

## MAKE THE ORDINARY EXTRAORDINARY

Jellyfish is an Emmy®, BAFTA, and VES award-winning visual effects studio whose work includes scenes in “Rogue One: A Star Wars Story” and countless other movies and television shows.



### TECHNOLOGY PARTNER



### INDUSTRY

Cinematic visual effects and animation

### CHALLENGES

Accelerate image rendering to support more intensive visual effects in 3D and ultra-high-definition films and television programs

### SOLUTION

Jellyfish leveraged a variety of AMD solutions, including AMD EYPC™ based processor servers and AMD Ryzen™ Threadripper™ CPUs, but especially AMD Ryzen™ PRO processors to provide exceptional multitasking capabilities, machine intelligence, and up to 62%<sup>1</sup> greater multithreaded performance

### RESULTS

Dramatic acceleration of industry-standard special effects applications such as Houdini FX, Adobe® Creative Cloud, Autodesk®, Vray, and Arnold, reducing Jellyfish's rendering times “from hours to minutes”

### AMD TECHNOLOGY AT A GLANCE

AMD Ryzen™ PRO processor

**Jellyfish Pictures started as a two-man band back in 2001 and has since grown into one of the most respected visual effects and animation studios in the world. It boasts a talented and versatile team of motion designers whose work blends graphic design, 2D animation, traditional illustration, live action, and 3D CGI.**

“Jellyfish works on a wide range of projects,” said Jeremy Smith, CEO of Jellyfish Pictures. “Some of the work we’ve done is *Black Mirror* for Netflix, and we worked on ‘Rogue One’ for Lucasfilm. Going forward we’ll be working on similar projects.”

The spectacular visual effects that energize today’s blockbusters are created in computers rather than in cameras—and the more amazing an effect must be, the more powerful the computers that are needed. To meet that demand, the company has also become a pioneer in developing technical production pipelines that let artists bring their visions to life more rapidly.

Long render times can cripple the work of special effects artists like Jellyfish’s Petur Breki Bjarnason. “I almost exclusively work in Houdini, which can be a very resource heavy application,” he said.

“Depending on the shot, you might be juggling millions of points all storing their own internal data while they move about. All this adds up to a lot of progress bars.”

### A LEADING VISUAL EFFECTS AND ANIMATION STUDIO WITH INNOVATIVE TECHNOLOGY

The Houdini FX special effects application from SFX combines superior performance and dramatic ease-of-use to deliver a powerful and accessible 3D experience to VFX artists creating feature films, commercials, or video games. Houdini is perfect for

visual effects artists and technical directors with its particle and dynamics environment, but its computational demands can be extreme.

Jellyfish utilizes AMD Ryzen PRO processors to carry this tremendous load. The revolutionary new AMD Ryzen PRO processor is designed from the ground up for exceptional power, security features, and

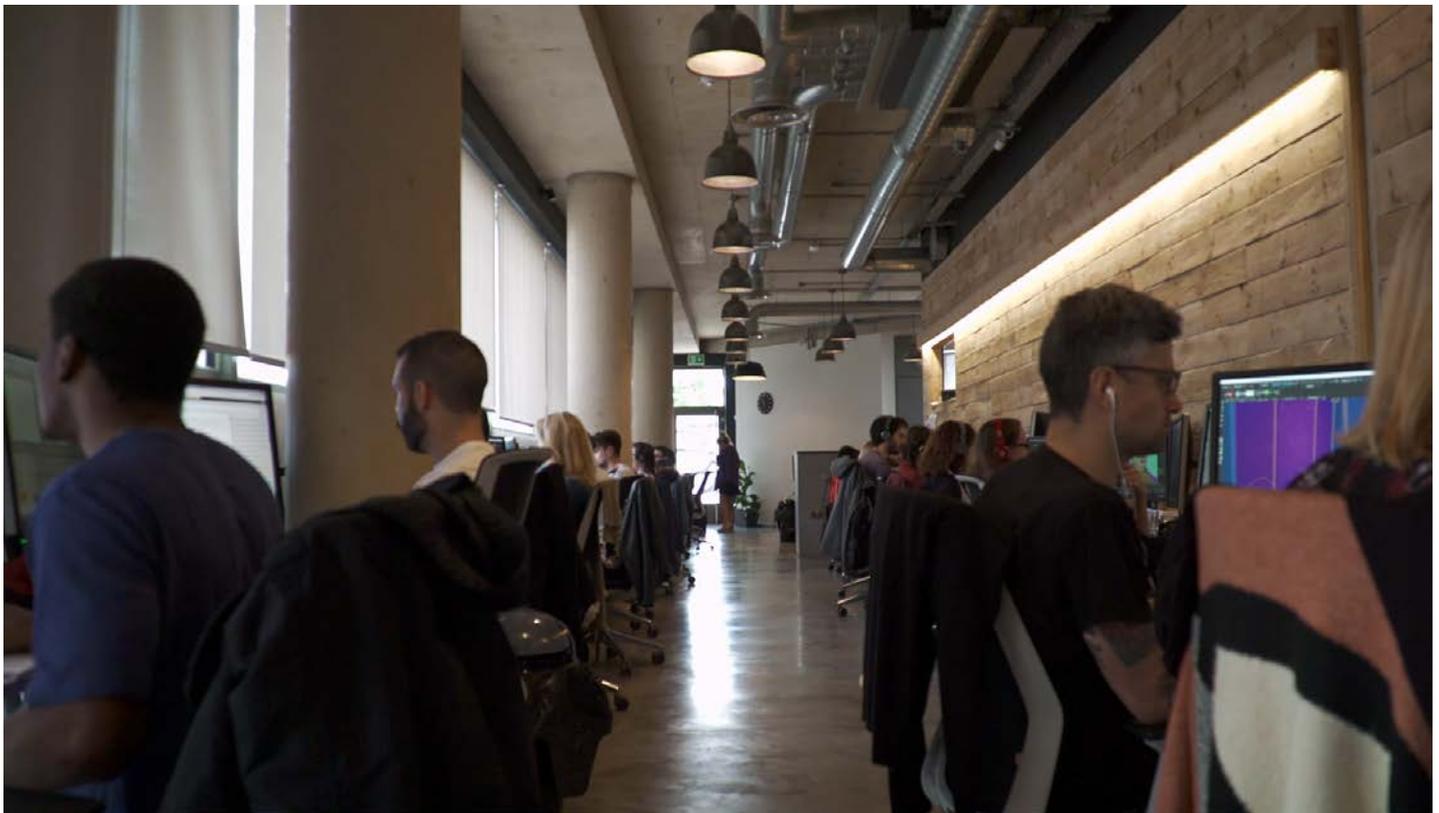
reliability. The Ryzen™ 7 1700 is the first-ever CPU to offer up to 8 cores and 16 threads for commercial-grade PCs features exceptional multitasking capabilities, machine intelligence, and enables up to 62% more multithreaded performance than other solutions<sup>1</sup>.

*“Some films require from four to six hours to render each frame, and now everything that’s being done in ultra HD, the amount of compute that is required is absolutely massive.”*

*Jeremy Smith, CTO,  
Jellyfish Pictures*

“In one sequence we may have around two million particles, all with their separate data sets, moving in 3D space in real time,” Bjarnason noted. “Before adopting the AMD hardware, we had to wait a lot longer for results, and this allows us to integrate a lot quicker than what we used to. Being able to do that in real time is in valuable.”

Added Smith, “The Ryzen PRO processor from AMD has given us alternatives, and we are able to come up with new custom hardware solutions that we wouldn’t have otherwise been able to do. The fact that AMD is now back on the table as a viable hardware partner is very, very exciting for us and the solutions that we can come up with with that hardware.”



*JellyFish Pictures studio in London*

## ABOUT JELLYFISH

Jellyfish is one of the top visual-effects and animation studios in the world. Located in London, England, it is responsible for many of the heart-pounding and eye-popping scenes in “Rogue One: A Star Wars Story” and countless other movies and television shows. Jellyfish has won a string of Emmy®, BAFTA, and VES awards for its work, and its 170 employees are true creative visionaries. For more information about JellyFish, visit [www.jellyfishpictures.co.uk](http://www.jellyfishpictures.co.uk).

## ABOUT AMD

For more than 45 years AMD has driven innovation in high-performance computing, graphics and visualization technologies — the building blocks for gaming, immersive platforms and the datacenter. Hundreds of millions of consumers, leading Fortune 500 businesses and cutting-edge scientific research facilities around the world rely on AMD technology daily to improve how they live, work and play. AMD employees around the world are focused on building great products that push the boundaries of what is possible. For more information about how AMD is enabling today and inspiring tomorrow, visit the AMD (NASDAQ: AMD) [www.amd.com](http://www.amd.com) website.

1. Testing performed in AMD Internal Labs as of May 10, 2017. System Config: Ryzen 7 PRO 1700 : AMD Myrtle – SM with 95W R7 1800X, AMD Radeon R7 240, 2x4096 DDR4-2400 RAM, Win 10 PRO, 512GB SSD, Graphics driver 21.19.142.257. Intel i7-7700: MSI Z270 SLI (MS-7A59) with 65W i7-7700, Intel HD Graphics 630, 2x4096 DDR4-2400 RAM, Win 10 PRO, 512GB SSD, graphics driver 21.20.16.4534. PC manufacturers may vary configurations yielding different results. Performance may vary based on version of driver used. Cinebench R15 nT is used to show multithreaded performance. Using Cinebench R15 nT, the Ryzen 7 PRO 1700 scored 1422 while the Intel i7-7700 scored 878 which is a performance differential of 61.9 or ~ 62% in favor of the Ryzen 7 PRO 1700. RZP-2 ©2018 Advanced Micro Devices, Inc. All rights reserved. AMD, the AMD Arrow logo, EPYC, Radeon, Ryzen, Threadripper, and combinations thereof are trademarks of Advanced Micro Devices, Inc. PID 1896902

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