

Virtual Human Meets Virtual Studio: AI Powers Text-to-Video for Broadcast



Hour One's AI-powered platform, accelerated by NVIDIA GPUs, allows broadcasters to automatically generate videos with text and develop lifelike virtual humans.

Hour One is an AI company specializing in the development of virtual humans for use in professional video communications. The company is a member of NVIDIA Inception, a free program designed to help startups evolve faster through access to cutting-edge technology and NVIDIA experts, opportunities to connect with venture capitalists, and co-marketing support to heighten the company's visibility.

Hour One's lifelike virtual characters are based on real humans and can be animated with human expressiveness just from text, enabling broadcasters to upgrade their communications with unprecedented ease and scale.

With its self-service platform, Reals, broadcasters can access Hour One's technology more easily than ever, generating fully-produced videos automatically in just minutes. Hour One's customers include some of the biggest names in media, including Berlitz, NBC Universal, and DreamWorks.



RAN sports newscast. Image courtesy of Hour One.

- Hour One helps broadcasters engage with audiences using Al-powered videos and virtual presenters.
- > Broadcasters can use the self-service platform, Reals, to automatically generate videos in minutes.
- Hour One uses NVIDIA technologies to accelerate Al-generated models and 3D rendering.
- With the GPUs, the AI training and inference times have significantly accelerated.
- Hour One was able to boost their high-compute, intensive workloads, complex AI pipelines on the GPU and 3D rendering in their cloud clusters.

Customer Profile



Organization: Hour One

Industry: Broadcast Location: Tel Aviv, New York City Website: hourone.ai





RAN sports newscast opening credits. Image courtesy of Hour One.

Enabling Broadcasters to Automatically Generate Video Content

Hour One helps broadcasters engage with audiences using Al-powered content. With Hour One's platform, Reals, users can automatically turn text into videos with virtual presenters and virtual sets. To generate the videos and virtual humans, broadcasters can easily choose a layout, select a character out of hundreds of options, and then enter text to create the content.

Hour One's solutions are powered by NVIDIA technologies. With NVIDIA professional GPUs, the team can accelerate both AI-generated models and 3D rendering.

The NVIDIA GPU, CUDA, and CudNN frameworks enable the team to train state-of-the-art models at a fast pace to meet customer needs. The complex media pipelines are powered by the fast acceleration and high memory capacity of the complete NVIDIA offering. "Our cloud offering enables our customers to enjoy all the benefits of Generative AI and 3D rendering through their web browser with a few clicks," said Lior Hakim, CTO at Hour One.

Accelerating AI Workflows With NVIDIA Solutions

With the GPUs, the training and inference times have been significantly reduced. Using NVIDIA's solutions, the team at Hour One was able to boost all their high-compute, high-memory-intensive workloads, including complex Al and media pipelines on the GPU and 3D rendering in their cloud clusters.

"NVIDIA's GPU acceleration and capacity allow us to deliver high-quality Al videos at costs and speeds that are game-changers to the traditional video production industry," said Hakim.

Making Sports News More Immersive

Multiple customers of Hour One have already experienced the benefits of their GPU-powered solutions. RAN—one of the top sports sites in Germany, covering all things around soccer, American football, hockey, racing, and more—leveraged Hour One's 3D templates to create an immersive Sports News video series.

"NVIDIA's GPU acceleration and capacity allows us to deliver high-quality AI videos at costs and speeds that are gamechangers to the traditional video production industry."

Lior Hakim, CTO at Hour One



RAN sports newscast. Image courtesy of Hour One.

As a sports news media company, RAN has a huge demand for premium video, especially as the company moves beyond broadcast into online channels, which demand higher volumes and frequently updated video content. The GPU-powered solutions from Hour One offer massive flexibility with virtual humans' selection, speed, and quality.

"We've been able to generate a whole new content series in video format, which is more engaging for soccer fans who always crave more visual content," said Malte Krotki, business development for RAN. "Near-instant Al video generation simply from text inputs is a highly cost-effective way to generate premium video that is highly monetizable."

Leveraging Virtual Humans in Broadcast

Another customer is DeFiance Media, a 24-hour broadcast news platform covering alternative culture, finance, and technology. The team at DeFiance Media was looking to host a show with a news anchor that would be aired 24/7. But with a physical studio and a human anchor, it would have been too costly and wouldn't have allowed the team to focus on global news.

DeFiance Media initially adopted a news anchor they chose from their library of 100+ virtual humans. After a while, they created their virtual anchor, Raxana, commissioned futurist Ian Beacraft as their synthetic host, and adopted Hour One's new immersive 3D template. This allowed the team to design with virtual humans from scratch, as well as access experts as their AI selves - to match their brand and vision for the future of news. "Hour One enables flexibility, speed and cost-efficiency like no other provider we found on the market," said Marc Scarpa, CEO at DeFiance Media. "They are also a collaborative partner and we've been able to grow together over time."

Ready to Get Started?

To learn more about NVIDIA solutions for Professional Broadcast visit: **nvidia.com/professional-broadcast**

© 2023 NVIDIA Corporation. All rights reserved. NVIDIA and the NVIDIA logo are trademarks and/ or registered trademarks of NVIDIA Corporation in the U.S. and other countries. Other company and product names may be trademarks of the respective companies with which they are associated. All other trademarks are property of their respective owners. 2644540. MAR23

