

# Threading between Pixel und Prompt - Image editing meets AI magic

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# This presentation in a nutshell

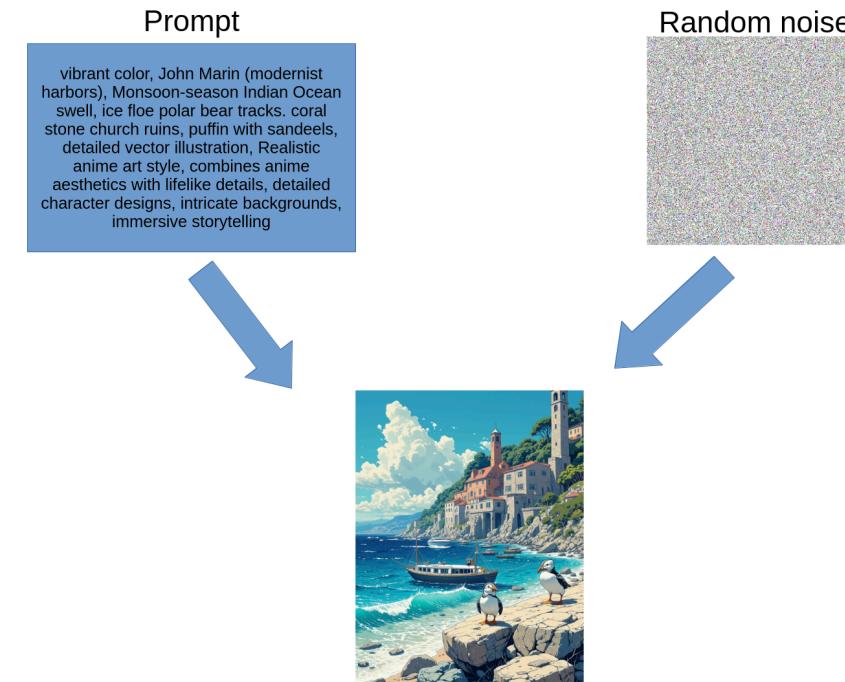
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Lighthearted presentation about something else than  
LLMs.

Let's talk about image generation and editing with AI.

# How are images generated using AI?

One buzzword: Stable Diffusion!



# Evolution of Models

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## Stable Diffusion 1.5 (SD)

- The classic - 512x512 images
- Fast, efficient, runs on modest hardware
- Huge library of community fine-tunes

## Stable Diffusion XL (SDXL)

- Higher resolution - 1024x1024 native
- Better prompt understanding and detail
- Requires more VRAM (~6-8GB+)

# Advanced models

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## Flux

- New architecture from Black Forest Labs (original SD creators)
- Superior prompt adherence and realism
- Multiple variants: schnell (fast), dev (quality), pro (best)

## Qwen

- Multimodal model from Alibaba Cloud
- Strong at text rendering in images
- Versatile across multiple languages

# Availability

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Pretrained checkpoints, LoRA, etc. are available under:

- [https://huggingface.co/models?pipeline\\_tag=text-to-image](https://huggingface.co/models?pipeline_tag=text-to-image)
- <https://civitai.com/images>

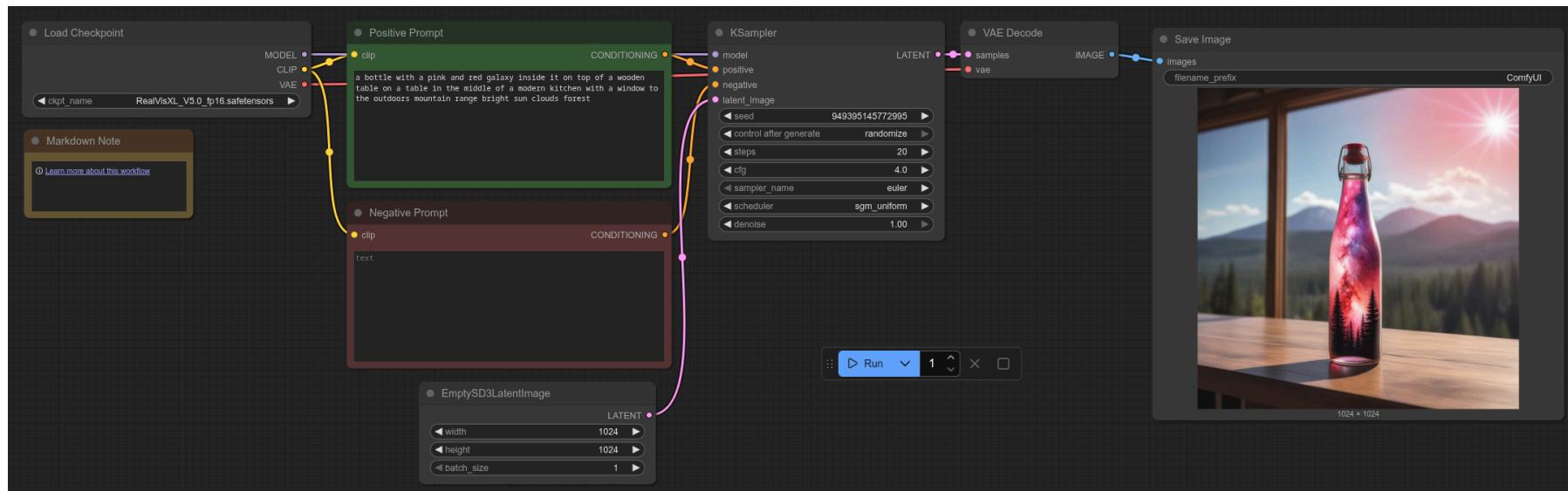
... but that's all nice, but  
kinda hard to use!

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# Accessibility Level 1: ComfyUI

## Node-based workflow for Stable Diffusion

- Visual programming interface for AI image generation
- Build complex workflows with simple drag-and-drop
- See exactly what each step does
- Save and share workflows as JSON files



# Accessibility Level 2: Krita AI

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AI generation meets professional digital painting

- **Native Integration:** AI tools directly in your painting workflow
- **Artist-First Design:** Built for creators, not engineers
- **Inpainting & Outpainting:** Edit specific regions or extend your canvas
- **Layer-Aware:** Work with selections, masks, and layers seamlessly
- **Multiple Backends:** Connect to ComfyUI, local models, or cloud services

# Why Krita + AI?

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The best of both worlds!

## Traditional Digital Art

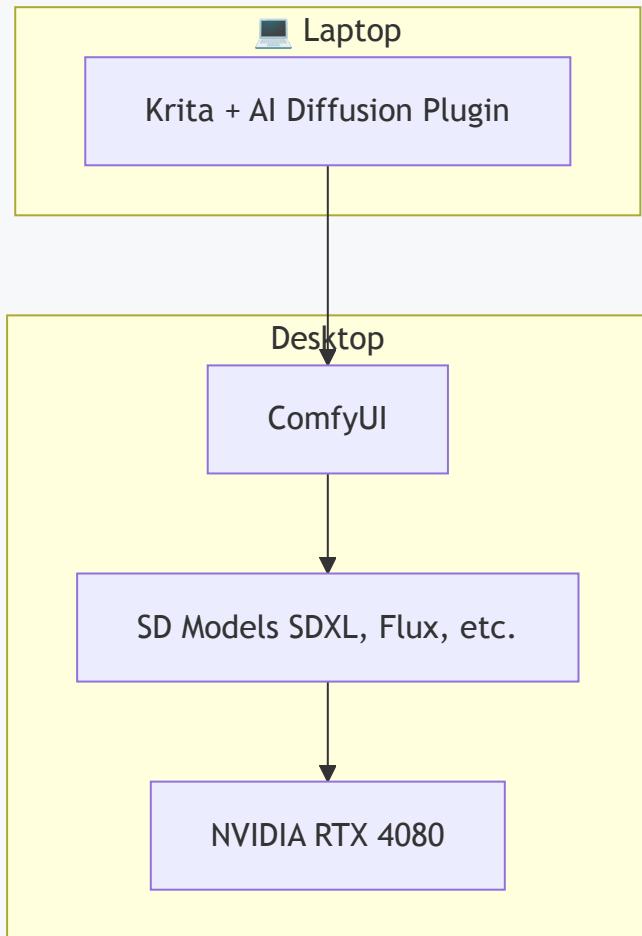
- Professional-grade painting tools
- Brush engines, layers, filters
- Non-destructive workflow

## + AI Superpowers

- Generate base compositions quickly
- Fill in backgrounds or details
- Explore variations without starting over
- Speed up repetitive tasks

**Result:** Artist stays in control, AI handles the grunt work

# DEMO setup



# DEMO Krita + krita-ai-diffusion plugin

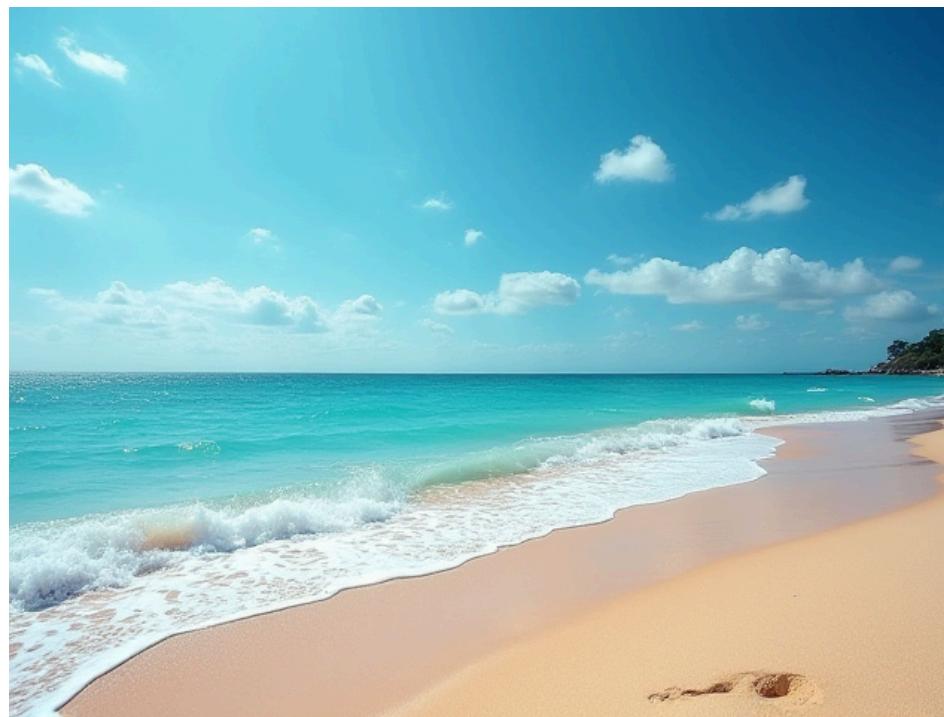
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<https://github.com/Acly/krita-ai-diffusion>

# DEMO 1: Simple generation

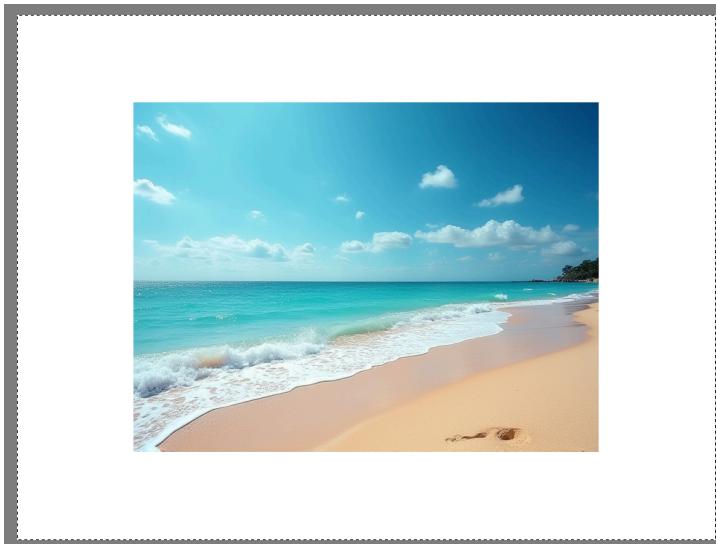
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Flux: Sunny, summer, beach



# DEMO 2: Extend image (Outpainting)

Flux: Sunny, summer, beach



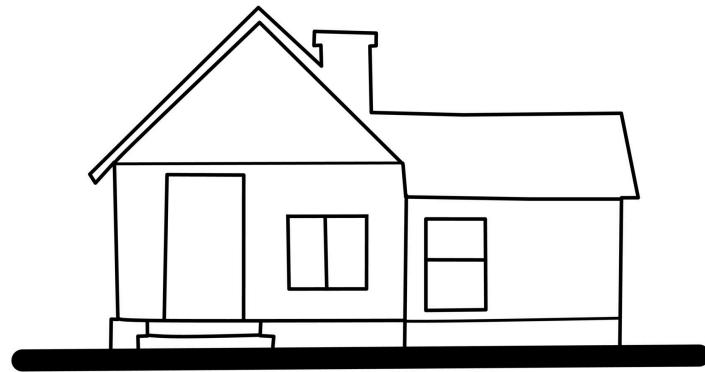
# Demo 3: Add / Change Details (Inpainting)

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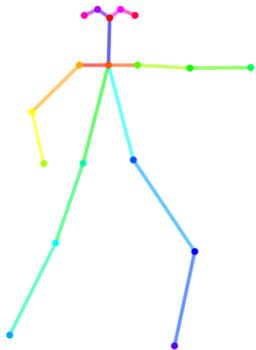
# Demo 4: Reference Layers

TODO Image



# Demo 5: Poses

SDXL: one Cat, Lederhosen, holding a beer, parish fair



# Demo 6: The next generation: Flux, Qwen Image

Understands prompts for editing:

Keep background as is, remove the cat, add a beard to the  
guy

colorize this image



# No GPU?

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Rent a server: [runpod.io](https://runpod.io)

# Thanks!

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