# AI, Hollywood & Metaverse

A synergistic future





#### What can AI do for filmmaking?

- Al driven content creation
- Al generated digital actors & Performance Simulation
- Immersive Al powered storytelling for the Metaverse
- Al powered content distribution & personalisation
- Infrastructure and performance optimisation
- Neural interfaces and gesture based interaction
- Al generated soundtracks and audio effects

#### What would probably never happen

- Fully autonomous Al generated films
- Brain computer direct integration

#### How do we build something like this?

The high-level architecture

- Content creation and production layer
- Metaverse experience layer
- Al driven distribution and personalisation layer

#### Software components

- Al scriptwriting engine, Pre-visualisation and storyboarding and human-like characters
- Al generated environments for VFX

## Technologies

#### The tech stack

Al scriptwriting engine	GPT 4 turbo, LLAMA, RAG models, Scene Graph AI
Al storyboarding and pre-visualisation	Stable diffusion, ControlNet, NeRF, Unreal Engine
Al post production	Deepfake, FaceGAN, Neural video editing
Al digital humans	MetaHumans, GANs, NVIDIA Audio2Face
Al environments	Unreal Engine, Procedural GANs, Nvidia StyleGAN
Al powered storytelling	Branching Narrative AI, LLM and NPC adaptation
Al recommendation engine	Multimodal AI (video), Graph neural networks
Real-time subtitling & dubbing	Whisper, Chinchilla AI, Wav2Lip, Eleven Labs
Predictive marketing & analytics	Al sentiment analysis, Al generated trailers

#### Streamlining the creative process

- Script analysis & development
- Pre-visualisation & storyboarding
- Post-production enhancements

#### Revolutionising casting & performances

- Digital actors
- Deepfake technology
- Casting algorithms

#### Enhancing the viewer experience

- Personalised recommendations
- Interactive storytelling
- Real-time subtitling and dubbing

#### Impact on film marketing & distribution

- Predictive analytics
- Dynamic trailers
- Global reach through localisation tools for an international audience

# The Future of AI in Hollywood

## Immersive interfaces

### Insights

- 1. Expanding Al influence in the Metaverse
- 2. Al as a creative catalyst
- 3. A new era of world-building with Al environments
- 4. Human-machine collaboration
- 5. Limitless potential for innovation

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