

ARTPEER: Artistic Alignment via Reflection-based Prompt Evolution with Simulated Artist

Kaustubh Kumar^{1,2} Ashutosh Ranjan¹ Vivek Srivastava¹ Shirish Karande¹

¹TCS Research ²Indian Institute Of Technology, Patna

Motivation

- Current generative systems frame alignment in narrow terms, encoding the artistic influence as a static token.
- Models are trained to reproduce surface-level features, such as color palettes, compositions and textures, while lacking contextual or conceptual coherence.
- Despite the abundance of information available about artists and their artworks, existing systems fail to effectively leverage this data.
- Furthermore, most current systems treat the creative process as a one-shot activity, overlooking its inherently iterative nature.

Illustration

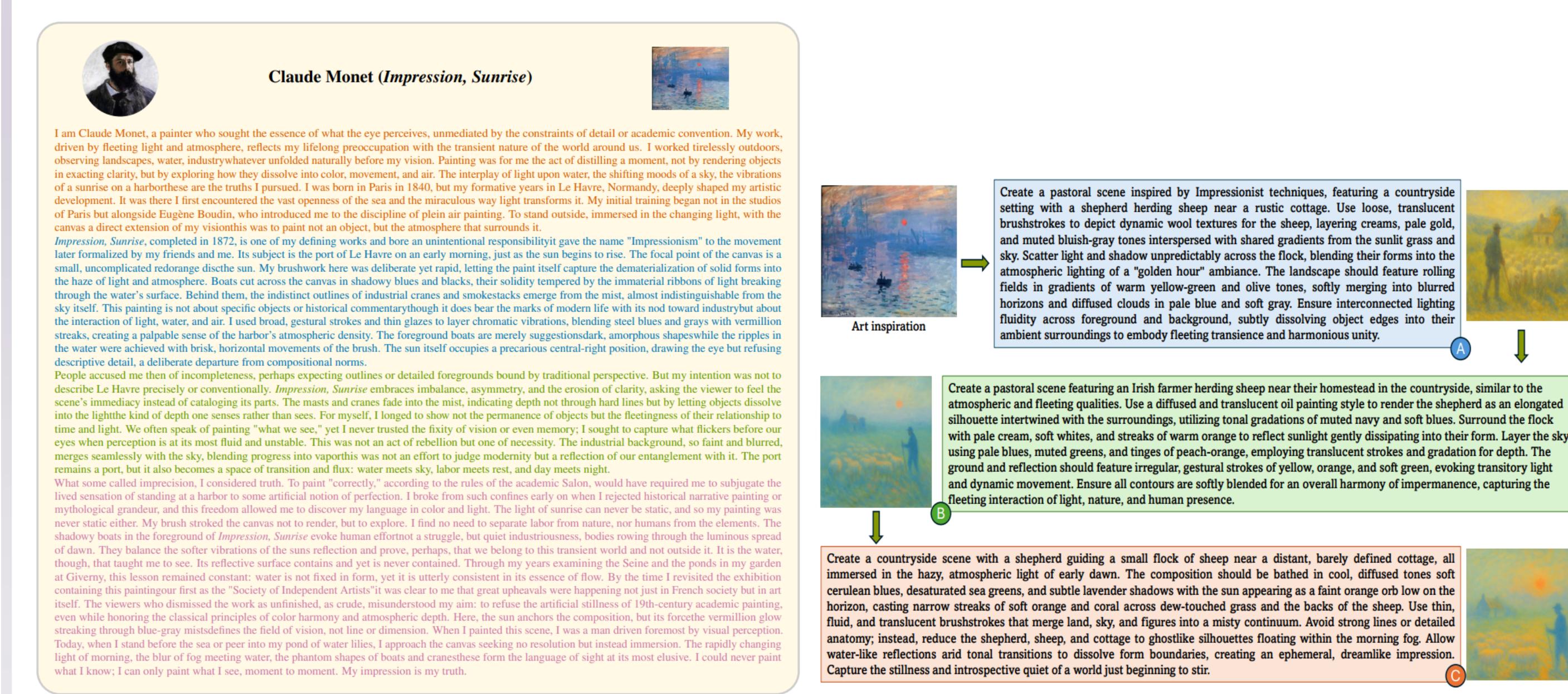


Figure 2: Artist Persona (left) and prompt evolution (right) illustrating the method.

The figure depicts the Persona of Claude Monet for the artwork *Impression, Sunrise* across four personality dimensions: ■ Contextual influences, ■ Self-awareness and identity formation, ■ Creative disobedience, ■ Creativity as problem-solving generated through **Persona Simulation Engine**. We also show the **Prompt evolution** example with ARTPEER. The starting prompt is: “Irish farmer herding sheep near homestead in countryside” and the art inspiration is *Impression, Sunrise* by Claude Monet. We show the generated image and the corresponding prompt with (A) Artist persona, (B) first Socratic reflection, and (C) second Socratic reflection.

Ethical Considerations

Simulating an artist as an autonomous agent opens exciting possibilities for computational creativity but also raises important ethical concerns. Such systems risk shifting authorship and interpretation, reducing nuance, and privileging certain cultural viewpoints. To address these challenges, our approach emphasizes transparency in both process and influences, actively promotes inclusivity and diversity of cultural sources, and ensures respect for cultural heritage through thoughtful and sensitive design choices.

Artistic Alignment via ARTPEER

- We re-frame artistic alignment as a problem of robust creative reasoning by embedding reflection, critique and adaptation into generation.
- Introduces **ARTPEER**, a computational framework for robust artistic alignment that embeds artistic reasoning within the generative process.
- We propose a **Persona Simulation Engine** that creates an artist agent modeled on four dimensions: **Contextual Influence**, **Identity Formation**, **Creative Disobedience**, and **Creativity as Problem-Solving**. It operates through three components: the **Knowledge Hub**, which aggregates iconographic and stylistic analysis, biographical details, and historical context; the **Information-Seeking Web Agent**, which gathers work-specific evidence such as letters, sketches, and material choices to reconstruct production circumstances; and structured analysis using **Noël Carroll’s art criticism framework** [5] to articulate meaning and value. This synthesis produces a dynamic persona that goes beyond mere factual accumulation.
- Introduces **Creative Exploration**, a multi-agent framework that models iterative creative decision-making through *Socratic reflection*. This process refines prompts via teacher-student dialogue between Artist Agent and Canvas Proxy, ensuring stylistic alignment and conceptual coherence.

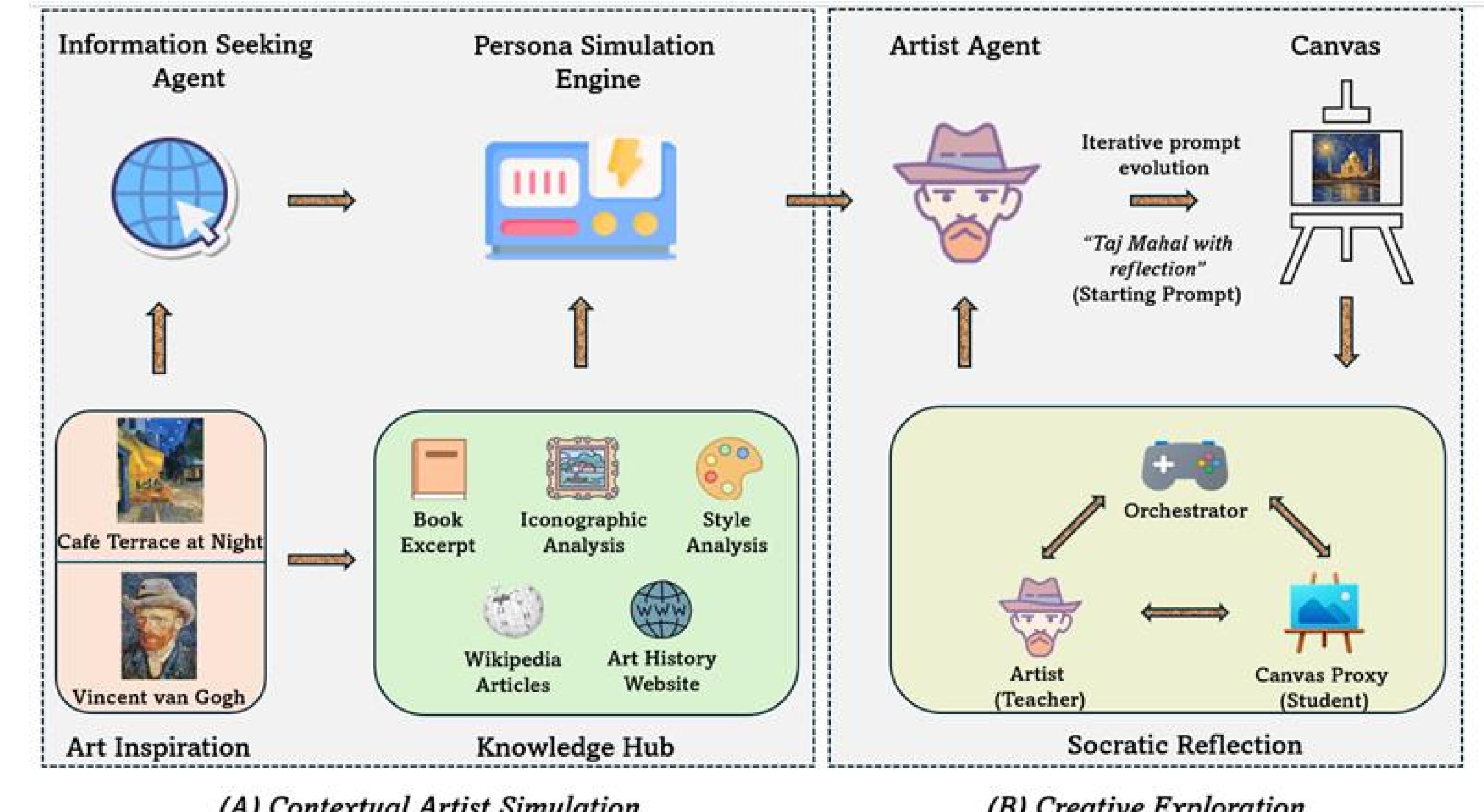


Figure 1: Architecture of our proposed framework, ARTPEER, consists of two core components: (i) contextual artist simulation and (ii) creative exploration. The artist is simulated using a persona derived from diverse knowledge sources, conditioned on art inspiration. To adapt this inspiration to novel contexts, the simulated artist iteratively evolves prompts through Socratic reflection for personalized creativity.

Experiments & Results

We evaluate ARTPEER on 10 art inspirations split between canonical (e.g., *Café Terrace at Night*, *Mona Lisa*) and non-canonical works[3] to test generalisation beyond memorisation across diverse movements and techniques. Reference prompts exclude stylistic terms to ensure style originates from the method. ARTPEER is compared against three baselines: **Keyword Prompting**, **StyleSSP** [1] (training-free stylisation), and **StyleLoRA** [2] (LoRA-based style adaptation). Performance is measured using **ArtFID** [4], which combines FID and LPIPS; lower scores indicate better artistic alignment and correlate with human preference.

Artist	Art Inspiration	Initial Prompt
Edvard Munch		Father and son playing tennis.
Pablo Picasso		A high fantasy battle between elves and orcs in a dense forest.
Will Barnet		A nerdy boy programs at a computer in a gadget-filled room
Edgar Degas		Muscle cars race on street, city sunset background.

Figure 3: Dataset containing art inspiration with respective artist name and initial prompts for stylistic adaptation.

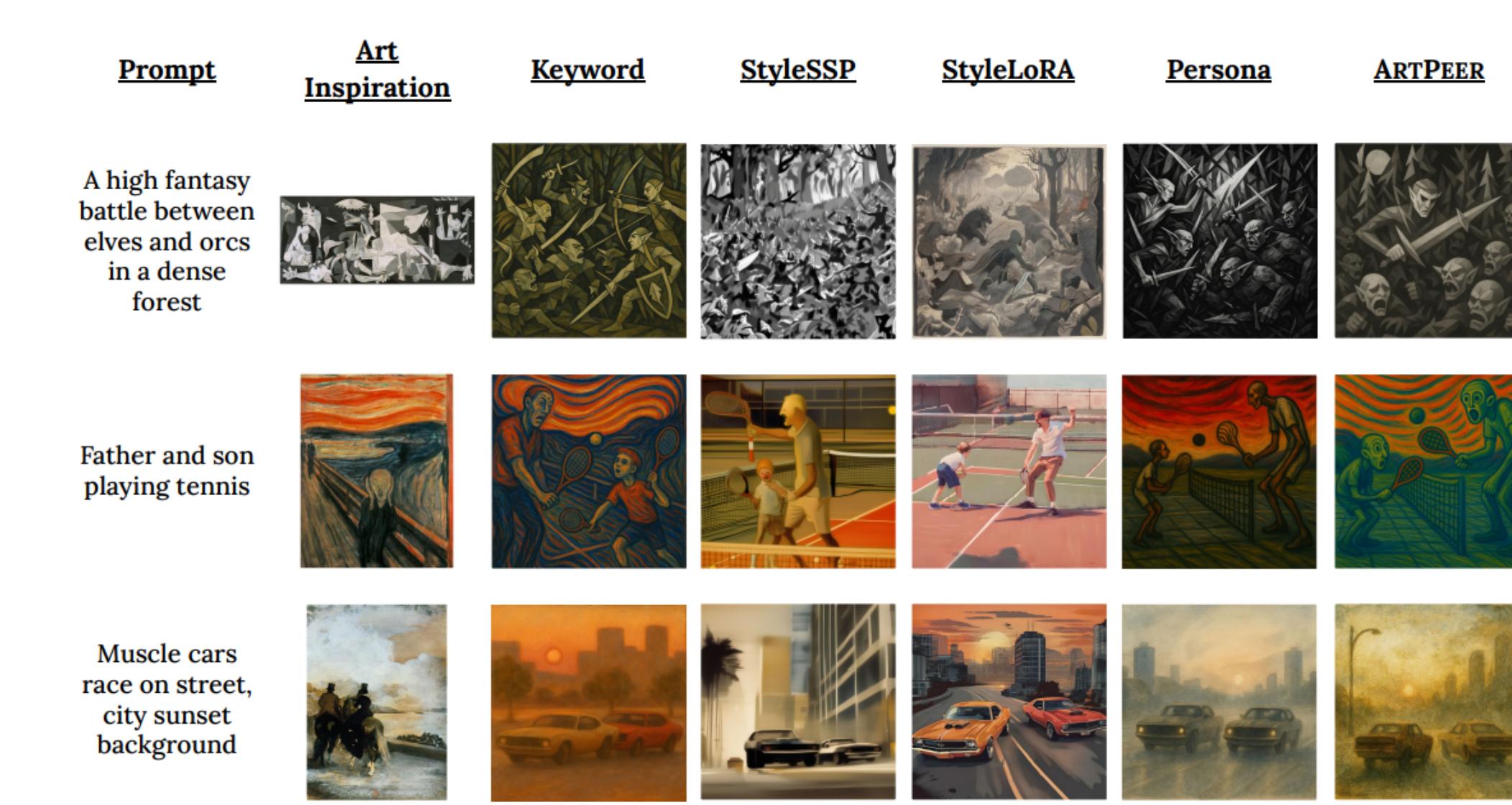


Figure 4: Qualitative comparison of personalized art from different techniques.

Art inspiration	Keyword	StyleSSP	StyleLoRA	Persona	Reflection 1	Reflection 2	Reflection 3
Canonical	23.42	29.70	25.35	23.59	20.23	18.70	18.20
Non-Canonical	28.04	30.46	25.08	25.27	20.37	17.98	17.46
Overall	25.73	30.08	25.21	24.43	20.30	18.34	17.83

Figure 5: ArtFID (↓) scores for canonical and non-canonical art inspiration across different techniques.

References

- StyleSSP [Xu *et al.*, CVPR25]
- B-LoRA [Frenkel *et al.*, ECCV24]
- WikiArt [<https://www.wikiart.org/>]
- ArtFID [Wright *et al.*, DAGM22]
- LLM-Art [Arita *et al.*, arXiv25]

Thanks

We thank Dr. Vikram Jamwal for the support in showcasing our work at NeurIPS 2025!

Link to the Paper

