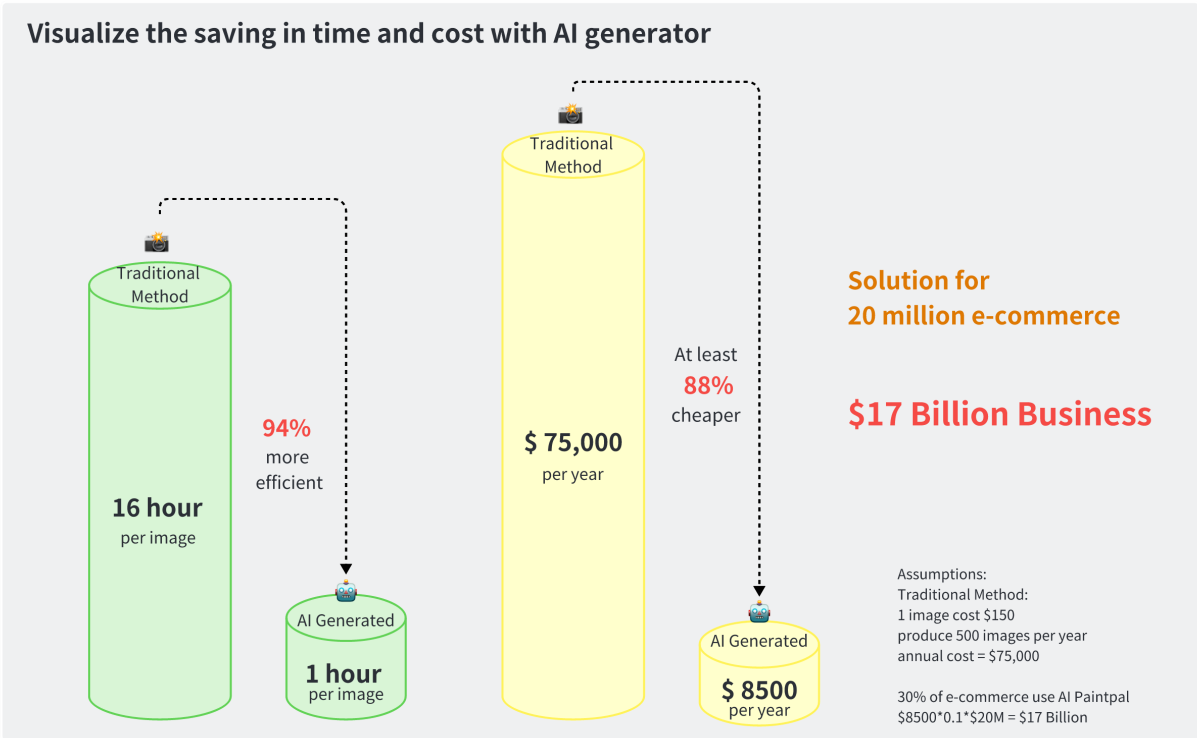# Hackathon Demo

> ☀ We use AI to facilitate industrial design and modeling images.
>
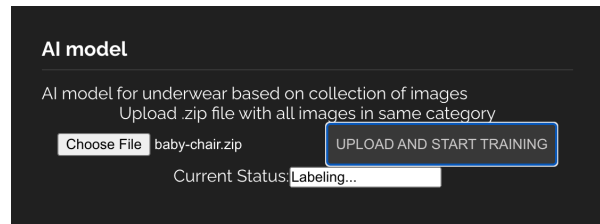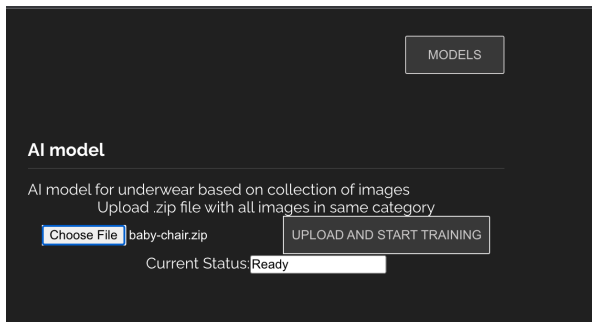> Our first product is **_Paintpal_**

💰 Business Values

- Current market volumn for industrail design and modeling is high.

- The potential for cost reduction and efficiency improvement is huge.

- There are 20 million small business companies who can benefit from this.
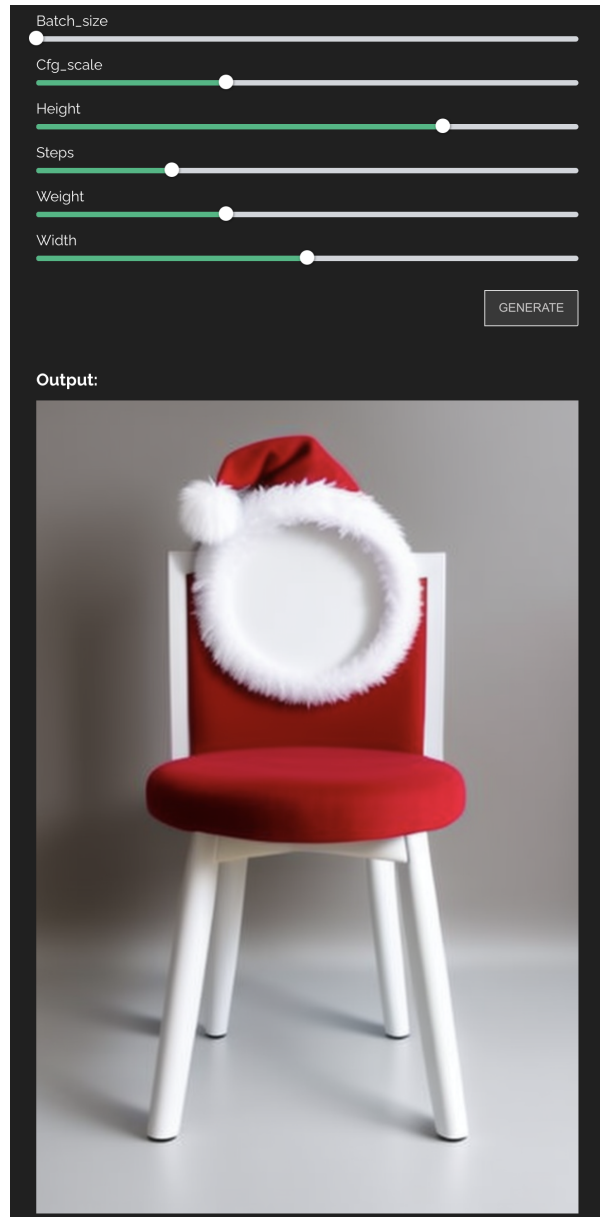
Visualize the saving in time and cost with AI generator

Traditional Method

Traditional Method

94% more efficient

16 hour per image

AI Generated

1 hour per image

$ 75,000 per year

At least **88%** cheaper

AI Generated

$ 8500 per year

Solution for 20 million e-commerce

$17 Billion Business

Assumptions:
Traditional Method:
1 image cost $150
produce 500 images per year
annual cost = $75,000

30% of e-commerce use AI Paintpal
$8500*0.1*$20M = $17 Billion

🎨 What we do

You can

- generate designs based on descriptions and existing collections.

- try new designs in real-world pictures.

- Upload batch images to train your own model to generate image in the same category

AI model

AI model for underwear based on collection of images
Upload .zip file with all images in same category

Choose File | baby-chair.zip   UPLOAD AND START TRAINING

Current Status: Ready

AI model

AI model for underwear based on collection of images
Upload .zip file with all images in same category

Choose File | baby-chair.zip   UPLOAD AND START TRAINING

Current Status: Labeling...

Paintpal

Type
Stable diffusion

Model
AI children's chair based on collection of in

Prompt

children's chair, no humans, white background, simple
background, still life, chair, stool, table, santa hat

109 Characters

Negative_prompt

frame,bad anatomy,gross proportions,(malformedlimbs),
((missingarms)),((missinglegs)),(((extraarms))),
((extralegs))),(fused fingers),(toomanyfingers),
((longneck))),tiling,poorlydrawn,mutated,cross-eye,canvas
frame,frame,weird colors,blurry

621 Characters

Sampler_index

DPM++ SDE Karras

16 Characters

Model

ertongyi

8 Characters

For example, you can use the model to

- generate streamlined, leather material body e-cigarette design based on the <200 images collection>

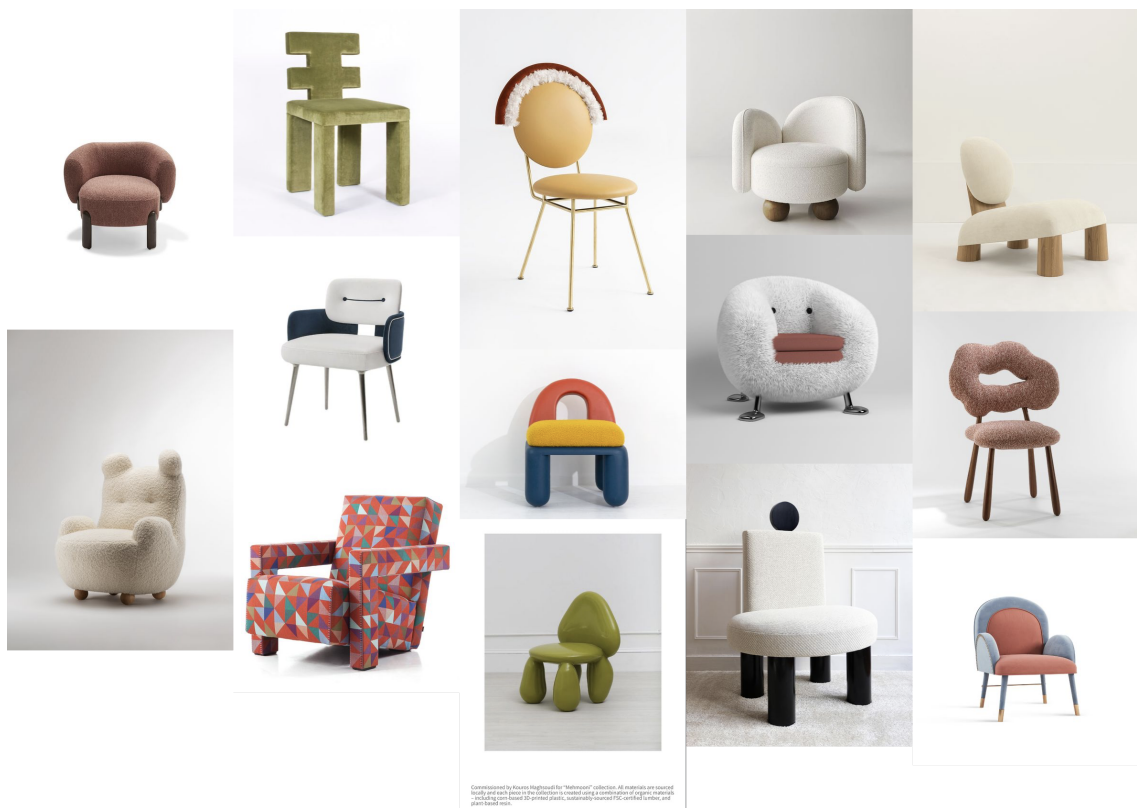- try <helmet-design> on 6-month kids playing on grass.

💡 Originality and Customer Use Cases

- Originality
  - Found during working with existing customers
- Innovation
  - Solve practical problems for small companies with state-of-art AI technologies
- Actual use cases in collaboration with real users
  - ▼ Children's chair

    Training set
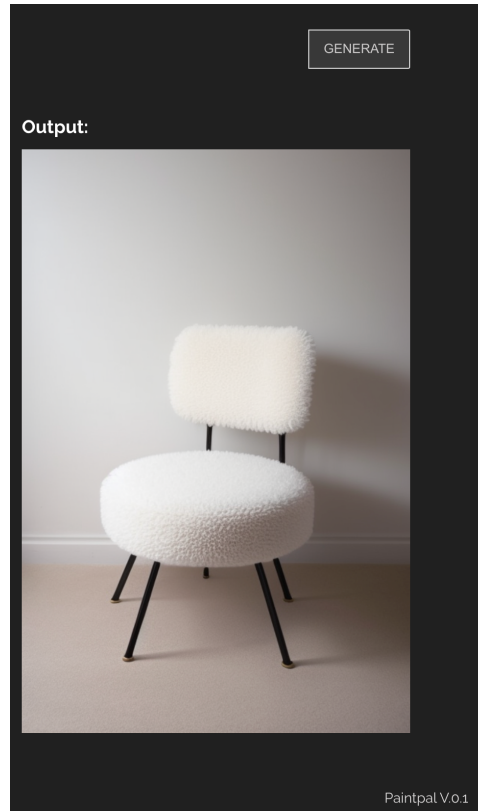

    Parameters_1

```
children's chair, no humans, w
hite background, simple backgr
ound, still life, chair, stoo
l, table,  santa hat, <lora:er
tongyi:0.8>
```

Paintpal

Type
Stable diffusion

Model
AI children's chair based on collection of in

Prompt

```
children's chair, no humans, white background, simple
background, still life, chair, stool, table,  santa hat,
<lora:ertongyi:0.8>
```

130 Characters

Negative_prompt

```
Embossed, ((bad construction)), words, text, ((distorted
structure)), deformedeyes,((disfigured)),((badart)),
((deformed)),((extra limbs)),(((duplicate))),((morbid)),
((mutilated)),outof frame,extra fingers,mutated hands,poorly
drawn eyes ((poorly drawnhands)) ((poorlydrawn face))
```

621 Characters

Sampler_index

```
DPM++ SDE Karras
```

16 Characters

Width

Height

Steps

Cfg_scale

Batch_size

Results_1

GENERATE

Output:

Paintpal V.0.1
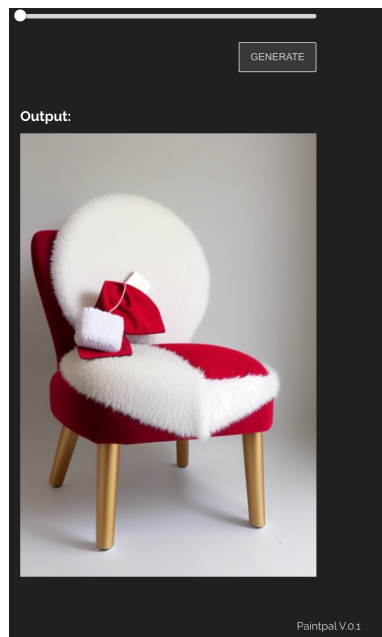
Parameters_2

```
children's chair, no humans, white background, simple background, still life, cha
ir, stool, table, Shearling, <lora:ertongyi:0.8>
```

Results_2

▼ AI modeling for helmet

Training set

screenshot-2023 0324-170432.png

screenshot-2023 0324-170445.png

Parameters_1

```
a cute boy , helmet , sitting on the
sofa  ,smiling   <lora:helt3.27-0000
12:1>
```

Paintpal

Type
Stable diffusion ∨

Model
AI children's helmet ∨

Prompt

```
a cute boy , helmet , sitting on the
sofa  ,smiling   <lora:helt3.27-
000012:1>
```

78 Characters

Negative_prompt

```
Embossed, ((bad construction)), words,
text, ((distorted structure)),
deformedeyes,((disfigured)),((badart)),
((deformed)),((extra limbs)),
(((duplicate))),((morbid)),
((mutilated)),outof frame,extra
```

621 Characters

Sampler_index

```
DPM++ SDE Karras
```

16 Characters

Width

Height

Steps

Cfg_scale

Batch_size

Results_1

Parameters_2

```
a cute boy , helmet , on grass ,smiling  <lora:helt3.27-000012:1>
```

Results_2

▼ e-cigarette industrial design

Training set
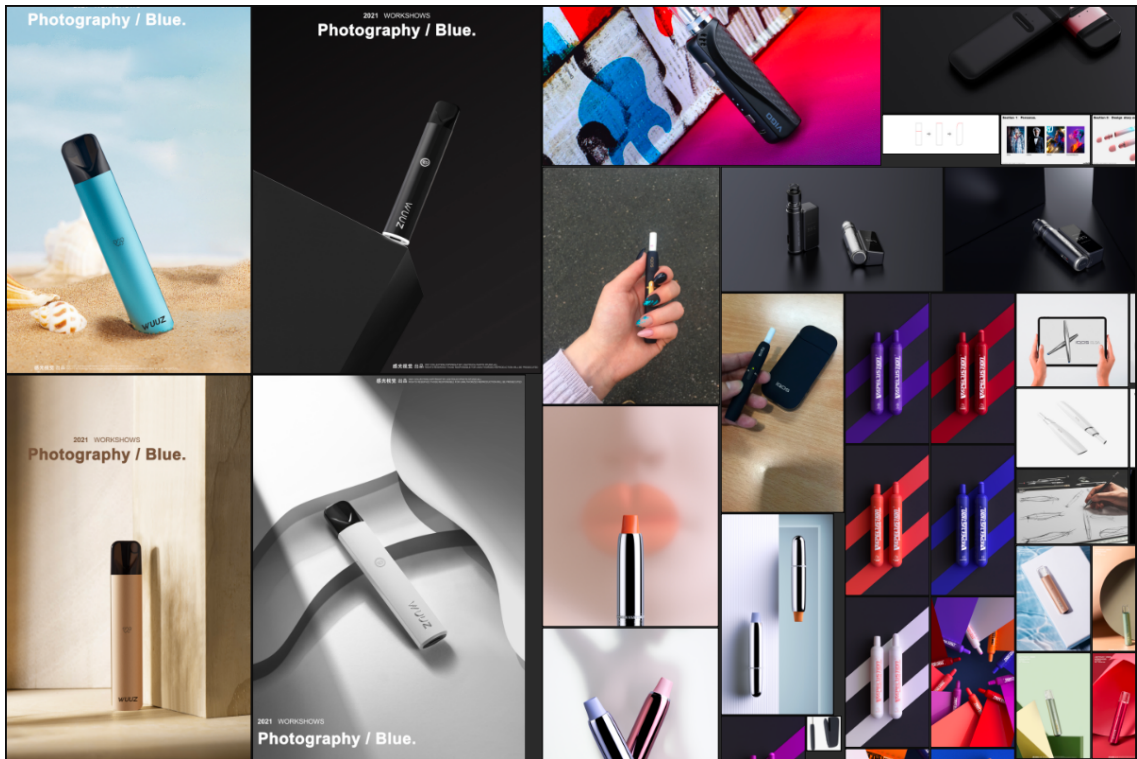
Parameters_1

e-cigarette,sports,classic,light, poor ,simple background,

Results_1

Parameters_2

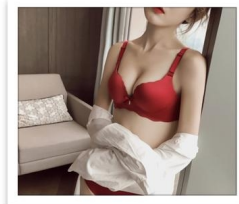sports,classic,light, poor ,simple background,
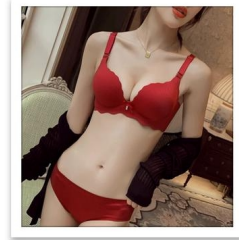
Results_2
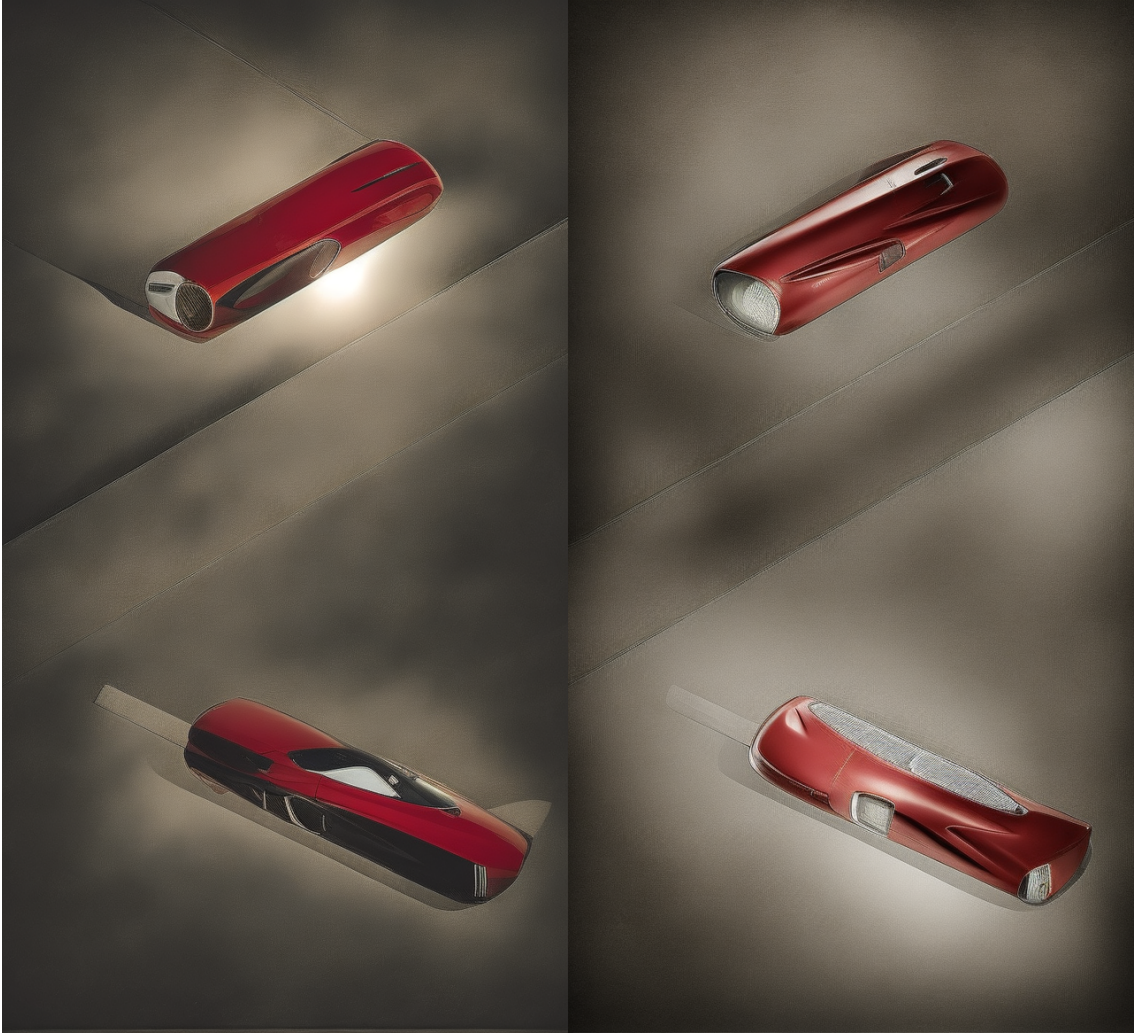
▼ AI model for dressing

Training set

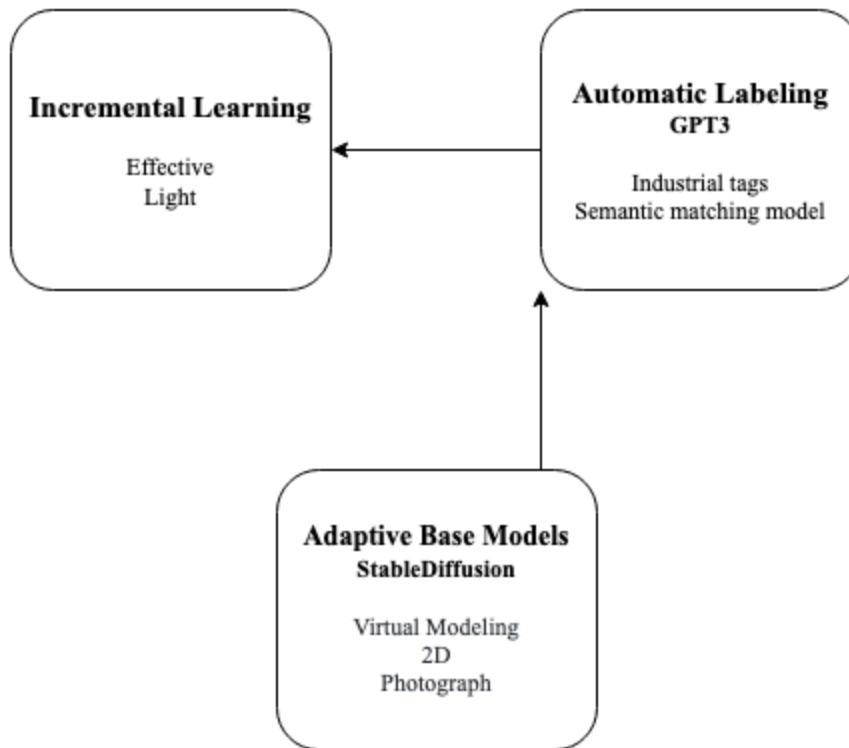红色内衣一套a-1.jpeg   红色内衣一套a-2.png   红色内衣一套a-3.png

Parameters_1

Results_1

Overall Impression

- Users can provide a collection of reference images
- Users can use simple words to *generate* and *modify* images
- The user's product can be displayed in different scenarios

🔧 Technology

- System diagram

💥 Impact

- Tailored for industrial design. Where the output image is applicable for massive production.

- Unique labeling system and algorithm.

- Make the state-of-art technology more accessible to people with no tech background.

🤖 Demo Link for Paintpal

Please remember this is still a very early-stage demo. We'll continue improving it 😁

https://paintpal-lablab.mindblink.co/

🥷 Contact

If you're interested in our product and would like to speak with us, you can schedule a call at https://calendly.com/mindblink/30min

You can also send us an email to *contact.mindblink@gmail.com*

Thank you for your interest!