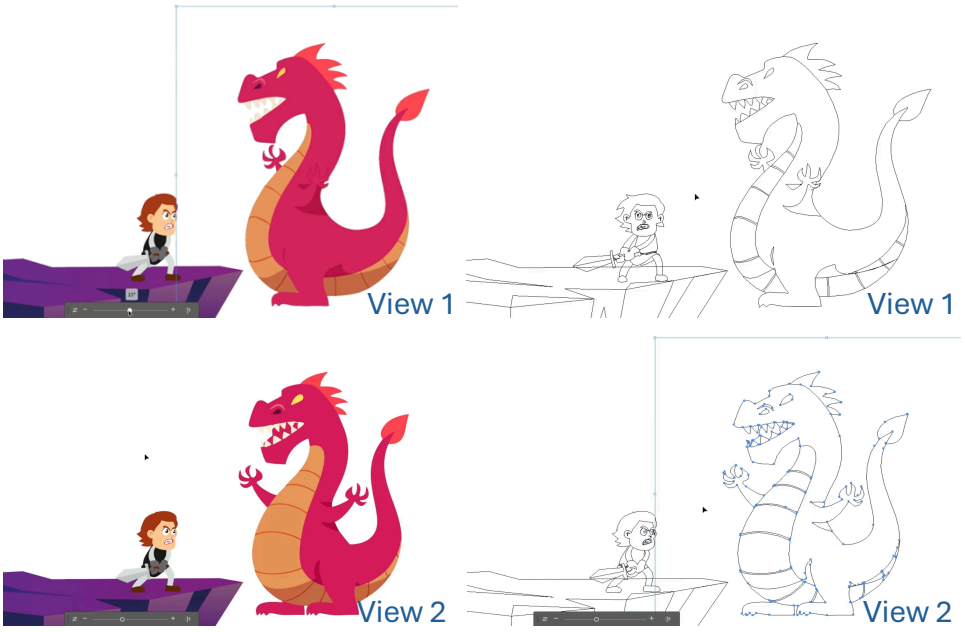
Enhancing Multi-View Editable Vector Graphics with Generative AI

Keywords: *GenAI, Diffusion Model, Computer Vision, 3D, Vector Image*

Generative AI advancements have unlocked new possibilities in graphic design, particularly in creating adaptable, multi-view vector graphics from single 2D images. Inspired by Adobe's Turntable project, which enables 2D vector drawings to simulate 3D views, this thesis explores a generative approach combining vector and pixel processing to produce high-quality, editable multi-view vector graphics. This approach leverages the strengths of current generative AI, which primarily excels at pixel-based image processing.



How to generate Multi-View Editable Vector?

1. Multi-View Image Generation: Develop a pipeline to create consistent multi-view images from a single 2D input using diffusion models.
   Reference Projects: Zero123, SyncDreamer, and MVDream.

2. Pixel-to-Vector Conversion: Convert the generated pixel images to vector format for editing

If you are interested in pursuing this topic for your master's thesis, please email:

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with your **CV** and **Transcript**.