
VICON
VFX
REDEFINING
VFX
MOTION CAPTURE
VFX

VICON SHŌGUN

"We consider Vicon the gold standard for production. It is unbelievably powerful."

- Dan Pack, Founder Silver Spoon Animation

WHAT'S INSIDE

BUILT FROM THE GROUND UP, SHŌGUN TAKES ADVANTAGE OF VICON'S 35+ YEARS' EXPERIENCE IN MOTION CAPTURE AND THE IMPROVED TECHNOLOGY AVAILABLE IN OUR INDUSTRY-LEADING RANGE OF SPECIALIST CAMERAS.

Today's visual effects productions need to be achieved in real time and deliver the highest quality skeletal data in the shortest time possible. Shōgun Live and Post are designed to help studios of any size optimize capture and processing for maximum quality results. Shōgun includes best in class, low latency tracking for both film and virtual cameras, support for Viper and much more.

WHO IS SHŌGUN IDEAL FOR AND WHY?

GAMES COMPANIES

- Ubisoft
- EA
- Sega
- Nintendo
- Square Enix
- Epic Games
- Warner Brothers
- Activision
- Ninja Theory
- Larian
- Valve
- Myrkur Games
- Bandai Namco
- Plarium

FILM PRODUCTION COMPANIES AND STUDIOS

- Framestore
- Double Negative
- ILM
- Disney
- Pixar
- Digic Pictures
- Dreamworks

SERVICE PROVIDERS

- AudioMotion
- House of Moves
- Imaginarium
- Silver Spoon
- Beyond Capture
- Neoscape
- The Capture Lab
- MOOV

UNIVERSITY FILM & GAME DEPARTMENTS

- DAVE School
- Staffordshire University
- NYU
- Portsmouth University
- Savannah College of Art & Design
- FIA
- USC

KEY MARKET USE CASES

SNOOP DOGG, LARRY DAVID, NFTS, AND AN UNLIKELY METAVERSE PROJECT

Astro Project is an indie start-up taking big swings

The Crip Ya Enthusiasm music video sounds improbable: a gamified, Web3 metaverse project built in a video games engine, starring Snoop Dogg blended with Larry David, featuring appearances from long-dead rappers Tupac Shakur and The Notorious B.I.G., all wrapped around an NFT component and powered by motion capture.

While the video is high profile and very complex, it's not the product of a large studio or well established VFX house. It's the work of Astro Project, a small start-up formed less than a year ago by a pair of founders who had never used motion capture before.

The studio is the brainchild of director James DeFina and YouTuber Jesse Wellens. The pair began collaborating several years ago, but it was when they became interested in Web3, the metaverse and digital production, that their partnership coalesced into a company.

Wellens wanted to do a metaverse project using animation. He showed DeFina the videos Matt Workman made for his Cinematography Database channel documenting his journey learning to use a Vicon system, and DeFina quickly saw the possibilities.

"I thought, that's amazing. It's the future. And basically, we were like, OK, let's start a company doing all this," says DeFina.

From there, investing in a Vicon system was the obvious choice. "I saw Matt's work with Vicon and I did a lot of research, and I liked how the stuff looked. I wanted to recreate that."

James' and Jesse's learning curve got a lot steeper when one of the most famous rappers in the world got in touch.

"Snoop Dogg hit up Jesse, and said 'Hey, I want you guys to do this music video for my next song.' And he wanted us to combine him with Larry David to create a 'Larry Dogg' character."

We didn't really even know the full scope of what we were getting into. We just said, let's go for it," says DeFina. "In a month it really just happened. And suddenly we were asking, okay, how much is a Vicon system? Where do we get it?"

At the time, however, supply chain issues meant there was a six month wait for the system they wanted to buy, and they needed to begin work almost immediately. Jeffrey Ovadya, Director of Sales & Marketing for Vicon, stepped in. "He was really helpful. He was even saying, you can borrow a system until yours is ready," says DeFina.

James got set up with 16 Vero 2.2 cameras, a Lock Studio and a video camera, all running through Vicon's Shōgun VFX software into Unreal Engine. Procuring a system was only half the battle, though. James had to learn motion capture very quickly. "The training was great, which was awesome. Everybody at Vicon has been very helpful. Because I probably hit them up like a million times about everything, because I was just learning everything so fast."

KNOWLEDGE SHARING

An unusual aspect of the project was how DeFina and Wellens found a way to pay that learning forward using NFTs. The first wave of NFTs were predominantly digital collectibles, but those being offered to Astro Project's backers also have a much more practical function.

"We created digital keys that would give people access to download some of the environments, and then some of the characters and some of the mocap data," says DeFina. "We're letting people download the data and teaching them how we're doing everything, so they can learn and practice on an actual project. They might not have a motion capture system, but they can use some of our mocap data from the Vicon system and then see how it's done in Unreal Engine.

"Nobody else is really doing that."

The form that the keys take is a tongue-in-cheek nod to digital culture – a virtual donut. "We decided to do these digital donuts because in 3D design, one of the first things people ever learn is how to make donuts in Blender," says DeFina.

ONE DAY TO SHOOT

While Astro Projects is inviting fans to learn from its work, DeFina is well aware that he's still a relative beginner himself. Capturing Snoop Dogg, in particular, was a learning experience. "The day of the shoot, I was on a zoom call with people from Vicon and a couple of our other technology partners, and we're all trying to figure out how they can work together simultaneously. It was one of our first shoots ever, and we had Snoop coming in for one day, and we had to just go for it," he says.

Fortunately, the creative direction only required a light touch. "We kind of let him do his thing. Obviously the character's half Snoop, half Larry David. Since he was looking like Larry David a lot, we kind of just wanted him to move like Snoop Dogg, right? Like his mannerisms, his dancing and all that, so that people know it's him."

And for all the venture's challenges, it was a success. "When we showed him the final project, he hugged us. He loved it. He definitely wants to do more."

A MORE DECENTRALIZED METAVERSE

Now that DeFina and Jesse have their system set up and understand how to use it, they want to experiment with further boundary-pushing content.

"One thing we really want to do is make hyper-realistic animated content with custom Epic metahumans and Unreal Engine," says DeFina. "But then, we also want to do minigame experiences that can go along with a piece of content, like AAA minigames."

James is also interested in using his Vicon system and Unreal Engine not for filming things he couldn't shoot in real life, but simply for the sake of convenience. "It's almost a one-to-one comparison, right? For example, with a virtual set I can light something just how I light it in real life without needing this whole crew."

James and Jesse have also been experimenting with VTubing and creating a virtual podcast, streaming motion-captured characters in real time. "We've been testing some new tech that could allow us to do live streaming in two different locations at the same time with two characters.

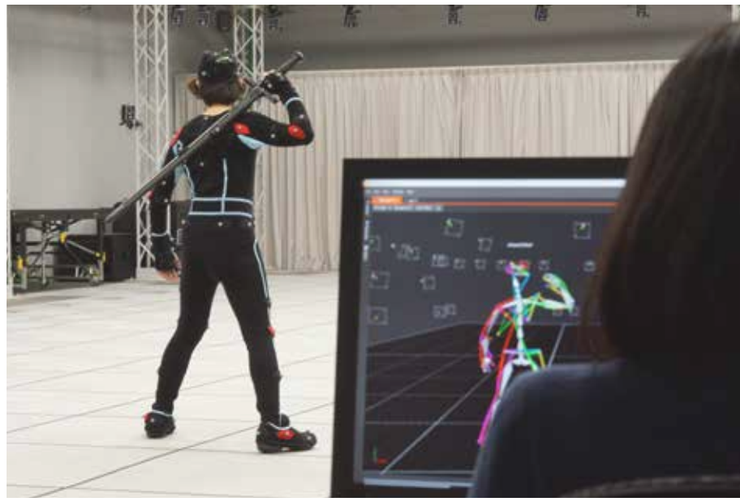
So, we can have somebody in our studio, and then somebody who's physically in Canada, at the same time in the same virtual environment," says DeFina.

Looking ahead, DeFina sees a future for all this metaverse content that isn't only about the big operators such as Epic, Meta and Roblox.

"It's always been a thing with these big gaming companies: they were the only ones doing it," he says. "And I think that now, more and more creators are going to get into it. There's going to be a lot of smaller studios and startups using motion capture animation for the metaverse. It also leads to a lot more collaboration between people. And as technology gets better and better, things are going to become easier for people. There are a lot of people building solutions inside of Unreal Engine to make everything simpler. I think it's just going to get easier and easier."

SQUARE ENIX – VISUAL WORKS

Video game titan Square Enix has built its reputation and its fan base by drawing gamers deep into immersive worlds such as those of the famous Final Fantasy series. One of the cornerstones of this worldbuilding is the use of lengthy, increasingly lifelike cut scenes that bring the games' stories and characters to life, and one of the most powerful tools for creating them is Square's Vicon motion capture stage.



Visual Works

Since the groundbreaking release of Final Fantasy VII in 1997, Square's Visual Works CGI animation studio has been the driving force behind the cutscenes illuminating the publisher's games. The studio has worked on multiple entries in blockbuster franchises such as Final Fantasy.

Branching out, the production house began extending itself to standalone CGI films in 2005 with Final Fantasy VII: Advent Children, and taking on AAA Western series such as Tomb Raider since Square's acquisition of British publisher Eidos in 2009.

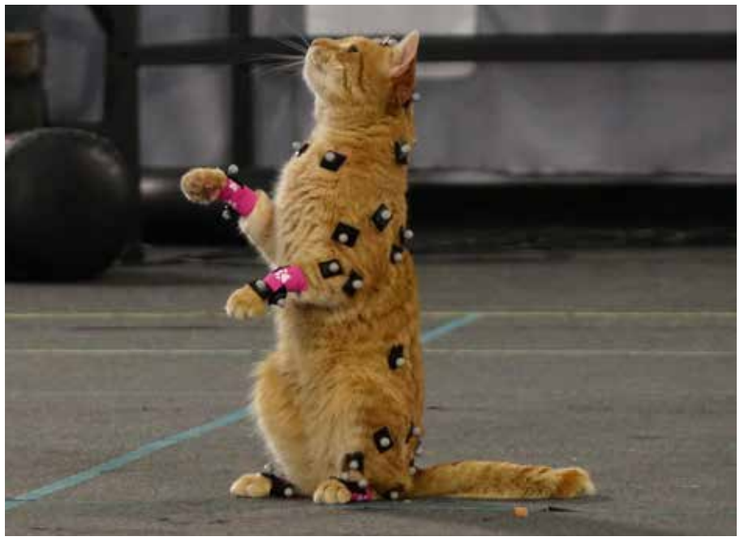
Visual Works has used Vicon technology since 2006 and currently boasts a huge motion capture volume equipped with 100 Vantage cameras, making it one of the largest mocap stages in Japan. In keeping with the epic scale of Square's games the team often uses the large space to capture casts of 10 or more actors, while at a more granular level they're investigating Shōgun's new high fidelity finger solver as an option for producing hand animation.

The director of Visual Works emphasizes the speed that the studio's Vantage cameras and Shōgun software allow his team to work at. Being able to quickly process capture data in-house and output real-time animation in the studio is a powerful advantage, particularly when it comes to creating fantasy animations which might take the form of anything from a realistic medieval knight to a bobble-headed anime character.

Whether Visual Works is subtly grounding and balancing fantastical characters or creating spectacular set-pieces, everything the studio does comes back to bringing beloved characters to life, such as Cloud in the recent Final Fantasy VII Remake.

DIGIC – TAILS OF KITTY CAPTURE

With patience, even the most difficult animal scan produce good data.



DIGIC has been providing motion capture services to its clients for around 12 years, using its data to produce VFX for film and TV as well as animation for video games. Mostly, that involves capturing stunt performers and vehicles. DIGIC also has a very specialist sideline, tracking animals.

To date, much of this work has focused on horses and dogs. More recently, though, the studio has been tracking animals that are notorious for their unwillingness to do what they're told – cats. Doing animal capture in-house wasn't DIGIC's first choice. "We purchased horse mocap data from several places for earlier projects," György Tóth, Managing Director of DIGIC Services, says, "but we weren't satisfied with the quality, so we decided to try to record the horses' movements ourselves.

"During our first horse shoot, it was difficult to get the markers to stay on the horse, so for the next shoot we had a cloth sewn to make the markers stick better. There were also some problems with that: the cloth on the legs would get tangled, and if the horse got too sweaty the cloth would stretch, for example. After three or four shoots we got to the point where we could extract good data from the sessions, and the current marker set was developed based on that experience."

DIGIC has banked almost 10,000 shooting hours in the dozen years since it established its volume, amassing 60TB of data and nearly 40,000 takes, so experience isn't something the studio is short of.

Those takes have been done in a steadily evolving setup that currently includes 40 16MP Vicon T160 cameras. "The team that designed the system had experience with optical motion capture and inertial sensing," says Tóth. "Based on this knowledge, we decided to go with the most advanced Vicon camera solution at the time, which was the T160 series. Over the last 12 years, after a few thousand hours of shooting, we think we made the right decision!"

Despite that deep bank of experience and a powerful motion capture system, however, capturing cats came with its own set of challenges.

Mocats

The mocat project began at the request of a Korean client looking for a library of mocap data and scans of dogs, horses and cats to be integrated into their game engine as full navigation movements.

While DIGIC was working with the cats, the studio decided that it would also use some of the data for "some more interesting ideas both for internal use and to put it on the market," says Tóth.

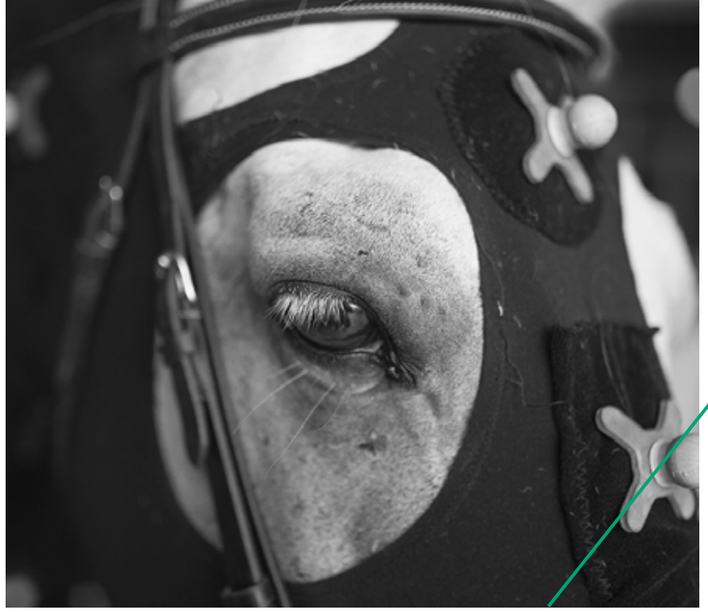
For all of DIGIC's work with horses, turning their expertise to cats wasn't as straightforward as swapping one animal for another.

On a practical level, Csaba Kovári, Mocap Division Lead, says that, "We couldn't dress the cats, so the marker placement had to be done differently. And you couldn't put markers on the tails, either; it would have made natural movement impossible."

Then there was the issue of getting the desired performance from the cats.

"Although the cats were trained and had been in films many times, it was a challenge to get them to move naturally despite the markers that were placed on them," says Kovári. "The solution was a relatively long acclimatization process. First, placing one or two markers on the cat's body for a few minutes, then gradually working up to the full marker set.

"Also, it's important to note that it took approximately one month to train the cats – with the help of a professional animal trainer – and prepare them for the mocap shooting session.



"Another thing to mention is that, unlike humans, cats, horses and dogs can work for much shorter periods of time. Therefore we had to take a break after one or two hours or replace the animal with another one."

After the performances were captured, processing the data presented its own problem.

"The other challenge was that for the cats, as for the dogs and horses, we had to develop a bespoke solver that could transfer the marker data to a skeleton that's as lifelike as possible, while also taking into account the anatomical features," says Kovári.

The cats' much more mobile spines were a particular factor when it came to designing for cats rather than horses, too. "It took a lot of finetuning, and the marker set changed a lot after the first tests," says Kovári.

People Power

Having the right technology in place is only one piece of the puzzle, however. The other is having people in the loop who can problemsolve during a difficult shoot.

"Working with animals is a completely different field from working with human performers," says Tóth. "It's very important to find the right trainer team, to work closely with them, to assess what is feasible, what is not, or when the shoot might become unpredictable. Also, it's crucial to be prepared for the possibility of a complete redesign of the shooting schedule."

While working with animals might require a loose approach to planning, DIGIC doesn't intend to be put off. Looking ahead, the company plans to deepen its library of cat and dog animations. The studio is also, Tóth says, working on a new IP of its own, funded by the Epic MegaGrants program, involving a range of different animals.

ILM

At the heart of every project that ILM has utilized performance capture for over the last 25+ years lies a core technology that helps push the boundaries of visual effects: Vicon motion capture systems.

It is no exaggeration to say that the collaboration between ILM and Vicon has helped redefine the extent of our imagination.

The latest example of this work is one of ILM's most challenging and ambitious projects ever – The Mandalorian.

Following the Emmy Award-winning season one, the latest season of The Mandalorian pushes the thrilling ride for fans to new heights — all thanks to ILM's ground-breaking StageCraft technology that achieves a giant leap forward in filming techniques.

Working with Vicon, ILM has evolved well beyond traditional VFX motion capture to become a world leader in virtual production.

Turning vision into reality through technology

With The Mandalorian, filmmakers Jon Favreau and Dave Filoni have been explicit in their desire to "bring Star Wars to the screen in a new way."

With the scope and ambition of the series only increasing on the second season it was crucial that the actors and viewers not only experience a huge range of new worlds — but truly believe in the reality of the worlds being created and are able to build emotional connections with the characters.

This ambition has required new filming techniques to be rapidly developed and deployed — chief among them virtual production techniques including camera tracking for in-camera VFX (ICVFX).

Virtual production in its simplest form is the merger of physical and digital worlds. Through a combination of immersive technologies like virtual reality (VR) and augmented reality (AR), as well as ILM StageCraft and real-time render engines, virtual production allows filmmakers to view their projects live on set to quickly react and make changes as needed, rather than having to wait until post-production.

Virtual production also offers several logistical benefits as it allows for more iterations of scenes or shots to be created with fewer personnel in a shorter space of time, therefore significantly reducing production costs.

Allowing the creative team and the actors themselves to better visualize the environments on shoot day is paramount. Production teams previously had to imagine the final scene while using green screens to shoot, with visuals applied in post-production after the fact.

ILM has invested heavily in leading the way with these techniques – and projects such as The Mandalorian and George Clooney's feature, The Midnight Sky has been a tour de force of just what is possible with virtual production.

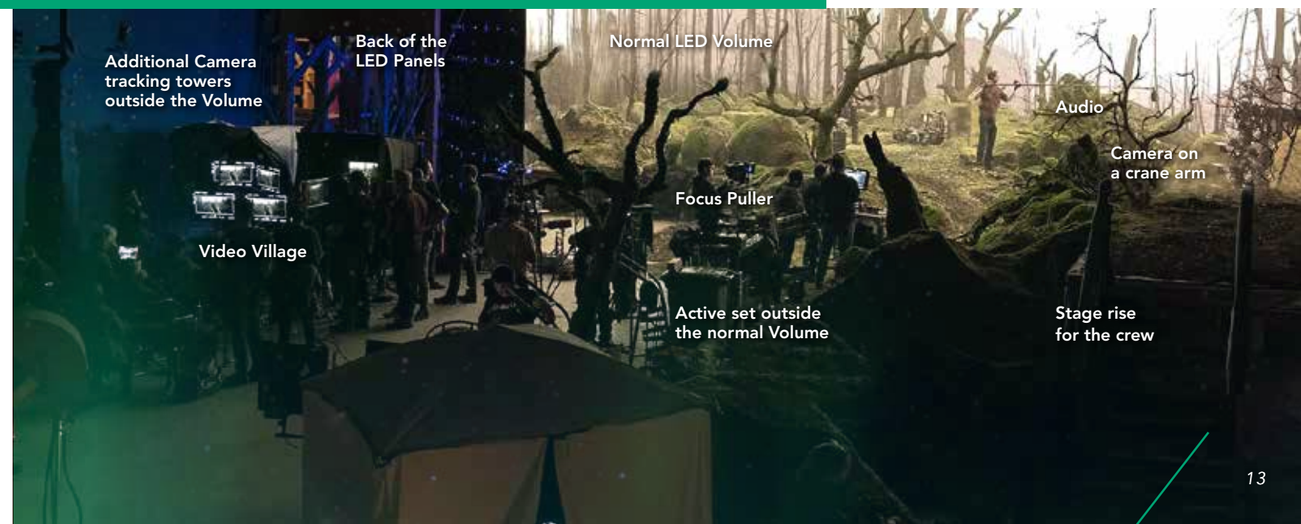
Motion capture technology in a virtual production pipeline is a crucial component in making these endeavors a reality.

Vicon's technology has allowed ILM to recreate the universe of Star Wars in compressed time with 60 different live environments, which they can use over and over again.

Everything from VR scouting, previsualization, performance capture and in-camera VFX using giant LED walls can make use of Vicon technology in some way.

One of the biggest leaps forward has been real-time capture in the volume itself, which requires high-resolution cameras and large frustums. The latest Vicon hardware has enabled ILM to accurately track cameras on set while moving about no matter if the camera is handheld, on a crane, a Steadicam, or some other support equiptment. This has helped to create a 360 degrees virtual production environment at large scale such as ILM's pioneering StageCraft LED volumes, enabling them to capture a whole new category of shots while successfully blending photoreal visual effects with live action, which previously wasn't possible.

SETS EXTENDING OUT OF THE CAPTURE VOLUME



Making the impossible, possible for 25 years

For Rachel Rose, ILM R&D Supervisor who oversees the studio's developments for virtual production, the success of The Mandalorian and all ILM projects requiring motion capture owes much to the collaboration:

"Since day one Vicon has enabled us to do things that were never possible before — and that's as true today as it was in the 90s. Vicon's technology and hardware have constantly advanced throughout our relationship, and the processing power available to us with their technology is like no other. We can deploy and always count on Vicon's tech as it's such reliable, robust hardware requiring only a quick calibration."

If a solution doesn't exist, we'll solve it on our own, but we're not looking to reinvent a solution that's already there.

We are incredibly lucky that we have a long-standing relationship with such an innovative company like Vicon. The absolute best thing I can say is that with Vicon I have a powerful performance capture system that just works."

"ILM always looks to collaborate with those who are making best-in-class software/hardware solutions for problems we're solving.

Unleashing a new wave of creativity

With ILM's StageCraft virtual production technology, ILM and Vicon have realized many filmmakers' vision for creating fully digital worlds that are as close to reality as possible.

The Mandalorian is just the start of a new wave of creativity that will be unleashed as film directors explore new ways to take advantage of the virtual production techniques pioneered by ILM and Vicon.

As we have seen in recent projects, the possibilities within highly accurate virtual production pipelines are endless.Rose concludes,

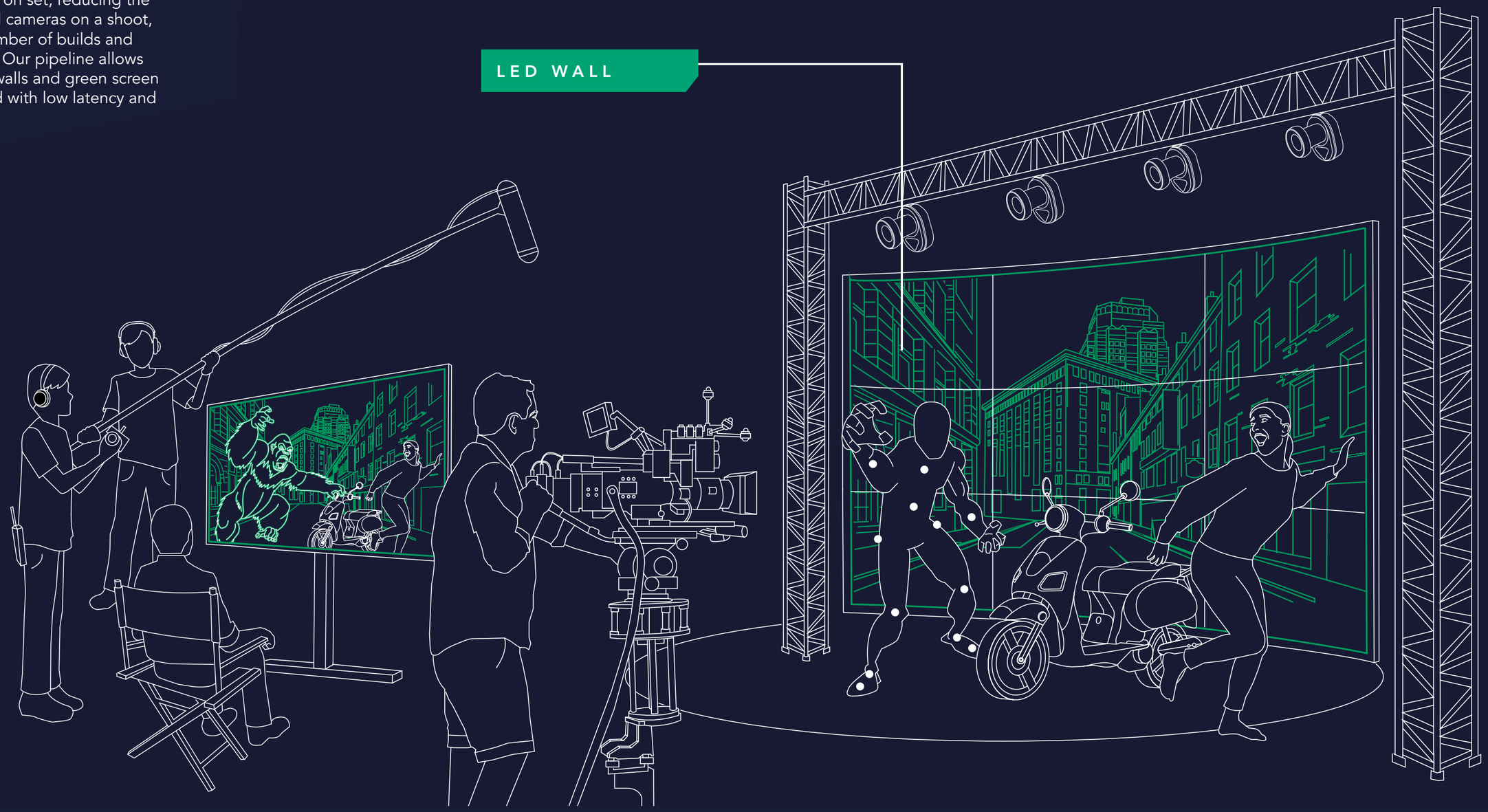
"As excited as I am about what's been accomplished by our StageCraft team and the visionary filmmakers we have been fortunate to collaborate with, we've only just scratched the surface of what we believe the system is capable of. What's really exciting is where filmmakers will lead us next."

While the landscape of film and TV is constantly evolving, it is certain that whatever happens next, motion capture and virtual production will play a key role in innovation. High-quality tracking technology, offering ultimate precision, is central to enabling the advances that will allow creatives to make leaps and bounds forward and to continue to revolutionize the entertainment industry.

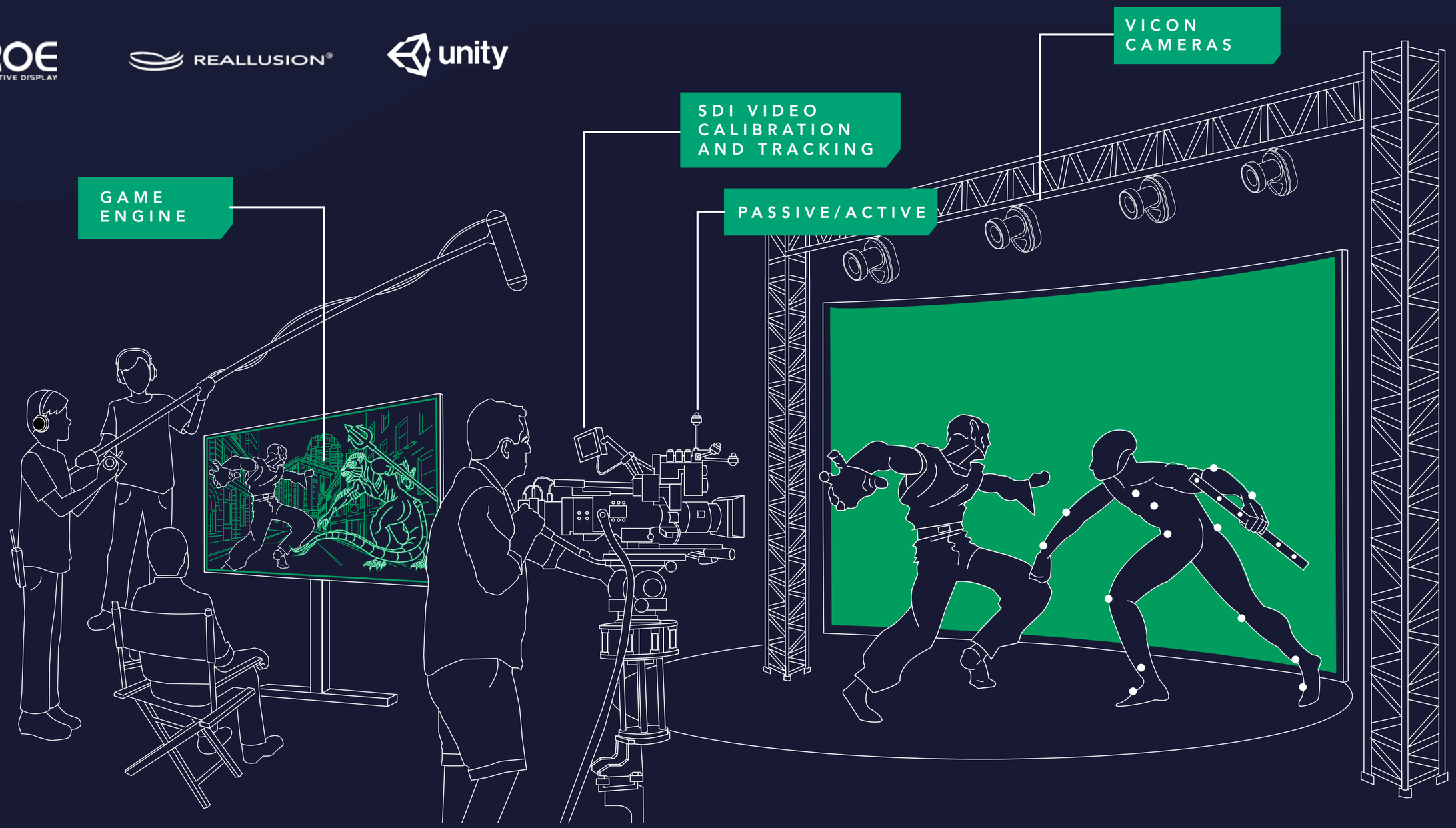
IN CAMERA VFX (ICVFX)

By enabling you to work with close-to-finished visuals on set, Vicon technology can save you time and resources in post-production while ensuring consistent visuals over multiple shoots.

Streamline production on set, reducing the number of people and cameras on a shoot, bringing down the number of builds and saving on travel costs. Our pipeline allows you to integrate LED walls and green screen technology, all tracked with low latency and unbeatable accuracy.



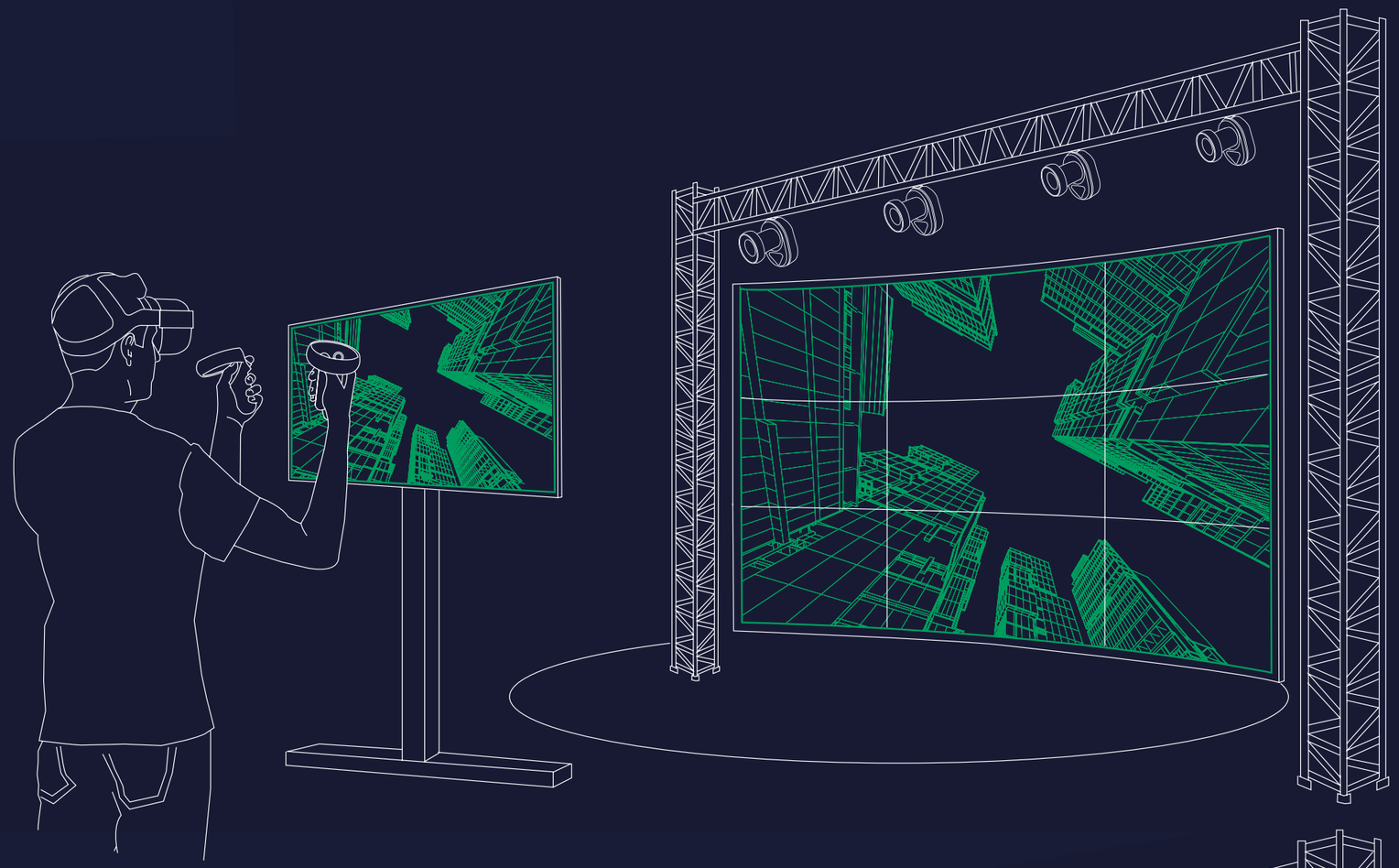
PARTNERS


VICON CAMERAS
SDI VIDEO CALIBRATION AND TRACKING
PASSIVE/ACTIVE
GAME ENGINE

VR SCOUTING

VR Scouting powered by Vicon tracking allows for remote working and collaboration. Review game engine sets within VR, we can track multiple HMCs within the same space.

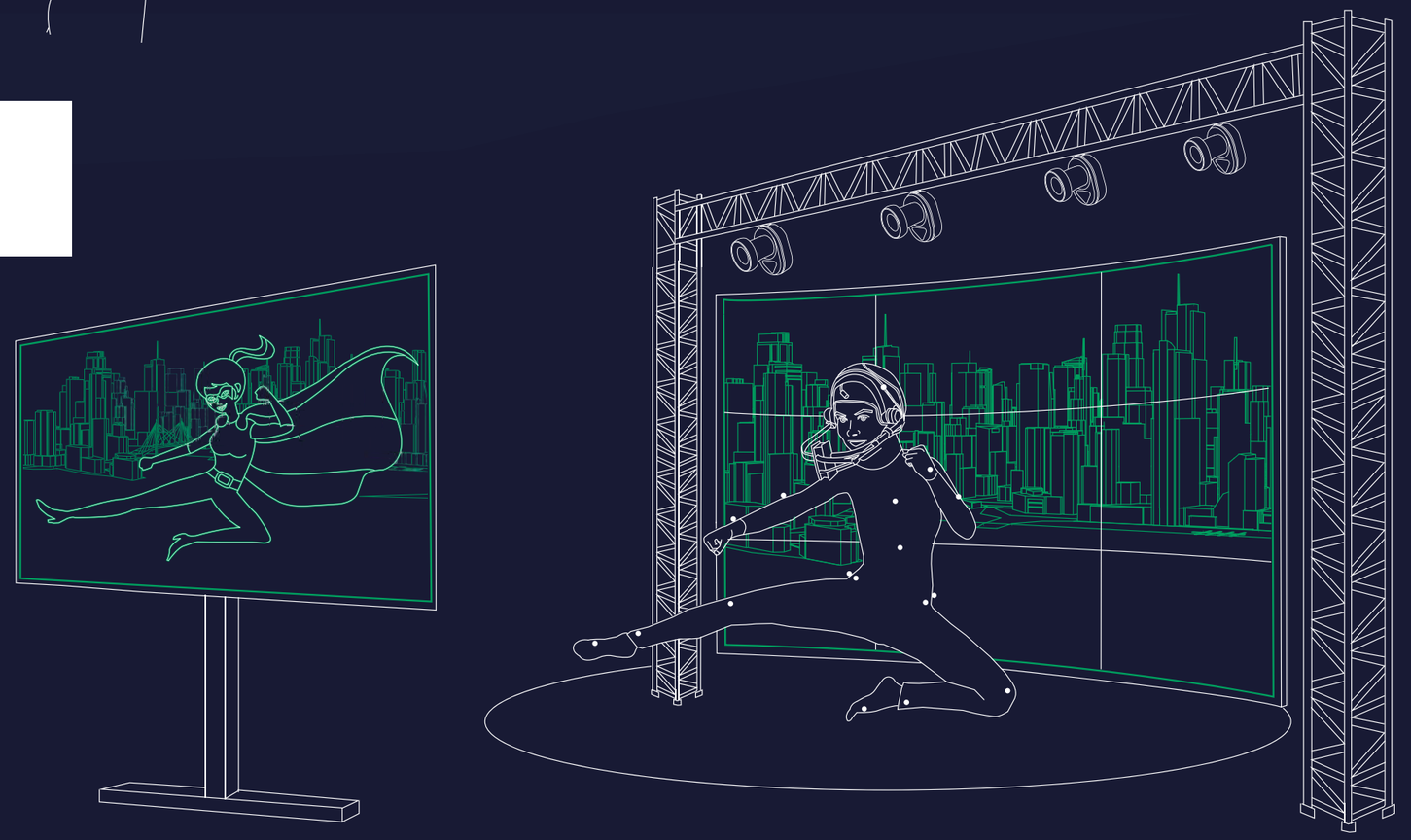
Scouting and pre-production in VR enables agile, non-linear production to overcome scheduling blocks, delivers consistent production values over time and different locations, reduces the number of people needed on set, the amount of build and travel costs, as well as post production cost.



FULL BODY PERFORMANCE CAPTURE

Vicon Shōgun allows for both cameras and full body subjects to be tracked at the same time, making use of optimized tracking profiles for both. This includes high fidelity finger animation and robust occlusion fixing when capturing the most complex moves.

These characters can be re-targeted within Shōgun and streamed directly into the game engine. This supports the latest technology innovations, including EPIC's new Metahuman project.



Cloud, Square Enix ™

Siren, Epic Games ™

WHAT CAN YOU DO WITH SHŌGUN LIVE?

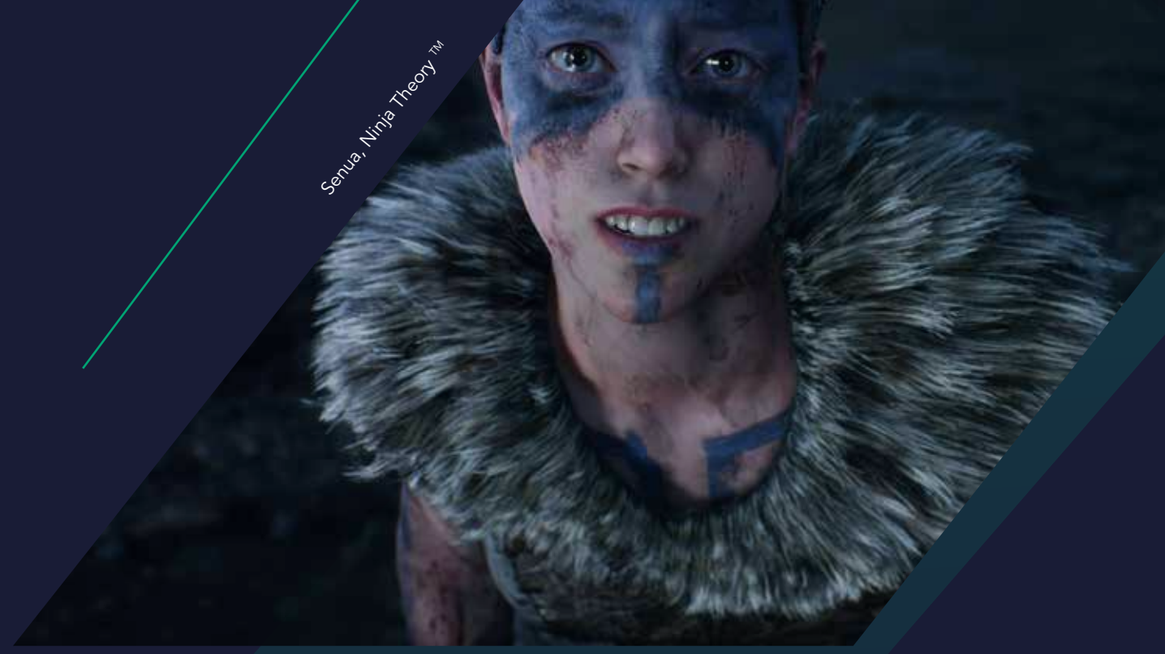
Kassandra, Ubisoft ™

- Realtime retargeting direct into game engines without using 3rd party software
- High fidelity finger solver allowing complex hand gestures like sign language
- 4K SDI video camera calibration complete with overlay.

SHŌGUN LIVE VS

UNBREAKABLE REAL-TIME SOLVER THAT'S BEST IN CLASS

FASTEST TIME TO CAPTURE (INCLUDING CALIBRATION AND RECORDING OF 3D DATA DIRECT TO DISK)



Senua, Ninja Theory ™

WHAT CAN YOU DO WITH SHŌGUN POST?

Incredible Hulk, Marvel ™

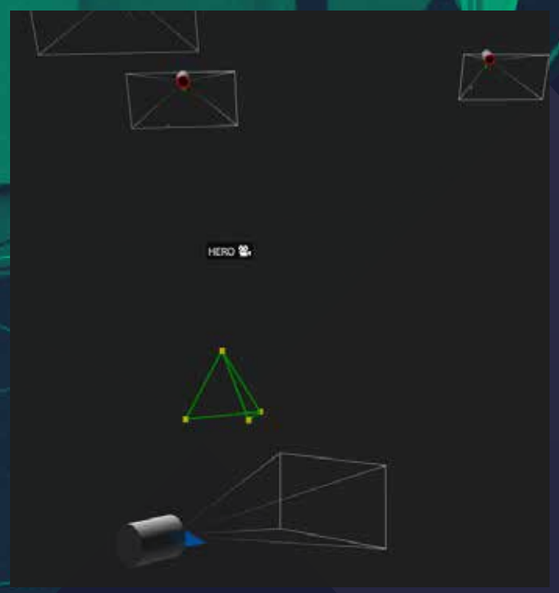
- Automatic gap filling and data assessment including innovative gap list feature
- Full retargeting pipeline direct onto character fbx
- Add control with auto-skeleton
- Fully scriptable using Python or HSL.

SHŌGUN POST VS

ONLY MOCAP PROVIDER TO SUPPORT USD EXPORT FOR VIEWING ANIMATION ON IOS DEVICES

Snoke, ILM ™

SHŌGUN 1.8 FEATURES AND IMPROVEMENTS



TRACK BOTH VIRTUAL AND FILM CAMERA

Easily calibrate any film camera that supports SDI along with timecode and sync. This calculates the center of the lens or nodal point so the perspective is correct when the camera moves. We have tested this with the Sony Venice, Blackmagic Ursa, Red Komodo and Arri Alexa Mini LF.

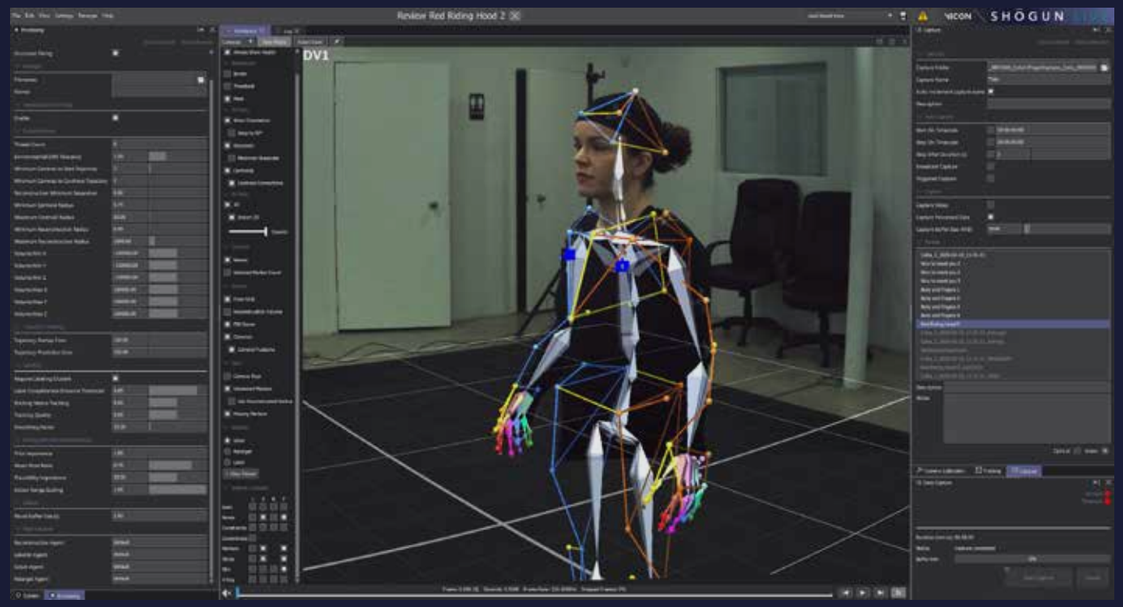
The Virtual Camera rig is designed to support a number of different configurations and allows the user to view the game engine using a tablet device. Bespoke 3d printed stalks allow for high quality object tracking all the way to the edges of the volume. It's lightweight and completely wireless, allowing you to frame shots and create creative camera moves either during the shoot or as an additional camera pass once the main shoot is complete.

SUPPORT BOTH ACTIVE AND PASSIVE MARKERS

Shōgun 1.8 supports all all current Vicon motion capture cameras. You can also run Vantage and Vero cameras strobless. This allows for you to capture in complex environments filled with smoke and FX and even capture outside. Alongside traditional passive markers you can also use active markers like the Vicon Nova or solutions from Technoprops or Standard Deviation.

BEST IN CLASS LOW LATENCY OBJECT TRACKING

By placing tracking markers on the camera you can create a connection between the markers and the camera so that when you move the film camera the virtual camera moves with it. This allows for a sub pixel accurate overlay of the CG layer on top of the film plate. This overlay can be viewed in Shōgun or directly in the game engine.



LIVE 3D OVERLAY ENABLES AR / XR WORKFLOWS

The calibrated lens can be exported to the game engine as an ST map. This can then be used when compositing and allows for the overlay to be replicated in the virtual camera view. Multiple different lens points can be calculated allowing for changes in Focus, Iris and Zoom. These can then be linked in the engine and dynamically blended between using a separate lens encoder.

TRACK ACTORS FOR FULL PERFORMANCE CAPTURE

Shōgun 1.8 allows for both cameras and fullbody subjects to be tracked at the same time making use of optimized tracking profiles for both. This includes high fidelity finger animation and robust occlusion fixing when capturing the most complex moves. These characters can be retargeted within Shōgun and streamed directly into the game engine. This supports EPIC's new Metahuman project as an example.

CALIBRATE MULTIPLE SELECTED CAMERAS

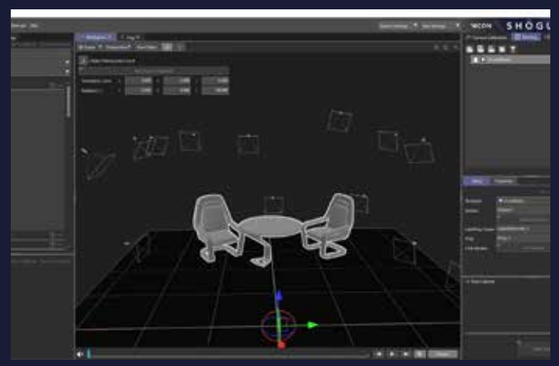
Expanding on the ability to quickly calibrate a single SDI camera if the intrinsic or tracking object has moved, the ability to calibrate or recalibrate multiple selected SDI or optical cameras has been introduced for a time-efficient and intrusion-free process on stage. Any cameras not selected are locked and the global co-ordinate system is maintained.

AUTOMATIC RETARGETING SETUP

Character retargeting continues to be a critical component in many VFX pipelines, regularly utilized in games and movies alike. With Shōgun 1.8 we have introduced the ability to automate large parts of the retargeting setup process, enabling our users to setup sides and parts, and create constraints with single button clicks. Retargeting your performance data to a unique character is now quicker than ever.

AUTO SKELETON

Live calibration produces reliable results for accurate labeling and can produce a high quality solve ready for direct real-time previsualization or retargeting. Auto-Skeleton allows the user to intervene and have greater control over the solving subject as a post-processed alternative to the Live calibrated solve. The solving subject can be reimported into Shōgun Live so that you can use this for real-time and also capture of processed data.



VALKYRIE COMES TO SHŌGUN

LEGENDARY PERFORMANCE

All Vicon customers will be empowered by the legendary performance of Valkyrie with Shogun 1.9.

Shōgun brings Valkyrie, the most powerful motion capture in the world, to Vicon's best-in-class digital creation ecosystem.

The next generation of movement analysis hardware is here to drive the leading edge of VFX and gaming applications, whether you're working in immersive virtual production, doing remote virtual scouting, or looking to create the most realistic digital scenes possible.

ACHIEVE STUNNING REALISM WITH HIGH-FIDELITY CAPTURE

Valkyrie pushes the possibilities of motion capture in the world of digital creation with unbeatable range, speed and field of view.

Vicon's next-generation hardware allows you to capture startling levels of detail with pixel counts of up to 26MP, giving users the data they need to achieve unprecedented levels of realism in their effects. Capture speeds of up to 2000fps allow users to capture fast-moving action and build incredible sequences for film, TV and games.

The camera's unique, custom-designed varifocal lens optimizes performance, whatever your application. Its wide, center and narrow field of view options can be combined within your setup to ensure the best possible coverage for your project, whether you're doing virtual production in an LED volume, capturing complex scenes in a warehouse-sized space or taking advantage of Valkyrie's IP65 rating to track subjects outdoors.

FREE UP YOUR TIME AND CREATIVITY

Valkyrie is built from the ground up to minimize its demands on your time so that you can focus on doing creative, agile work.

Even if you have to travel for your project, you can begin quickly. Valkyrie's 30FPS full video preview mode means that you can have your setup up and running with pinpoint accuracy quickly.

Once you're set up, the robustness of Valkyrie's tracking and calibration combines with clear display features to allow you to focus on your work, whether it's a wildly imaginative indie project or a massive blockbuster.

When it's time to create, Valkyrie's incredible data quality combines with its internal camera intelligence to minimize cleanup time and processing. Partnered with Shōgun's trusted ecosystem, Valkyrie will tighten your motion capture pipeline and allow you to focus on making great work.

BESPOKE MOTION CAPTURE LENS

Valkyrie includes a new, custom-built varifocal lens to increase range and precision.

INCREDIBLE SPEEDS

Valkyrie's native speeds go up to 500FPS, and as high as 2000FPS when using windowing techniques.

MARKET-LEADING RESOLUTION

With a resolution of 26MP Valkyrie offers unparalleled clarity.

A CAMERA FOR ANY ENVIRONMENT

With Valkyrie, you can capture any movement in any environment, safe in the knowledge that your camera is IP65-rated.

INTUITIVE OPERATION

At 30fps, Valkyrie's full video preview mode is Vicon's smoothest yet for easier camera monitoring.

VICON VFX

For more information visit our website or contact us.

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