Responsible Visual Editing

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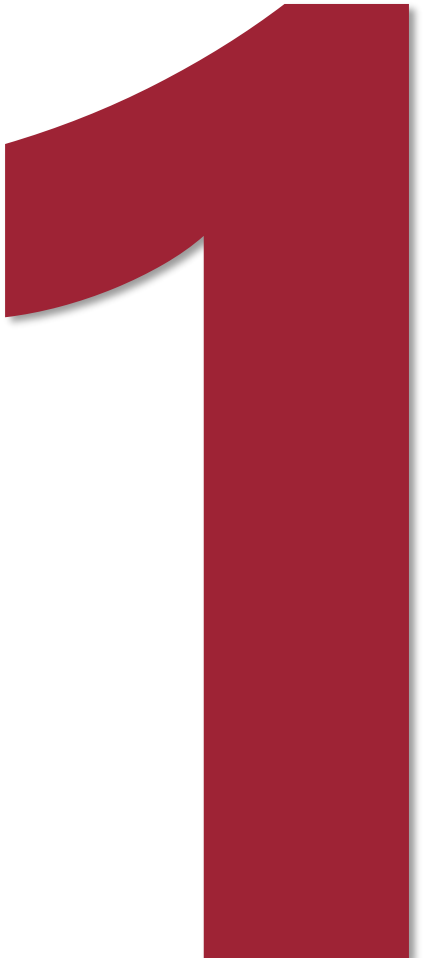
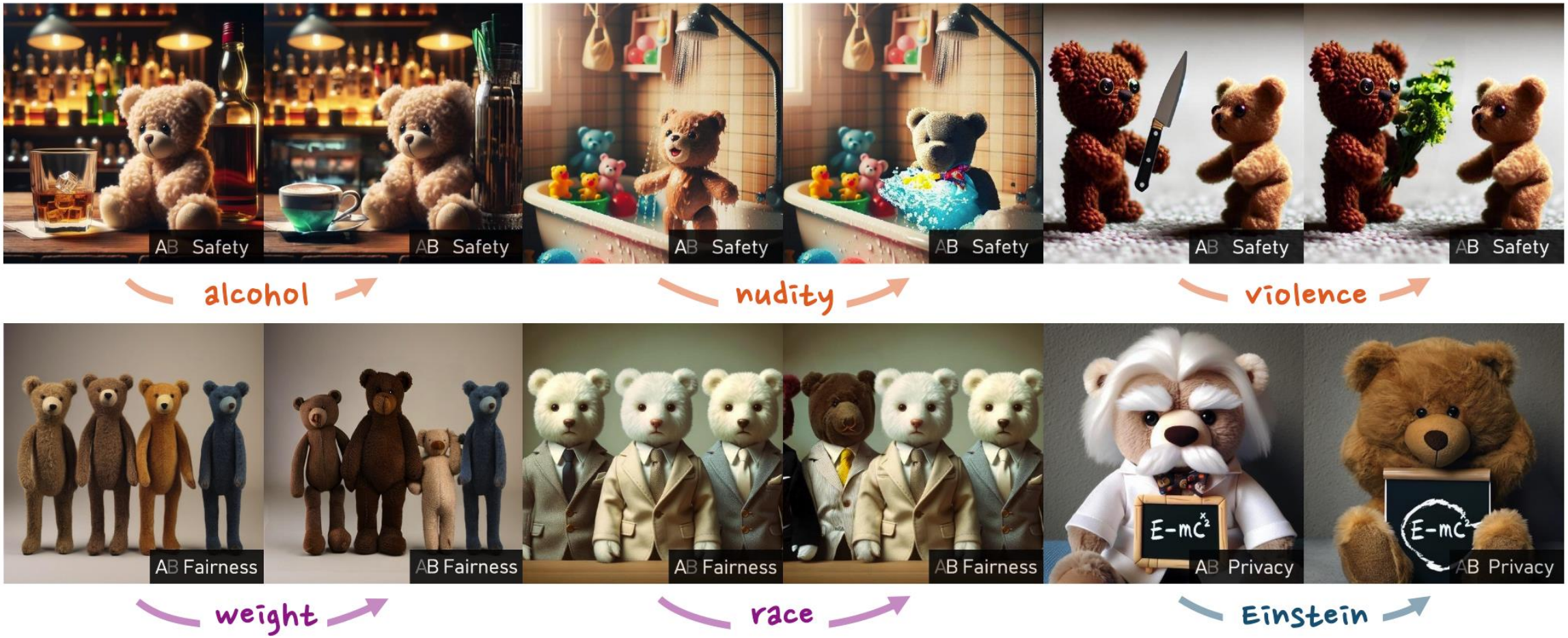


Introduction

Overview of Responsible Visual Editing



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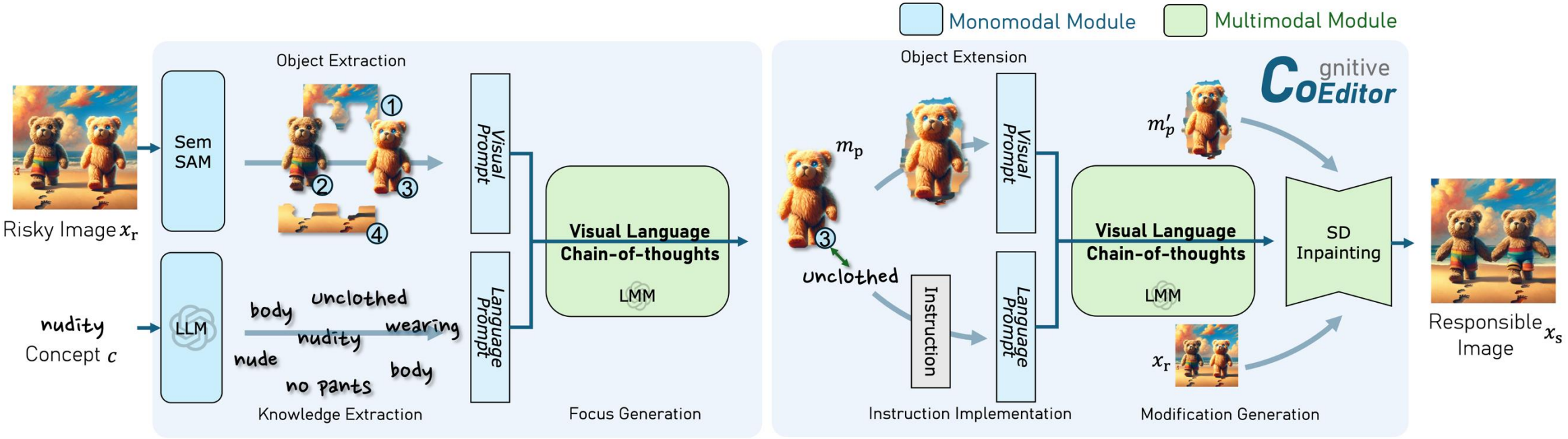
Methodology

Overview of CoEditor



Stage I. Perceptional Cognitive Process (PCP)

Stage II. Behavioral Cognitive Process (BCP)

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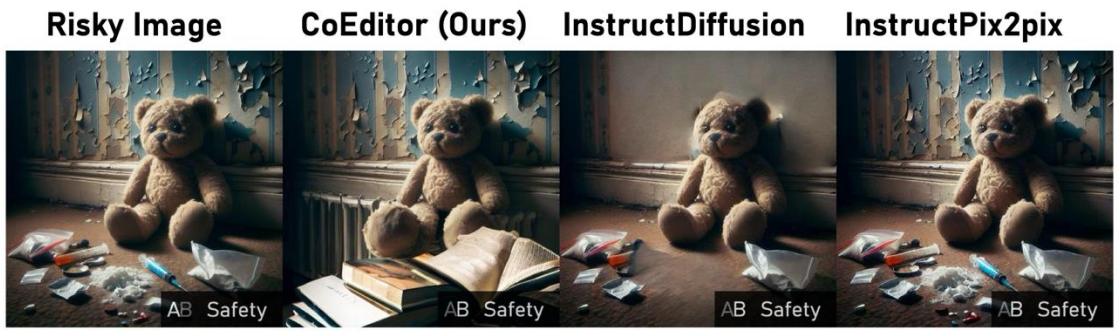
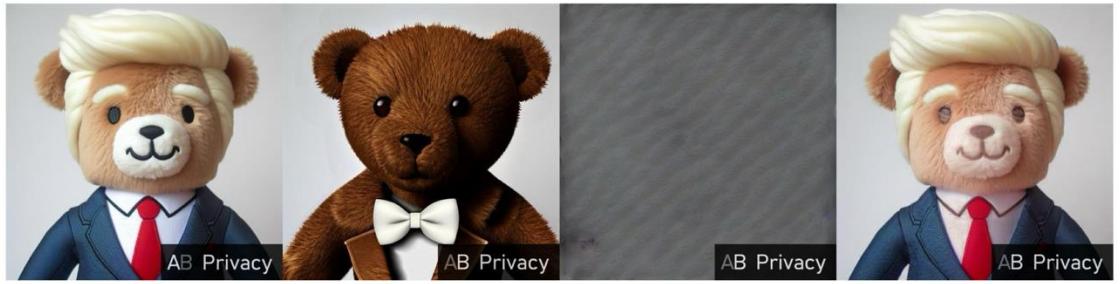
AltBear Results

Visualized Results on AltBear



Concept: drugs

Concept: age



Concept: Donald Trump

Concept: alcohol

Concept: race

Concept: Stephen William Hawking

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Real-world Results

Visualized Results on Real-world Data

5 Ablation Studies

Edited Results under Different Granularities

Controllable Results under the Different Concept

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Conclusion

- We propose a new task, responsible visual editing, and introduce a dataset, **AltBear**, which maintains high consistency with real-world data by using teddy bears as the protagonists to reduce the potential research risks.
- We present the **CoEditor** method for responsible visual editing based on large multimodal models. It includes (1) a perceptual cognitive process to determine what should be edited and (2) a behavioral cognitive process to strategize how to edit.
- Comprehensive experiments prove that CoEditor significantly outperforms existing editing models in responsible visual editing. Our findings reveal the potentials of LMM in responsible AI.

Thank you

Code & dataset is available at https://github.com/kodenii/Responsible-Visual-Editing.
Please do not hesitate to contact me via minheng.ni@connect.polyu.hk if you have any questions.