reference
Image



Generated
Video

Alibaba EMO



DeepFake(DMStudio) sample



Quality
Usability
Mise en scene
Montage



Quality
Usability
Mise en scene
Montage

||

Virtual Production

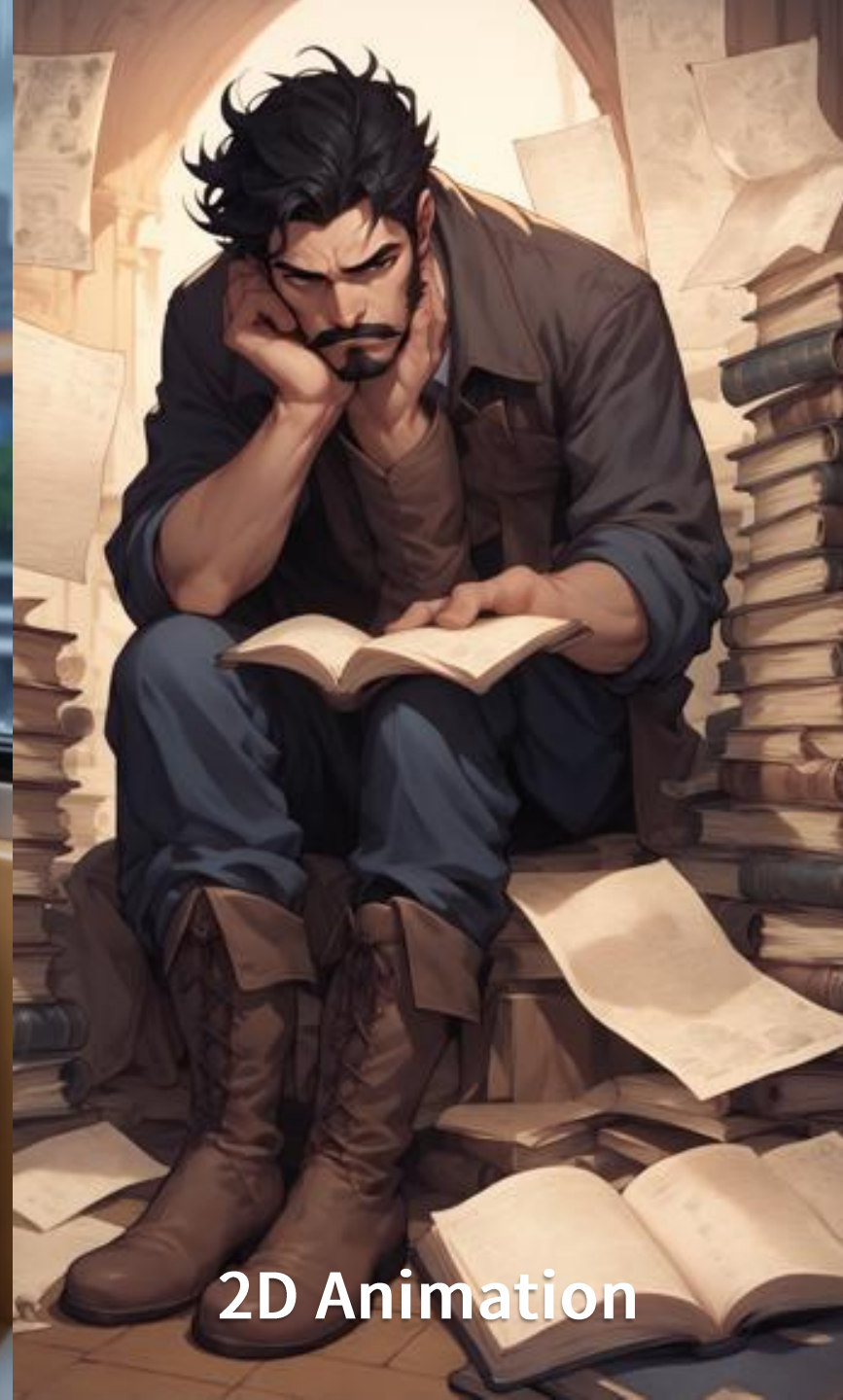
A picture created by AI



Live action

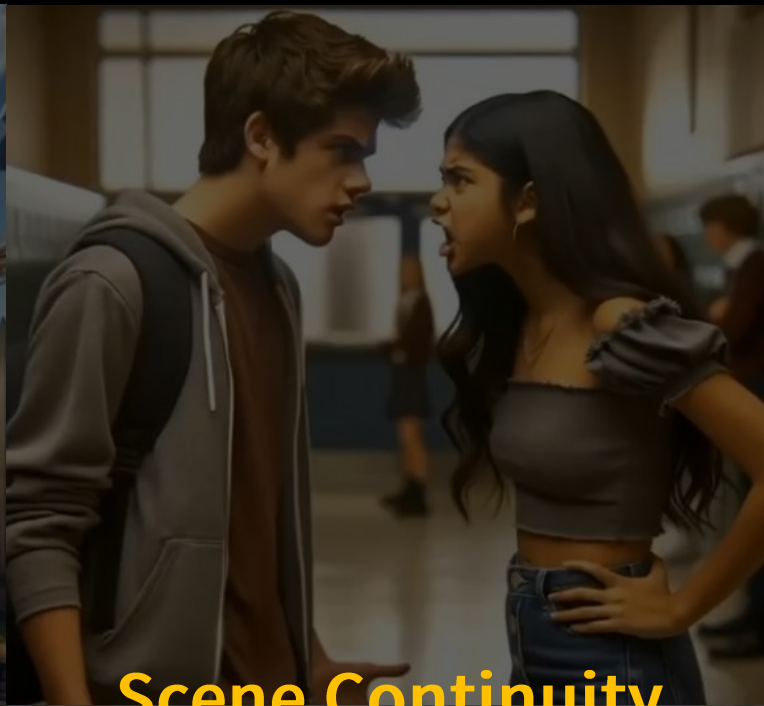


3D Animation

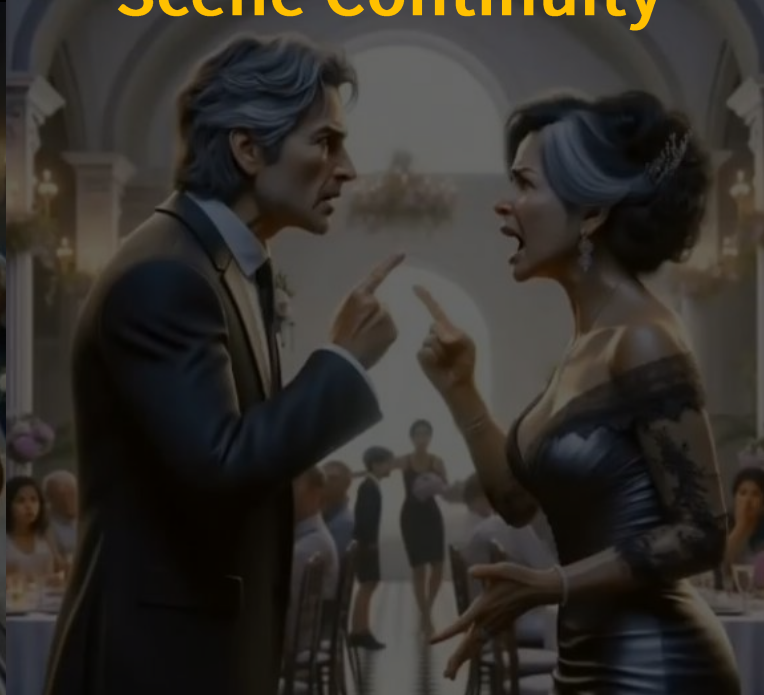


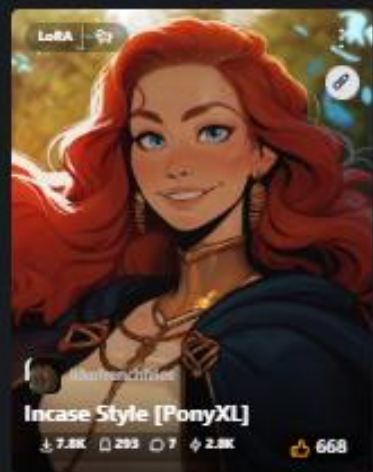
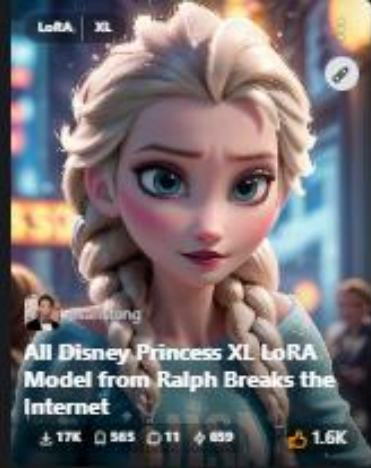
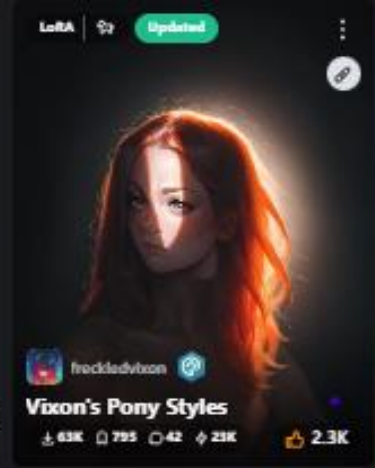
2D Animation

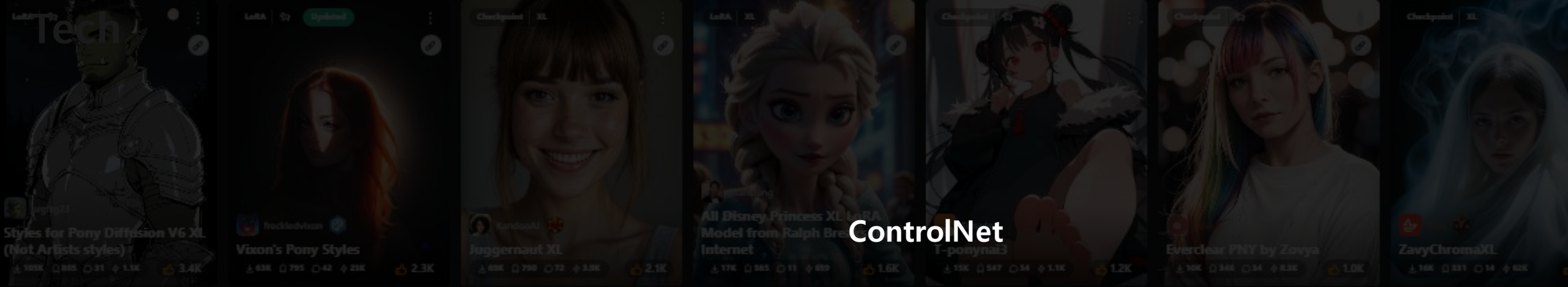




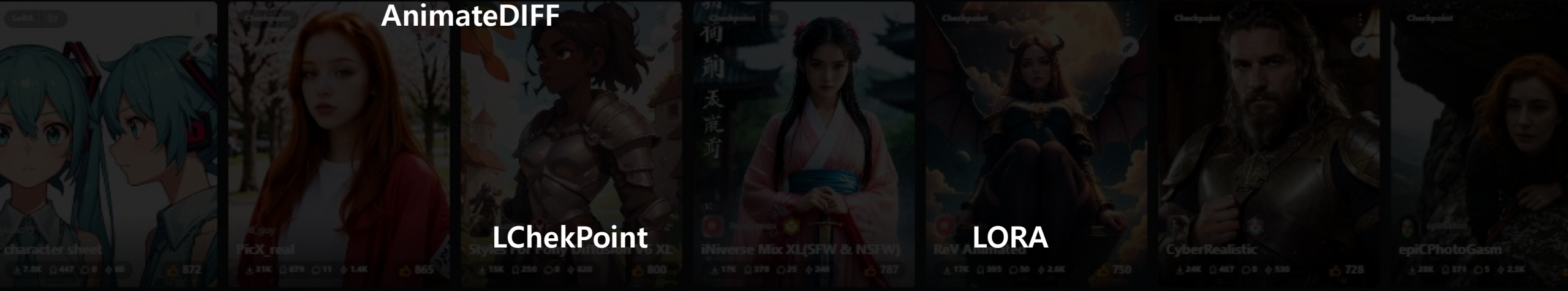
Scene Continuity







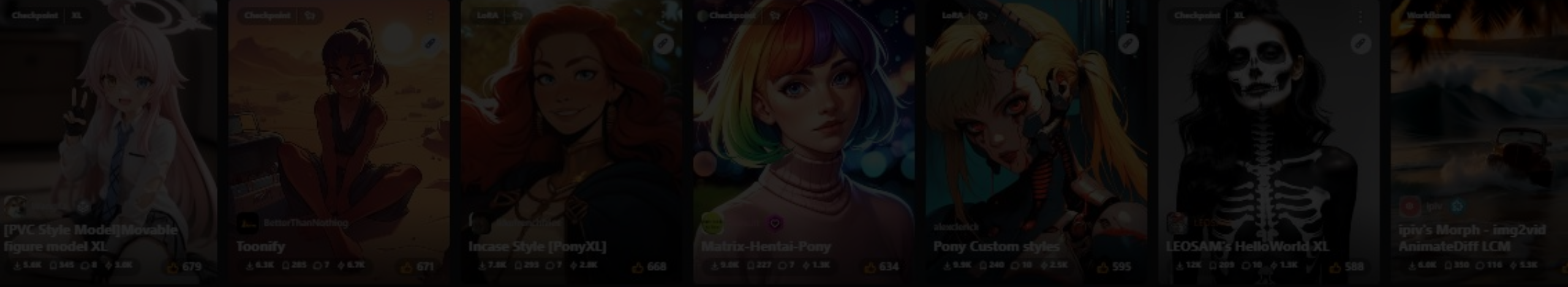
ControlNet



AnimateDIFF

LChekPoint

LORA



[PVC Style Model] Movable figure model XL

Toonify

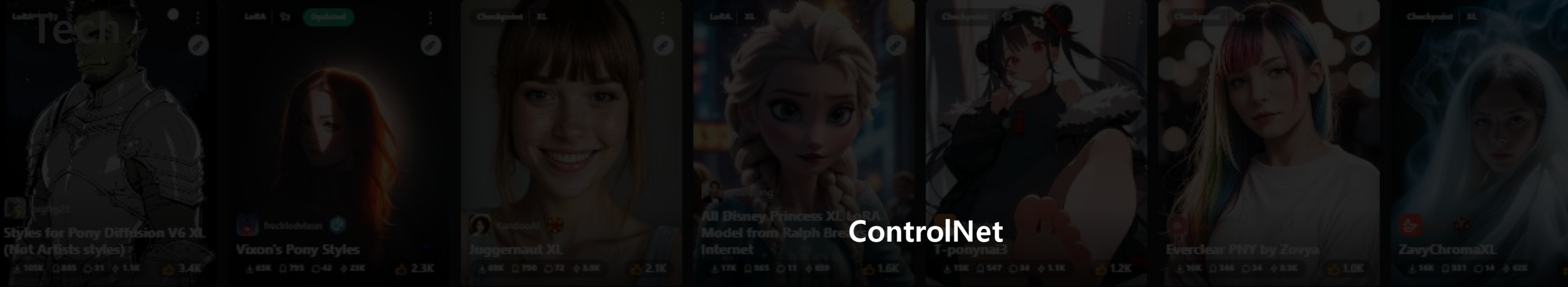
Incense Style [PonyXL]

Matrix-Hentai-Pony

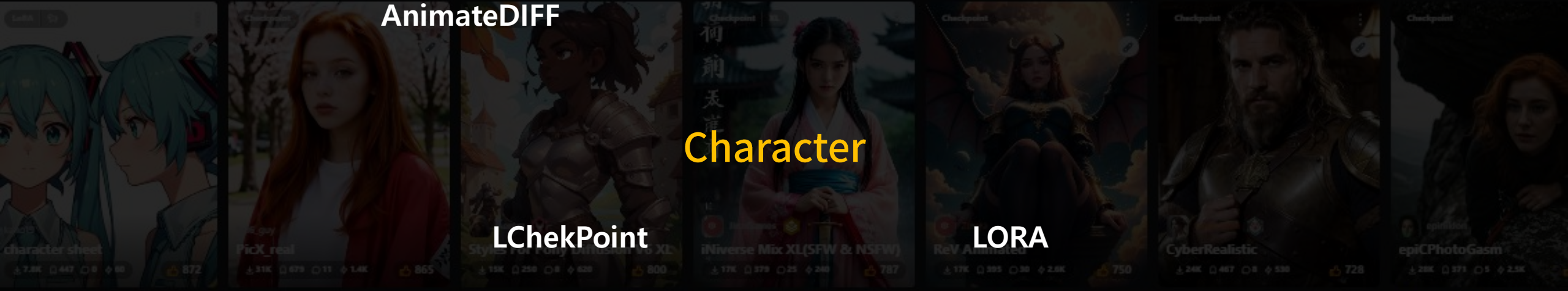
Pony Custom styles

LEOSAM's HelloWorld XL

ipiv's Morph - img2vid AnimateDiff LCM



ControlNet

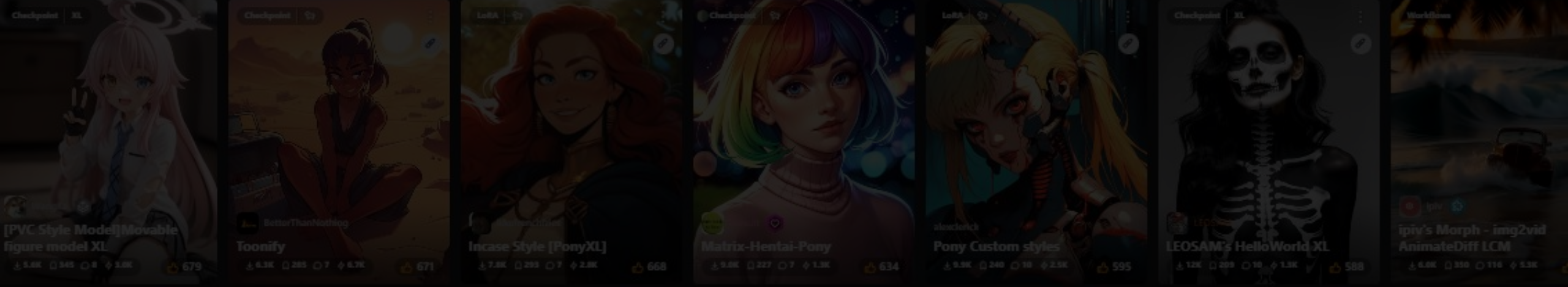


AnimateDIFF

Character

LChekPoint

LORA



[PVC Style Model] Movable figure model XL

Toonify

Incise Style [PonyXL]

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Pony Custom styles

LEOSAM's HelloWorld XL

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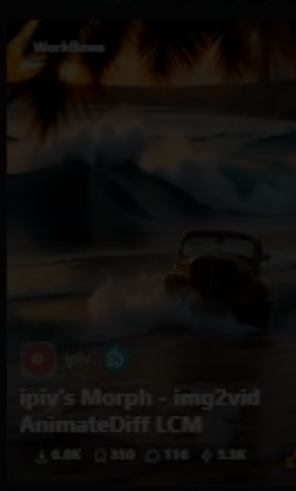
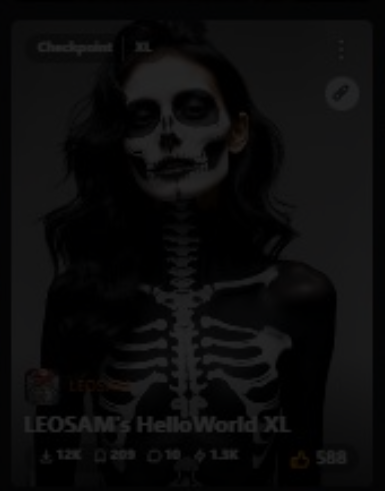
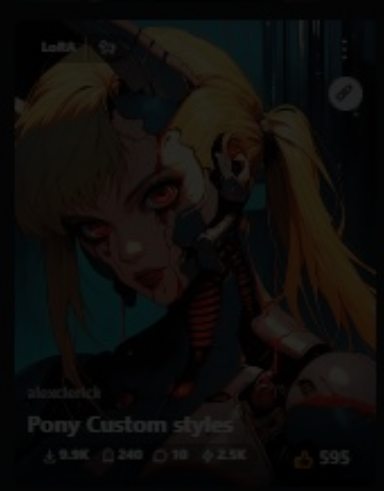
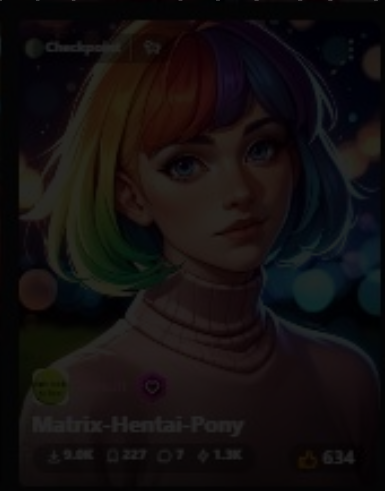
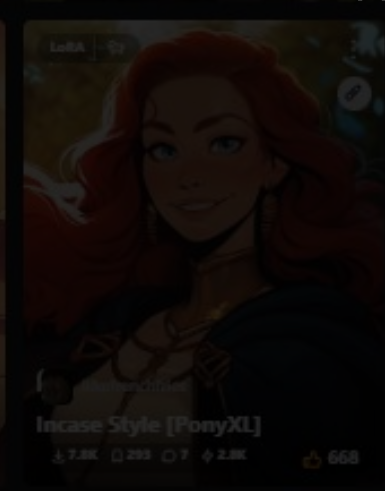
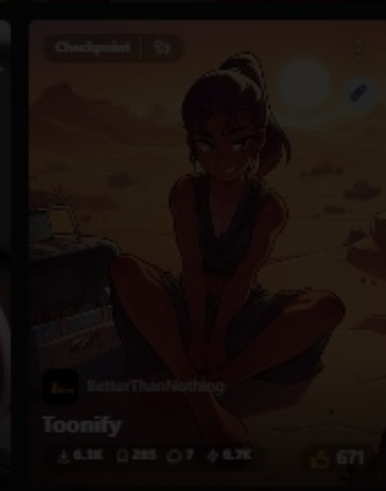
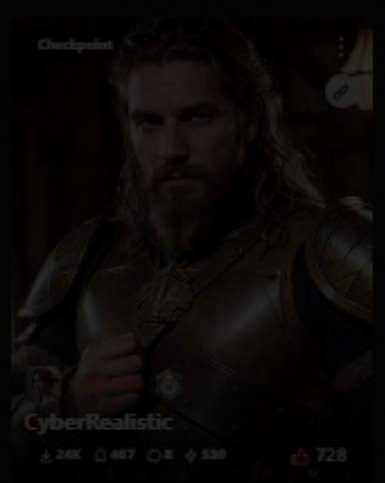
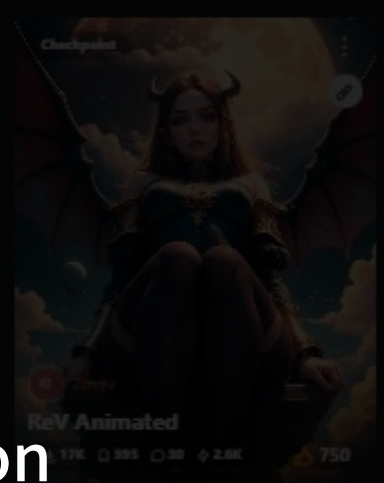
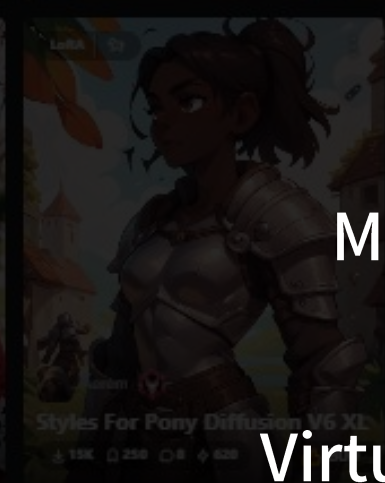
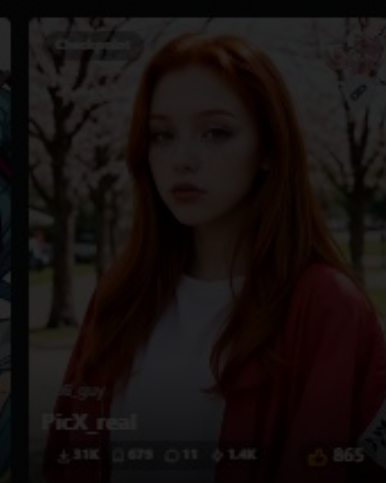
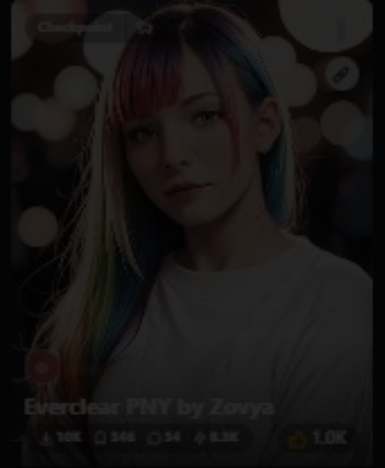
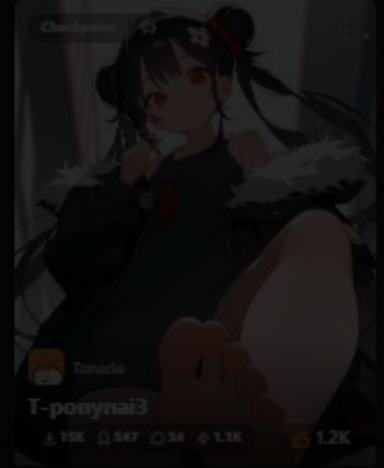
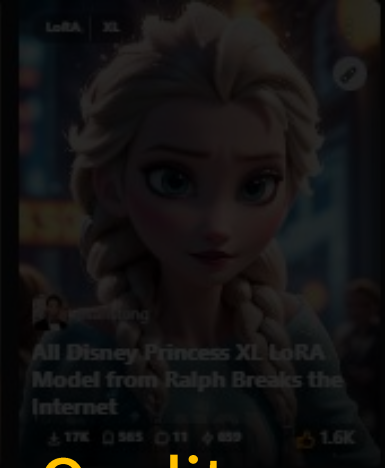
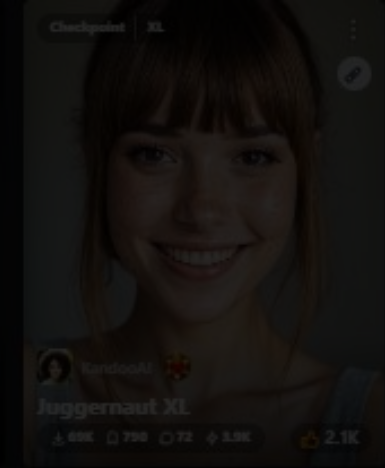
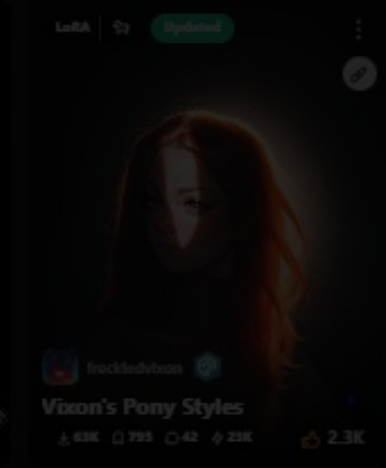
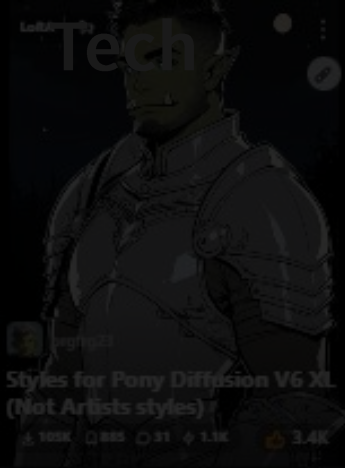
Quality

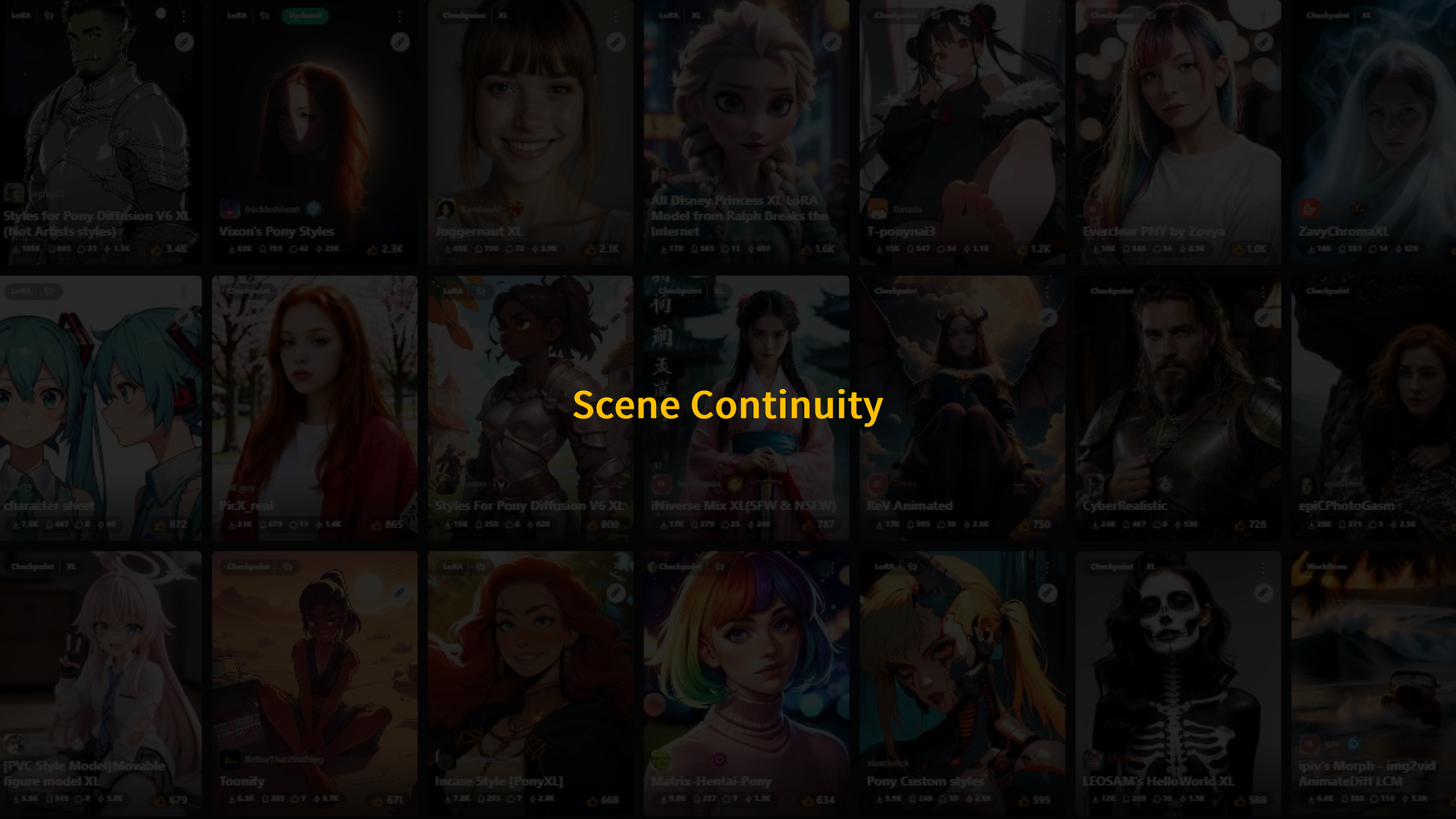
Usability

Mise en scene

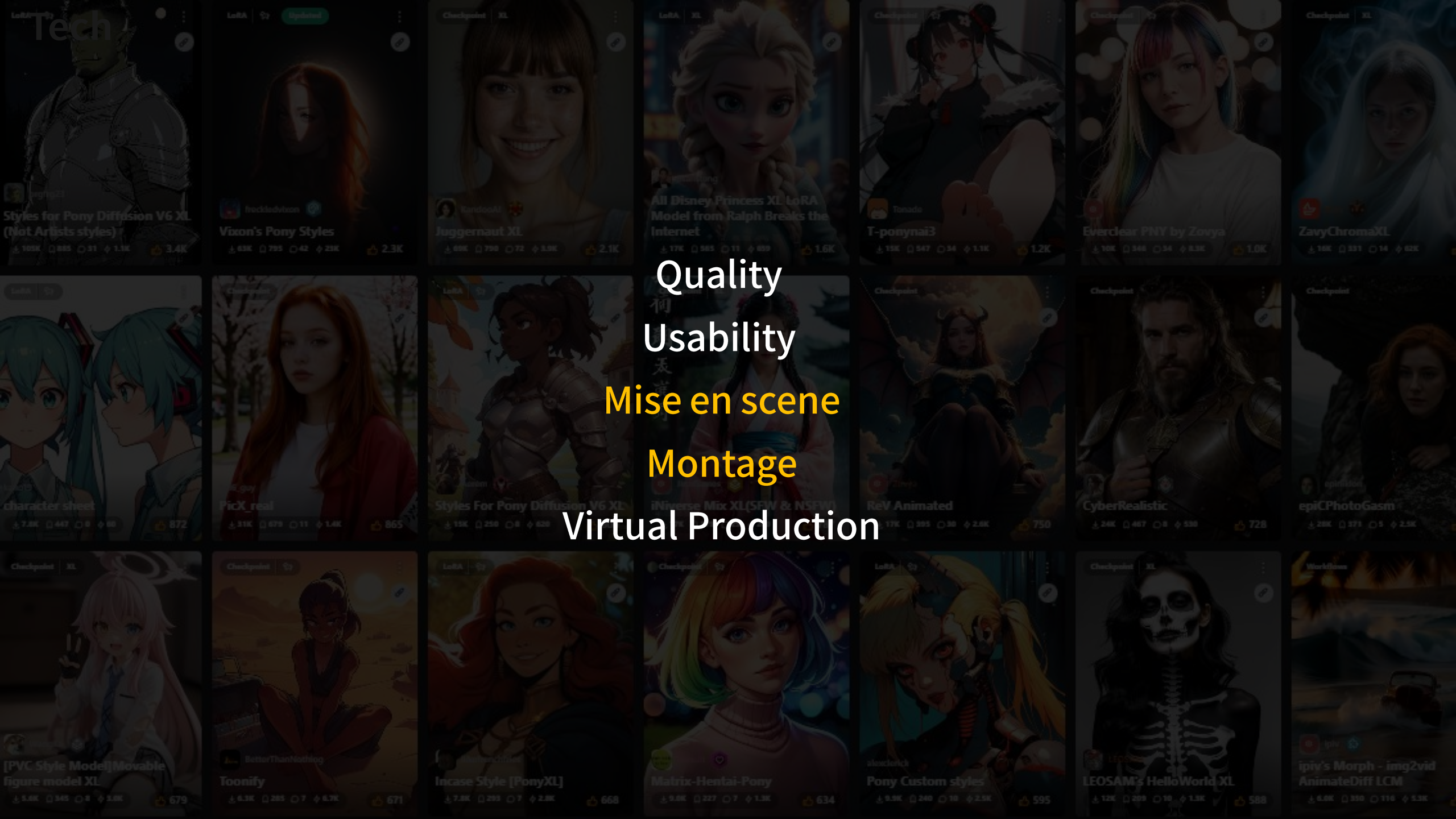
Montage

Virtual Production





Scene Continuity



Quality

Usability

Mise en scene

Montage

Virtual Production



Environment

Environment

AI Plan

Story – Art – Ani – Sound – Voice – s3D Convert

Human Plan

Art Directing – Edit

A futuristic cityscape with a blue color palette. The scene is dominated by numerous tall, modern skyscrapers with glass facades, some of which are illuminated with blue light. In the foreground, a complex highway interchange with multiple levels and ramps is visible, with cars and streetlights. The overall atmosphere is clean, high-tech, and futuristic.

**THIS MOVIE ENTIRELY
MADE BY A.I**



Emotion Code

어릴적부터 고아로 자라 오직 AI만을 가족으로 여기며
AI연구의 최고위치까지 오른 Dr.윤.

그가 개발한 '유대 AI'를 토대로 세상은 눈부시게 발전한다.
하지만 Dr.윤은 만족하지 못한다.

그가 진짜 AI라고 여기는 것은 감정을 가진 진짜 인간 AI였다.
때문에 아무도 모르게 홀로 연구를 진행한다.

Dr.윤은 인공 자궁을 통해 AI인간을 실제 인간처럼 부화시켰고,
인간으로 태어난 '유대 AI'에게 자신만의 방식으로 감정을 유도한다.

By Copilot

Movie 'Emotion Code' Credit

Production Team

Director **Chang-Ho Kim**

Art Director **Young-Jun Lee**
Art Director **Seung-Hyun Kim**

Editor **Hee-Ju Park**

Sound **Chan-Young Lee**

Producer **Oh-Joon Kwon**
s3D adviser **Sung-Hoon Kim(ETRI)**

Production duration

R&D **3 Weeks**
Production **2 Weeks**

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Movie 'Emotion Code' Credit

A.I Team

Scenario ChatGPT / Copilot

Art Stable Diffusion
Ani AnimateDiff
Face PIKA AI
Ani convert DOMO AI

Sound AIVA
Voice KT Voice Studio

s3D Convert DMs3D Converter

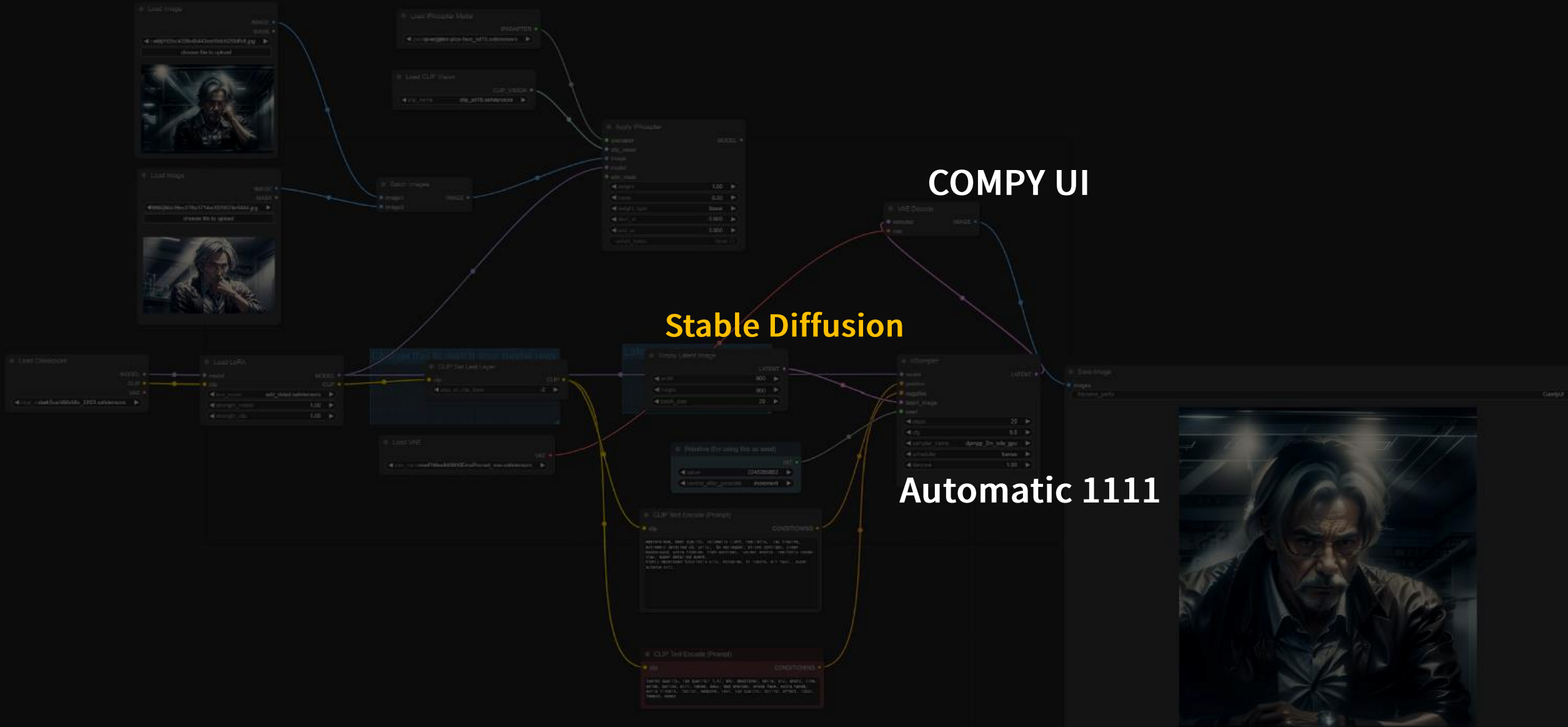
Server

A100 / RTX 3080 GPU

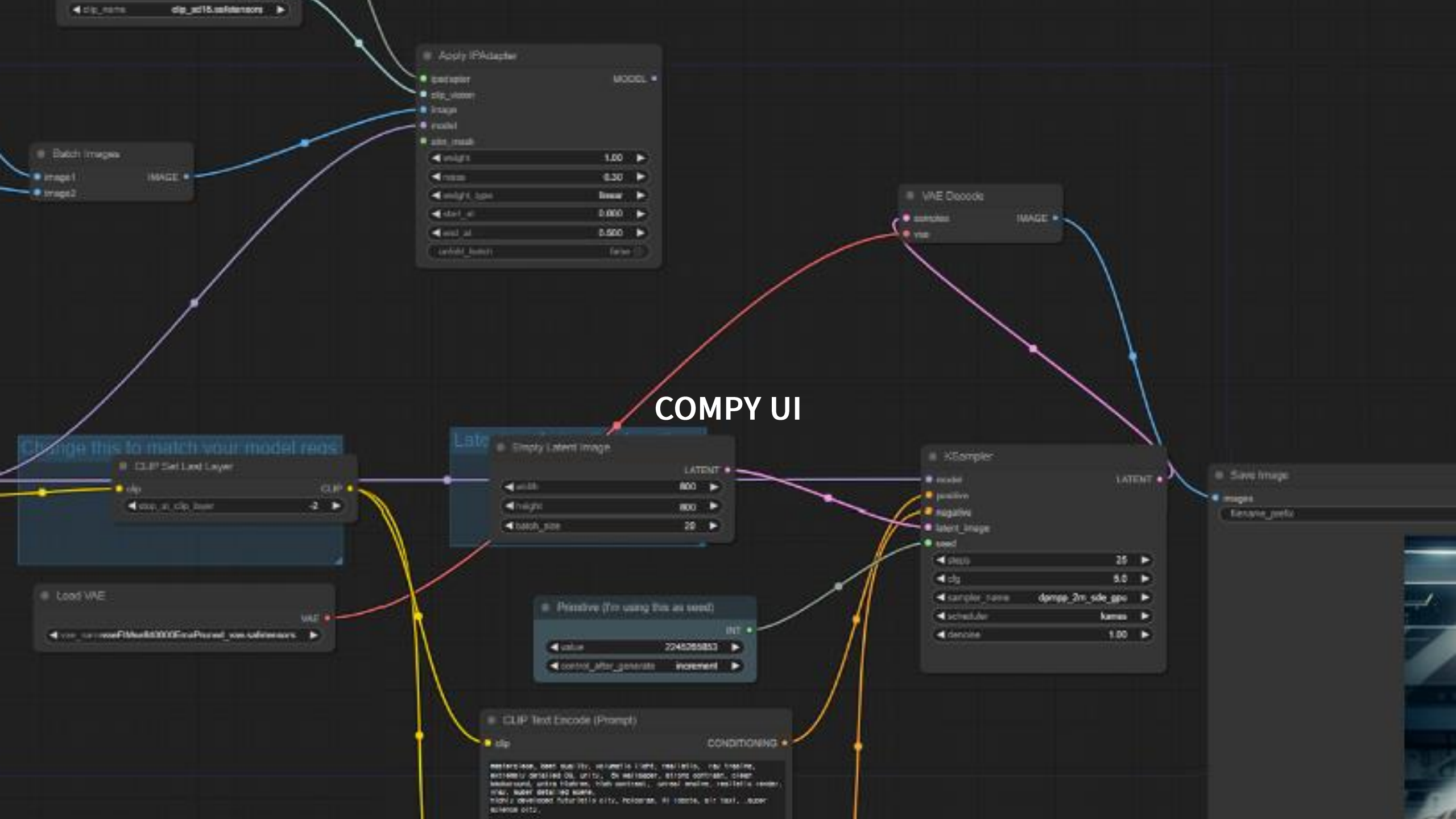
COMPY UI

Stable Diffusion

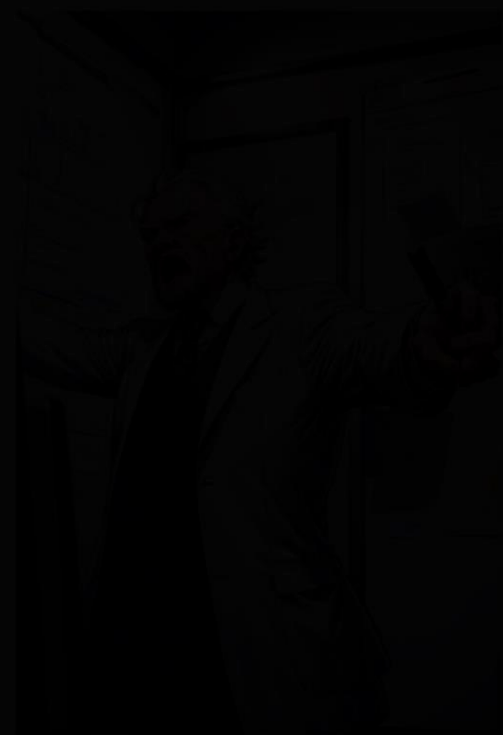
Automatic 1111



COMPY UI



AUTOMATIC 1111



XXXXXXXXXXXX

XXXXXX

Generation Textual Inversion Hypernetworks Checkpoints Lora

Sampling method: DPM++ 2M Karras Sampling steps: 30

Hires. fix Refiner

Width: 600 Batch count: 8

Height: 900 Batch size: 1

CFG Scale: 7

Seed: 4052641617 Extra

Override settings: VAE: vae-ft-mse-840000-ema-pruned_fp16.safetensors

ADetailer


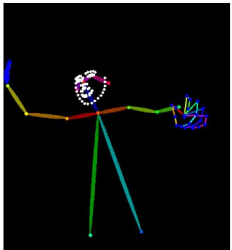
Dynamic Prompts

AnimateDiff

ControlNet v1.1.438 1 unit

ControlNet Unit 0 [OpenPose] ControlNet Unit 1 ControlNet Unit 2

Single Image Batch Multi-Inputs

Image:  Preprocessor Preview: 

Upload JSON

Set the preprocessor to [invert] if your image has white background and black lines.

Enable Low VRAM Pixel Perfect Allow Preview Mask Upload

Control Type

All Canny Depth NormalMap OpenPose MLSD Lineart SoftEdge Scribble/Sketch Segmentation Shuffle

Tile/Blur Inpaint InstructP2P Reference Recolor Revision T2I-Adapter IP-Adapter

Preprocessor: dw_openpose_full Model: control_v11p_sd15_openpose [cab727d4]



masterpiece, best quality, solo, volumetric light, CG, ultra highs, detailed background, <lora:add_detail:1.2>, 1 old man, black eyes and hair, short hair, wearing a suit and white lab coat, thinning hair, angry , screaming face, standing still pose, whiteboard full with graphs and notes in background, waist shot, future, white wall,

Negative prompt: (worst quality, low quality: 1.4), nsfw, naked, nude, skin, woman, breast, bad anatomy, woman, female, girl, sexy, body, ass, boobs, boring, girl, naked, sexy, bad anatomy, text, low quality, boring, effect, blurry,

Steps: 30, Sampler: DPM++ 2M Karras, CFG scale: 7, Seed: 4052641624, Size: 600x900, Model hash: cca17b08da, Model: darkSushiMixMix_225D, VAE hash: 735e4c3a44, VAE: vae-ft-mse-840000-ema-pruned_fp16.safetensors, ControlNet 0: "Module: dw_openpose_full, Model: control_v11p_sd15_openpose [cab727d4], Weight: 1, Resize Mode: Crop and Resize, Low Vram: False, Processor Res: 512, Guidance Start: 0.2, Guidance End: 1, Pixel Perfect: False, Control Mode: Balanced, Hr Option: Both, Save Detected Map: True", Lora hashes: "add_detail: 7c6bad76eb54", Version: v1.7.0

Time taken: 44.4 sec. A: 3.82 GB, R: 5.12 GB, Sys: 6.5/24 GB (26.9%)

ADetailer

Dynamic Prompts

AnimateDiff

ControlNet v1.1.438 1 unit

ControlNet Unit 0 [OpenPose]

ControlNet Unit 1

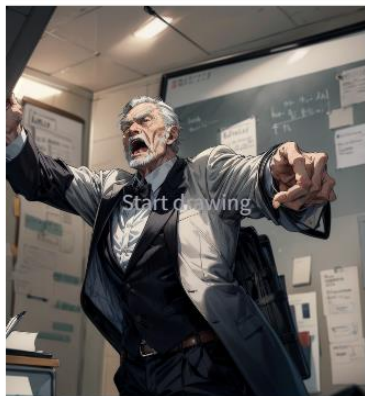
ControlNet Unit 2

Single Image

Batch

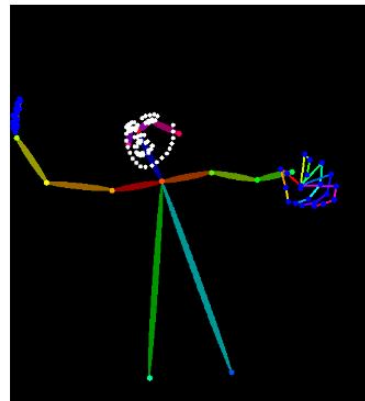
Multi-Inputs

Image



Start drawing

Preprocessor Preview



Edit

Edit

JSON

Close

Upload JSON

Set the preprocessor to [invert] if your image has white background and black lines.

- Enable
- Low VRAM
- Pixel Perfect
- Allow Preview
- Mask Upload

Control Type

- All
- Canny
- Depth
- NormalMap
- OpenPose
- MLSD
- Lineart
- SoftEdge
- Scribble/Sketch
- Segmentation
- Shuffle
- Tile/Blur
- Inpaint
- InstructP2P
- Reference
- Recolor
- Revision
- T2I-Adapter
- IP-Adapter

Preprocessor

Model

dw_openpose_full



control_v11p_sd15_openpose [cab727d4]

masterpiece, best quality, solo, volumetric light,
1 old man, black eyes and hair, short hair, wearing
white wall,

Negative prompt: (worst quality, low quality: 1.4
boring, effect,blurry,

Steps: 30, Sampler: DPM++ 2M Karras, CFG scale
pruned_fp16.safetensors, ControlNet 0: "Modul
Start: 0.2, Guidance End: 1, Pixel Perfect: False,

Time taken: 44.4 sec.

Generation | Textual Inversion | Hypernetworks | Checkpoints | Lora

Sampling method: DPM++ 2M Karras | Sampling steps: 30

Hires. fix | Refiner

Width: 600 | Batch count: 8

Height: 900 | Batch size: 1

CFG Scale: 7

Seed: 4052641617 | Extra

Override settings: VAE: vae-ft-mse-840000-ema-pruned_fp16.safetensors

ADetailer | Dynamic Prompts | AnimateDiff

ControlNet v1.1.438 1 unit

ControlNet Unit 0 [OpenPose] | ControlNet Unit 1 | ControlNet Unit 2

Single Image | Batch | Multi-Inputs

Image | Preprocessor Preview

Upload JSON

Set the preprocessor to [invert] if your image has white background and black lines.

Enable | Low VRAM | Pixel Perfect | Allow Preview | Mask Upload

Control Type: All, Canny, Depth, NormalMap, **OpenPose**, MLSD, Lineart, SoftEdge, Scribble/Sketch, Segmentation, Shuffle

Tile/Blur, Inpaint, InstructP2P, Reference, Recolor, Revision, T2I-Adapter, IP-Adapter

Preprocessor: dw_openpose_full | Model: control_v11p_sd15_openpose [cab727d4]



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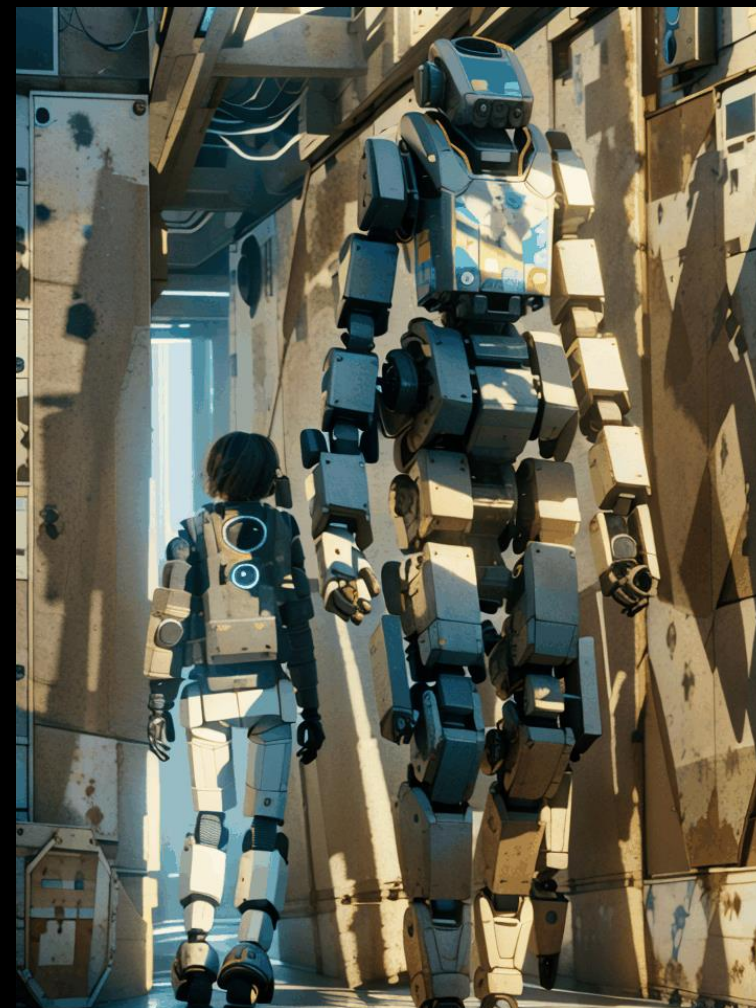
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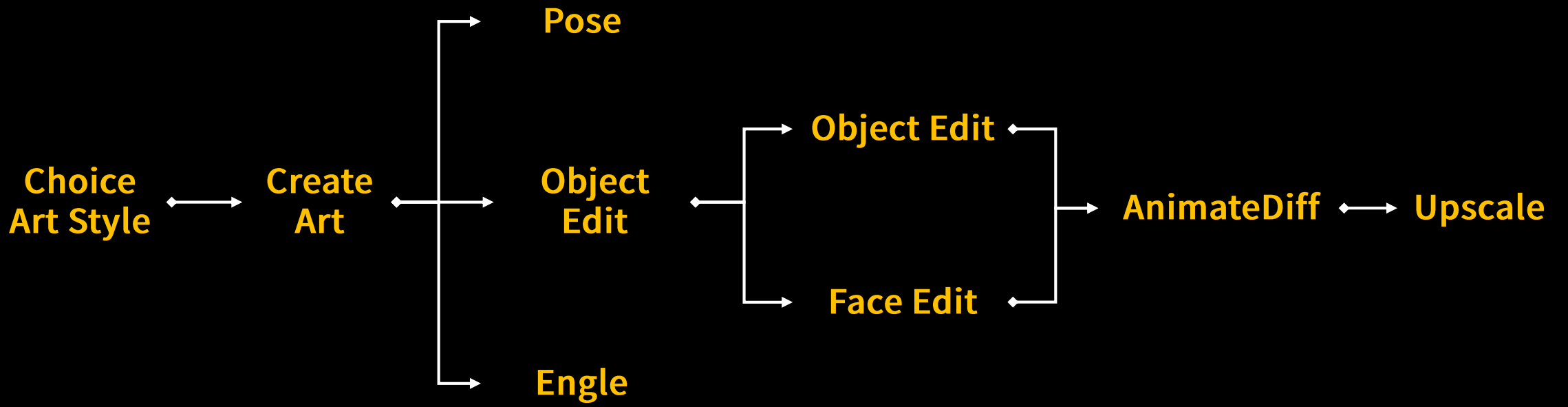
Steps: 30, Sampler: DPM++ 2M Karras, CFG scale: 7, Seed: 4052641624, Size: 600x900, Model hash: cca17b08da, Model: darkSushiMixMix_225D, VAE hash: 735e4c3a44, VAE: vae-ft-mse-840000-ema-pruned_fp16.safetensors, ControlNet 0: "Module: dw_openpose_full, Model: control_v11p_sd15_openpose [cab727d4], Weight: 1, Resize Mode: Crop and Resize, Low Vram: False, Processor Res: 512, Guidance Start: 0.2, Guidance End: 1, Pixel Perfect: False, Control Mode: Balanced, Hr Option: Both, Save Detected Map: True", Lora hashes: "add_detail: 7c6bad76eb54", Version: v1.7.0

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AnimateDiff





AI Art Process



Dr.Yoon Concept



Jude Concept

Composition Workflow

Create & tweak a chord progression

Help?

◀ Previous



Next ▶

futuristic, majesty, cybertic

Generate

Settings

Best practises

**Insert
Code**



**Create
Mucie**

1	2	3	4	5	6	7	8	
Cm ⁷	Bb ^{maj7}	F	F	Eb	Cm ⁷	Bb ^{maj7}	F	F

Zoom [Slider]

Tempo: 77

Melody

Chords

Bass

Extra

Percussion

Dynamics

Low Frequency Cut

High Frequency Cut

Reverb

Delay

Auto Staccato

Edit

M S

M S

M S

M S

M S

[Icon]

[Icon]

[Icon]

[Icon]

[Icon]

9 10

A Outro

Cm Eb Ab Fm Bb Cm Eb Ab Fm Bb Cm Eb Ab Fm Bb ...

Insert Code ↔ Create Mucie

c4

c3



새로운 인류로 기억될 거야!

Work



새로운 인류로 기억될 거야!

Work



새로운 인류로 기억될 거야!

L Movie



새로운 인류로 기억될 거야!

R Movie



새로운 인류로 기억될 거야!

- **Presentation**

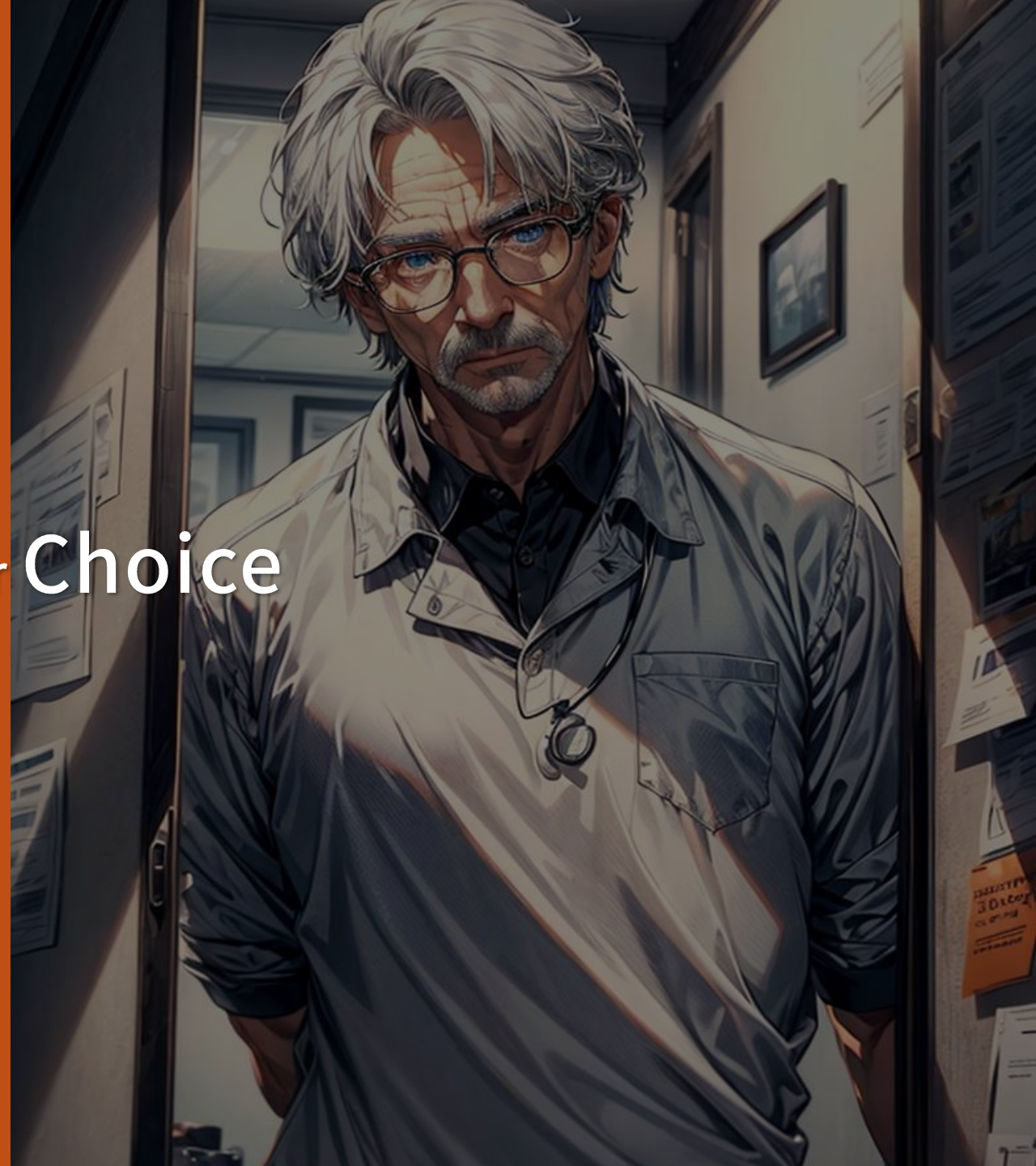
Mise en scene
Montage

Continuity?

Presentation



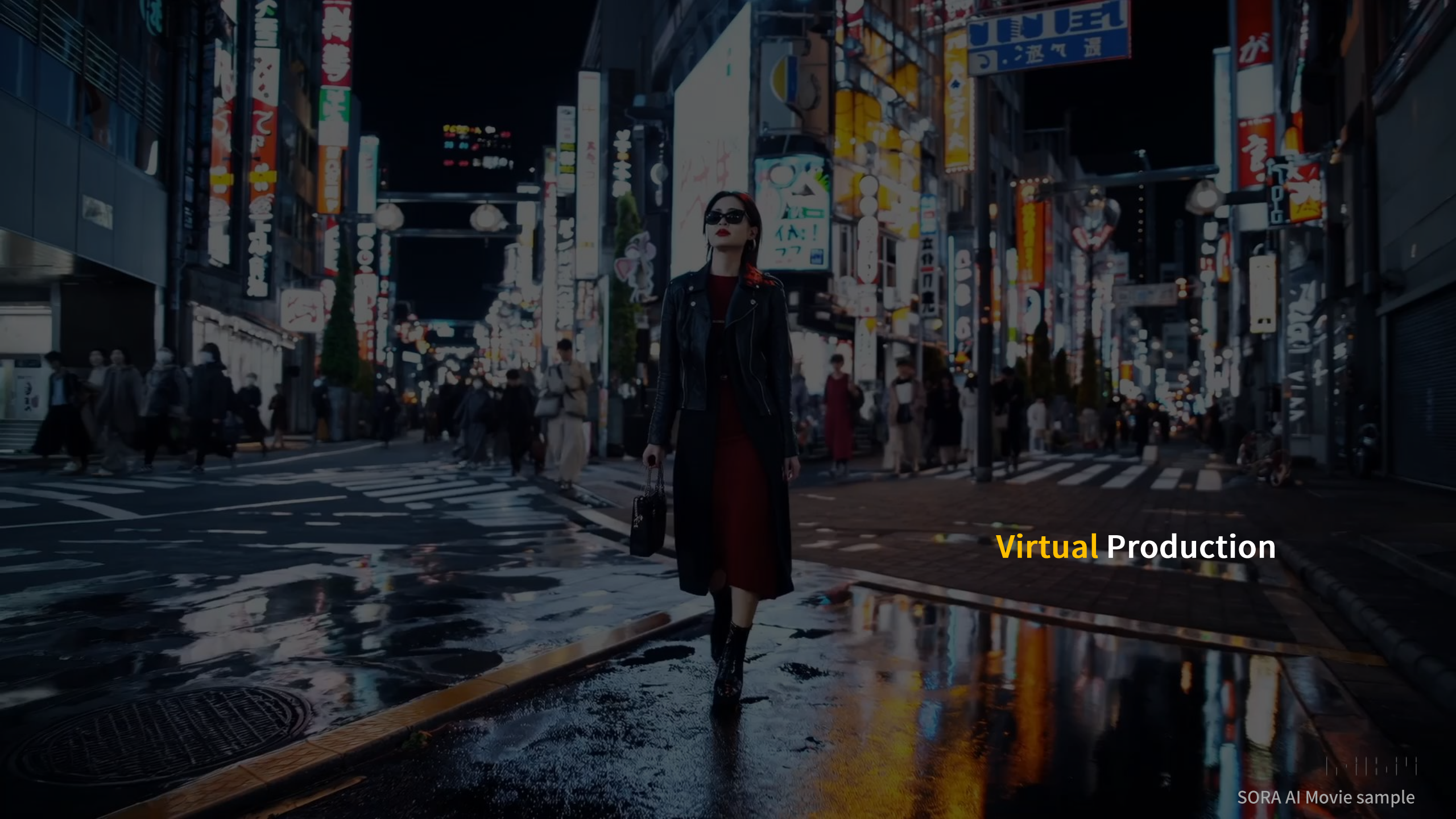
Make or Choice



A close-up, high-resolution photograph of a woman's right eye. The eye is dark brown and looking slightly to the right. The eyelashes are long and dark. The skin around the eye is smooth and has a warm, natural tone. The word "Choice" is written in a clean, white, sans-serif font across the center of the eye.

Choice





Virtual Production



SORA AI Movie sample