# Evaluating AnimateDiff for High-Quality Video Generation October 28, 2023 Tiana Le

# **AnimateDiff**

#### Introduction

AnimateDiff enhances ComfyUI, providing a stable and modular interface for diffusion tasks. It has evolved from its original version, sd-webui-animatediff, now offering smoother video clips with a similar output to tools such as <u>zeroscrope</u> and <u>runaway</u>.

#### Methodology

I evaluated AnimateDiff based on its ability to produce smooth video clips. Tests were conducted using ComfyUI and Warpfusion to assess usability, performance, and video quality. The tool was used with two interfaces: ComfyUI (node-based) and Warpfusion (Google Colab).

## **Installation and Setup**

Integrating AnimateDiff with ComfyUI was complex, requiring many attempts. Workflows were found on <u>GitHub</u>, <u>YouTube</u>, and <u>Reddit</u>.

### **Features and Functionality**

AnimateDiff stands out for its smooth video generation, especially for longer clips, though it can be slower than alternatives.

#### **Usability**

Warpfusion was easier to use and allowed frame previews during generation. ComfyUI was more challenging, particularly for setup and troubleshooting, and took longer to generate videos.

#### **Performance**

AnimateDiff offers smooth, high-quality video output but can be slow, particularly when control nets are added.

#### **Support and Community**

Support is limited, mostly relying on community-shared workflows and tutorials on YouTube, GitHub, Twitter, and Reddit.

#### **Case Studies or Examples**

The tool was used for a music video project, contributing to the desired video quality and smoothness. The client's target quality was similar to results (<u>example 1</u>, <u>example 2</u>) from <u>Pika Labs</u>. Below is a rough draft of my video generations with the song. <a href="https://youtu.be/ejB8NnRTCwo">https://youtu.be/ejB8NnRTCwo</a>

#### **Recommendations and Best Practices**

Start with generating short video clips (around 25-50 frames) to understand and adjust parameters before moving to larger videos.

#### Conclusion

AnimateDiff excels in creating high-quality, smooth video clips for extended durations. It doesn't require a monthly subscription, it can be used for free. Despite its learning curve and setup challenges, its advanced capabilities make it a valuable tool for video generation.

#### References

- ComfyUI-AnimateDiff-Evolved
- ComfyUI GitHub

#### Final Result:

Oxbow - Second Talk Music Video

Oxbow "Second Talk"

