AI Explain: AI-Generated Graphic Storytelling for Explaining AI Across Cultures

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***Abstract*—A significant gap exists between complex scientific discussions on Artificial Intelligence (AI) advancements and the general public consisting of diverse individuals separated by culture, age, gender, education, socio-economic status, lifestyles, media preferences, and other personal attributes. Bridging this translation gap requires adapting AI-related scientific content for different audiences. The idea of the AI Explain project is to explore how AI can enhance its own explainability through interactive graphical storytelling across cultures. Using content that has already been adapted for a lay audience, the project aims at fine-tuning DeepSeek narratives and AI-generated graphics for public engagement and understanding of AI.**

Keywords- Generative AI; Graphic Storytelling; Multi-Media Science Communication; AI Literacy; Digital Publishing; Augmented Reality.

I. INTRODUCTION

Artificial Intelligence (AI) is transforming societies at an unprecedented rate, yet public understanding of AI concepts remains limited. This project investigates how AI can contribute to explaining itself through AI-assisted visual storytelling. By adapting complex AI-related content into engaging graphic narratives, the research aims to bridge the gap between scientific discourse and public comprehension, particularly among younger audiences. The study leverages the fantasy novel *Angels and Other Cows* [3], which explores AI's role in the public sector, as the primary dataset. In an iterative process that exploits AI's key advantage to prepare, refine and improve numerous versions, the novel will be tokenized, segmented into narrative units, and annotated of AI concepts, ethical dilemmas, and key themes. A cross-linguistic analysis ensures cultural relevance for Indian and German audiences. Fine-tuning of DeepSeek is performed using supervised Reinforcement Learning from Human Feedback (RLHF) to enhance coherence and engagement. DeepSeek's text-generation capabilities will be utilized for AI-assisted storyboarding, transforming key narrative elements into structure storytelling sequences. Visual storytelling will be enhanced using AI-powered tools, such as RunwayML, Pika Labs, and DeepBrain AI, incorporating motion synthesis and character animation. A comparative study will assess audience responses to AI-generated storytelling, focusing on ethical considerations such as AI bias and explainability. To enhance engagement, interactive features such as tracker-based Augmented Reality (AR) elements will be developed using Unity for an immersive user experience. Evaluation will be conducted through a mixed-method approach, combining qualitative feedback and quantitative metrics, including comprehension scores and engagement levels. Insights gained will iteratively refine the model to ensure continuous improvements in AI-driven science communication. This research contributes to AI literacy and digital innovation by pioneering an interdisciplinary framework for AI-enabled storytelling. It aligns with national priorities on technological advancement and digital education, fostering a deeper, cross-cultural understanding of AI.

The ensuing sections detail the foundations and approach of the AI Explain project. Section 2 outlines the legacy of AI FORA and its contributions to inclusive science communication. Section 3 clarifies the project's cross-cultural and educational aims. In Section 4, we describe the technical steps, including data preparation, model fine-tuning, cultural adaptation, and the integration of AR features. Section 5 highlights the project's measurable results, anticipated challenges, and possible future directions. Section 6 concludes with reflections on the project's broader impact and outlines future pathways, including the expansion of co-creative strategies, incorporation of real-time user feedback, and the development of scalable educational tools for long-term societal engagement.

II. BACKGROUND

This project builds on the results of the international research project "Artificial Intelligence for Assessment" (AI FORA) [1] [2]. AI FORA already tried to break out of the silos of academia by presenting its research results not only in computer science proceedings but through the human-made literary fiction novel *Angels and other Cows* blending genres such as sci-fi, romance, adventure, mystery, and comedy [3]. With this approach, AI FORA started with the task of inclusive science communication making available research topics, results, and consequences of AI use in the public sector to a non-scientific lay readership via textual storytelling.

The AI Explain project now takes the next step in research for broader outreach: It investigates how AI can contribute to explaining itself, i.e., complex AI concepts,

through AI-assisted visual storytelling. By adapting the textual content of the AI science novel on AI use in the public sector into engaging graphic narratives, the research aims to bridge the gap between scientific discourse and public comprehension, particularly among younger audiences. The project investigates whether AI can assist in making itself more explainable through interactive and engaging storytelling techniques, catering to diverse audiences. While previous research has focused on AI ethics, this project expands its scope to encompass Explainable AI (XAI) through a cross-cultural lens. By leveraging digital storytelling tools, it aims to transform AI-related topics into visually rich graphical narratives that resonate with young readers in India and Germany.

III. OBJECTIVES

This project explores how AI can explain itself through AI-assisted graphical storytelling, aiming to develop a cross-cultural framework for AI explainability by comparing perspectives from India and Germany. It investigates the effectiveness of AI tools in crafting visually compelling narratives and examines the impact of interactive storytelling—especially using Augmented Reality (AR)—on public engagement with AI concepts. By using narrative case studies, the project also analyzes the ethical dimensions of AI within the broader scope of Explainable AI (XAI). Ultimately, it supports national and global priorities by advancing AI education and fostering cross-cultural communication around AI.

IV. METHODOLOGY

A. Data Preparation and Model Training

DeepSeek will be trained using the AI science novel as the primary dataset. Deepseek is chosen as it is fully open-source, and we can trail the model using our data. In an iterative process that exploits AI's key advantage to prepare, refine and improve numerous versions (narrative case studies),

- the primary dataset will be tokenized and segmented into meaningful narrative units
- AI concepts, ethical dilemmas, and key thematic elements will be annotated
- content will be made compatible with Indian and German audiences using cross-linguistic analysis
- Supervised learning with reinforcement from human feedback (RLHF) for improving coherence and engagement will be done to perform fine tuning DeepSeek on the above-mentioned dataset.

B. AI-Assisted Storyboarding and Video Generation

DeepSeek's text-generation capabilities will be leveraged to convert key narrative elements into structured storytelling sequences. AI concepts will be brought to life using tools like RunwayML, Pika Labs, and DeepBrain AI. Tools will be used to create animated sequences. Customization techniques, including AI-powered motion synthesis and character animation, will be applied to align the visuals with cultural preferences in India and Germany.

C. Cultural Adaptation and Ethical Analysis

A comparative study will be conducted to evaluate audience responses to AI-generated storytelling across both cultures. Ethical considerations, such as AI bias and explainability, will be embedded in the narratives and assessed for effectiveness in public comprehension.

D. Integration of Interactive Features

Tracker based Augmented Reality (AR) elements will be used for immersive experience. AR application design will use UNITY for user engagement and gamification.

E. Evaluation and Refinement

A mixed-method approach, combining qualitative feedback and quantitative metrics (e.g., comprehension scores, engagement levels), will be used to assess the impact of AI-assisted storytelling. Findings will be iteratively used to refine the model, ensuring continuous improvement in AI-driven science communication.

V. EXPECTED OUTCOMES

The *AI Explain* project aims to bridge the gap between artificial intelligence research and public understanding by developing inclusive, culturally sensitive science communication formats. Recognizing that research is often locked within expert domains, this initiative seeks to make AI concepts more accessible through narrative and visual storytelling.

Measurable outcomes include**:**

- A prototype graphic novel illustrating AI-related ideas for younger, non-expert audiences.
- Insights into how AI can contribute to its own explainability via interactive and visual storytelling.
- A cross-cultural study on AI perception in India and Germany.
- An interactive learning tool focusing on AI ethics and explainable AI (XAI).
- Frameworks for AI-assisted digital publishing and integration with augmented reality.
- Contributions to national AI missions by enhancing AI literacy through accessible digital storytelling.

Key challenges anticipated include maintaining cultural relevance in AI-generated stories, avoiding Western-centric biases, ensuring narrative coherence, and responsibly simplifying complex ethical issues.

VI. CONCLUSION AND FUTURE WORK

The *AI Explain* project positions itself as a critical intervention in making AI more transparent, relatable, and ethically grounded. By using co-creative strategies, combining AI-generated outputs with human input from artists, educators, and communities, the project will address the limitations of generative models and ensure contextual fidelity.

In future phases, the project envisions:

- Incorporating real-time gaze tracking and sentiment analysis to personalize AI education tools.
- Expanding cross-cultural frameworks to include additional geographies and languages.
- Publishing scalable toolkits and pedagogical resources for schools, museums, and digital media outlets.
- Building open-source pipelines for AI-assisted science communication to support long-term societal engagement.

Through these efforts, *AI Explain* aims to redefine how AI communicates itself, making it more understandable, participatory, and socially responsible.

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