



VICON

## CAPTURING ONE OF THE FALL OF THE HOUSE OF USHER'S DARKEST MOMENTS

The Murders in the Rue Morgue by Edgar Allen Poe is widely considered to be the first modern detective story, but it has a climax that stretches credulity for modern audiences: the killer turns out to be an orangutan. It was a version of this ending that Beyond Capture and legendary creature actor Terry Notary had to bring to life for Netflix's The Fall of the House of Usher – something that, despite some technical challenges, they achieved to chilling effect.

Beyond Capture is no stranger to horror-themed content, with credits across TV and video games including Netflix's The Order, The Walking Dead: Saints & Sinners, Back4Blood and Resident Evil 4.

The studio was founded by Graham Qually in 2017, building on experience he'd gained over the course of 16 years in the visual effects industry.

"I started in mocap back in 2006, at a company called Rainmaker Entertainment in Vancouver," he says. "They had a Vicon motion capture stage with 16 of the MX40 cameras. From there, I went off and helped build the Ubisoft Toronto stage where we had 80 of the T160s.

*So, of course, when I started Beyond, there was no choice other than Vicon."*

Beyond Capture already operates two large motion capture volumes (its Montreal location boasts one of the biggest volumes in the industry) and has plans to build out additional stages with Vicon cameras.

The capture session for The Fall of the House of Usher took place on the company's Vancouver stage. The volume there is fitted out with 100 Vicon Vantage cameras and Shōgun, with additional processing done by custom tools that plug into the studio's Vicon pipeline. "We have a lot of proprietary tools. We have four full-time programmers on our team that are building proprietary capture, solving, tracking and administration tools like file movement," says Qually.

Netflix's The Fall of the House of Usher draws on a number of stories by Edgar Allen Poe to weave together a multi-generational horror epic about the wealthy, corrupt Usher family. The scene that Beyond Capture worked on is the climax of the series' third episode, 'Murder in the Rue Morgue', in which a chimpanzee rather than an orangutan attacks and kills a character.

Terry Notary, who has done performance capture for films including Avatar, The Adventures of Tintin, The Hobbit trilogy, Kong: Skull Island, and, most relevantly, the rebooted Planet of the Apes trilogy, was joined by stunt actor Devyn Dalton for the session.

"Terry's a household name, especially when it comes to motion capture," says Qually. "It was just so awesome to have the guy on our stage and to watch him



We took Terry Notary's size and the dimensions of the monkey, and then we built a cage in our space that fit that ratio. We shot all his monkey data inside that super-sized cage, and then we had the data scaled to match the proportions on the set," Qually explains.

"The system held up perfectly and we were able to have nice, smooth real-time visualization for the people on set and the ones watching remotely."

"We integrated StretchSense gloves with the Vicon system, and got really good finger data when he was grabbing the bars and shaking them," adds Michelle Wiens, Facility Manager at Beyond Capture Studios.

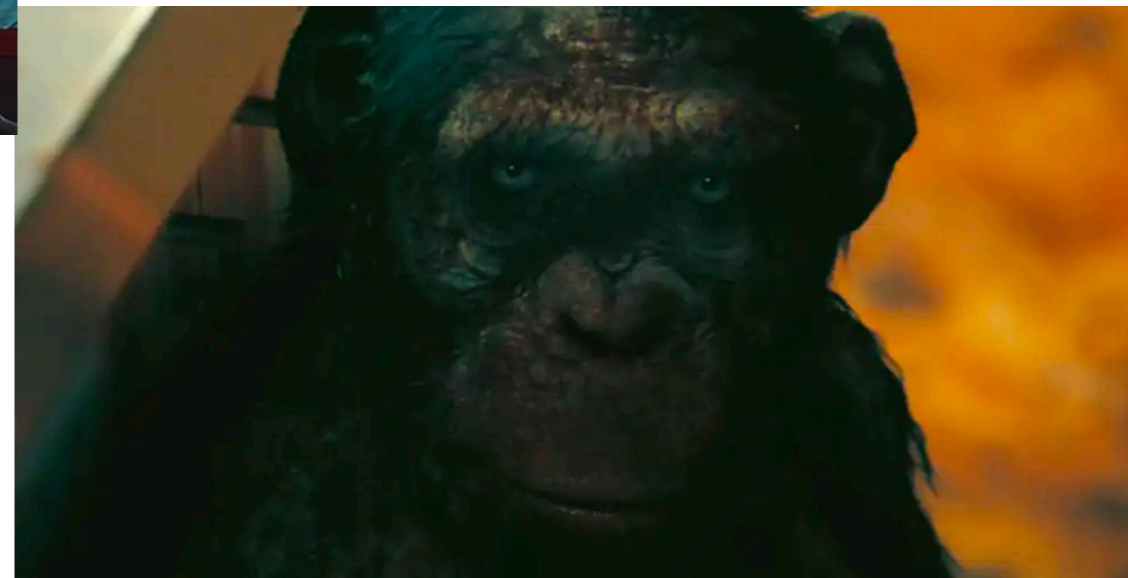
"They said that because they wanted to shoot the monkey removing the woman's scalp, they needed really articulate finger capture to get the fine detail. I remarked that this is why I do what I do. It's these kinds of phone calls where people say things like 'we need monkey scalping fingers!'" Qually jokes.

"One of the biggest helps was being able to do real-time visualization without having to worry about

occlusion, because we had all the parts of the cage we built blocking various markers," says Qually.

"Even though our actors were inside an actual cage, with arm extensions on and the finger capture we were doing, we were still able to achieve really high fidelity real-time visualization. The directors were very particular about the way the chimp moved, and they were able to see this because of our Vicon technology. That was a huge advantage for us."

*To find out more about Beyond Capture visit their website.*



transform on a snap of a finger from a human to a monkey. You know, the way he would roll around and run on his hands with these extensions on them was mind blowing."

The studio originally requested on-set motion capture, rather than running the shoot on Beyond Capture's Vancouver stage. "They were looking to either use an inertial suit or to bring us onto the set to do optical capture," says Qually. "They needed to capture a monkey attacking a character, but since the monkey is significantly smaller than the actor, we knew the best method to capture high quality, realistic data was to shoot at Beyond and re-scale the proportions to set.

### USING VIRTUAL PRODUCTION TO BRING IN REMOTE PRODUCERS

Virtual production was a key component of the shoot. "We were working on it both remotely and in-house," explains Qually. "We had directors at the stage and we were also streaming it over Zoom to different producers. We had already built the cage weeks earlier and built it as a digital asset for use in real-time, as well. As we had both the cage and the monkey in real-time we were able to visualize everything as we did the capture.

VFX