

Case study

Hasraf “HaZ” Dulull

High concept sci-fi filmmaker takes HP ZBook Studio into *The Beyond*



Industry

Media & Entertainment

Objective

Make great science fiction films delivering high production values on a limited budget

Approach

Take HP ZBook Studio Mobile Workstation everywhere—on set, at the studio, on the road—to streamline production workflow and juggle multiple projects

IT matters

- Accelerate rendering from three hours to 45 minutes
- Preview visual effects in near real time, at full resolution
- Leverage multiple ports and connectors to access storage and displays

Business matters

- Create high-end look and feel on a limited budget
- Streamline workflows to meet production schedules
- Collaborate easily with colleagues using Windows-based software
- Free creativity through fast feedback on work-in-progress

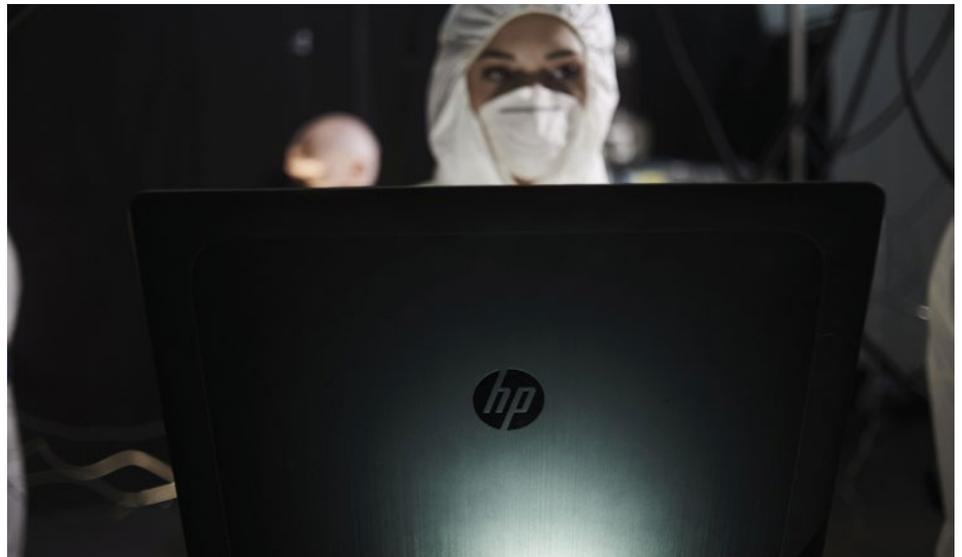


“What I love about the HP ZBook Studio is the feeling of a high-end workstation at my fingertips—the quick boot up, the crisp display, the fast render times. I can make feature films on a mobile device.”

— Hasraf “HaZ” Dulull, Director and Producer, HaZ Film LTD



What is the future of humanity? What might we find after passing through a wormhole into The Void? Hasraf Dulull—known as “HaZ” in the industry and by his friends—probes such questions in his debut feature film, *The Beyond*, a science fiction mystery released worldwide by Gravitas Ventures on January 9, 2018, on Digital VOD platforms. HaZ was an award-winning visual effects (VFX) supervisor and producer before venturing to make his own films. He wrote, directed, and edited *The Beyond*, and created most of the visual effects. Finding ways to deliver a spectacular audience experience on a very tight budget led to a game-changing relationship with HP. In several scenes of the film itself, actors can be seen solving scientific problems using HP Spectre x360 Convertible Laptops. Behind the scenes—on set, at meetings, and in the studio—HaZ relies on his fast, lightweight, powerful HP ZBook Studio Mobile Workstation for high performance and productivity on a budget.



Catch HaZ on set, in his studio, or on the road, and he'll be brimming with ideas—with his HP ZBook Studio on hand to transform inspiration into great filmmaking.

Spend five minutes in conversation with HaZ and what jumps out is his enthusiasm, his quick thinking, and his sheer joy in great storytelling. And, just as his films look into the future, HaZ is always pushing the boundaries of technical possibility.

"All of the projects I work on—short films, feature films, visual effects—reflect my interest in science fiction," HaZ says. "So, it makes sense that I'm always looking for the next best technology—cameras, workstations, software, displays—to help me tell my story."

HP ZBook Studio prompts Mac-to-Z switch

HaZ was a long-time Mac Pro® user when getting his hands on an HP ZBook Studio convinced him to defect. "I'm a bit of a snob when it comes to hardware," he says. "I'm always on the move, and I don't like big clunky laptops. For me, the device must not only be powerful, but also fast and light. The HP ZBook Studio is one of the slickest pieces of hardware I've ever worked with."

The HP ZBook Studio Mobile Workstation is one of HP's thinnest and lightest mobile workstations. The one HaZ uses is configured with Microsoft® Windows® 10, NVIDIA® Quadro® graphics, a 4K UHD display, and an Intel® Xeon® processor for powerful performance. This combination of compute muscle and mobility enables HaZ to work the way he likes: on the go, juggling multiple projects, and constantly trying out new ideas.

"*The Beyond* was my case study in the transition from Mac to PC," HaZ says. "I was hesitant at first, coming from an OSX background, but I was very surprised at how well Windows 10 performed. Not only was the HP ZBook Studio more affordable, it packed a bigger punch. Rendering that took three hours before now takes 45 minutes—and that's an Adobe® After Effects comp with motion blur, and tons of adjustment layers and grain."

The HP ZBook Studio also makes it easier for HaZ to collaborate with colleagues, such as 3D artists, who typically use Windows-based software for the CGI scenes. "I don't have to worry about installing two operating systems. I can have my 3D, editing, and visual effects software all in one environment—and it's the same system as my other team members, so there are no compatibility issues."

High quality on a small budget

These days, working low budget doesn't mean poor production values. HaZ's films all present a high-end look and feel, whether self-financed or backed by a large studio. But low budget does mean keeping a tight rein on costs and production schedules. The HP ZBook's NVIDIA Quadro graphics streamline HaZ's workflows so creative work continues uninterrupted. In the past, to test visual effects he'd have to wait until a shoot was finished, go back to the studio, pull together the scene elements—and then reshoot later if necessary. Now, he can preview visual effects almost in real time.



HaZ completed all editing and VFX for *The Beyond* on his HP ZBook Studio.

"I don't want to wait to get back home to carry on with an edit or VFX sequence," he says. "Having the NVIDIA graphics card with the high GPU, I can do assembly edits and VFX temp comps with the dailies/rushes quickly wherever I am, and show people what it will look like. On day three of a shoot, I can take my rushes, and certain shots and VFX material, to my hotel room and composite them on top of each other to get a really good look at whether it's going to work. With a speedy mobile workstation on set, you can do pre-visual-effects work while shooting. That helps production stay on schedule and keeps you from hemorrhaging money."

"As a filmmaker, I'm always on the move and usually working on multiple projects. The HP ZBook Studio Mobile Workstation massively increases my productivity."

—Hasraf "HaZ" Dulull, Director and Producer, HaZ Film LTD

HaZ likes the many connectivity options on the HP ZBook Studio. On the road, he links to a 2TB portable storage drive, using the workstation's 1TB SSD drive as a cache. In his home studio, he keeps film footage on an 8TB RAID drive and uses an additional tablet device for compositing. The 4K HP DreamColor display on HP ZBook is "amazing," HaZ says, but he also links to an HP DreamColor X27x Studio Display. "The second monitor is about efficiency," he says. "When editing, it's always best to have

the full frame onscreen and another monitor displaying your timeline to show as many layers as possible without having to scroll down too much."

HaZ shoots with Blackmagic cameras and uses Adobe Creative Cloud, DaVinci Resolve, and Autodesk® Maya software for animation, editing, compositing, and 3D computer graphics. He did all of his editing and VFX for *The Beyond* on his HP ZBook Studio. "Compositing was a beast," he says. "I wanted a machine that matched my speed, and the HP ZBook Studio absolutely did. I was previewing VFX comps with tons of layers in Adobe After Effects, and the fast performance allowed me to try out many things creatively without having to worry about processing in the background grinding my machine. What's more, the NVIDIA graphics card lets me do After Effects playback in full resolution, which helped me see perfect edges and Particles FX clearly. I also used the workstation on set for quick previsualizations using Autodesk Maya to block out framings with the director of photography, which were later fed into the VFX pipeline."

Lights, camera, action: HP onscreen and behind the scenes

HaZ's relationship with HP extends beyond his HP ZBook Studio. In *The Beyond*, the plot calls for space-agency scientists to use tablet computers when unraveling the mystery of an alien presence on earth. HaZ used HP Spectre x360 Convertible Laptops for their

Customer at a glance

Application

- Adobe Creative Cloud
 - Adobe After Effects CC, animation, and creative compositing
 - Adobe Photoshop image editing and compositing
 - Adobe Media Encoder CC
- DaVinci Resolve 14: editing and finishing software from Blackmagic Design
- Autodesk Maya: 3D computer graphics
- Editing footage with Apple ProRes 4444 Quicktime workflow, from HD 1080p, 2K, and 4k footage from Blackmagic cameras

Hardware

- HP ZBook Studio Mobile Workstation
 - NVIDIA Quadro M1000M graphics
 - Microsoft Windows 10 operating system
 - Intel Xeon processor
- HP Z840 Workstation
- HP DreamColor X27x Studio Display
- HP Spectre x360 Convertible Laptop

sleek design and quick performance. The devices enabled actors to see real graphics on the screens, and also to interact with the touchscreens to trigger graphics in time with their performance. "The Spectre is fast, it has a lot of memory, and it looks slick," he says. "It was a prop, but an interactive one; the actors could use real technology to open files and operate the device in real time on camera."

On another project—creating a 360 proof of concept for a virtual reality project—HaZ used a loaded HP Z840 Workstation. "If you're going to do visual effects-heavy content for VR, you need a beast of a machine and a beast of a graphics card so you can see what you're doing in real time," HaZ says. "I was getting almost real-time feedback on distortion effects, scrubbing through the timeline of the After Effects file to see how things moved."

With *The Beyond* completed, HaZ turned his attention to new projects—this time with studio financial backing. He directed, wrote the story, and co-produced *Origin Unknown*, a sci-fi thriller starring Katee Sackhoff—whose credits include *Battlestar Galactica* and *Longmire*—for release by Kew Media in 2018. He's also in development on a number of feature film and TV projects via his production company—

hazfilm.com. Catch him on set, in his studio, or on the road, and he'll be brimming with ideas—with his HP ZBook Studio on hand to transform inspiration into great filmmaking.

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"What I love about the HP ZBook Studio is the feeling of a high-end workstation at my fingertips—the quick boot up, the crisp display, the fast render times," he says. "One could easily forget that you are using a mobile device to make a feature film. For me, it's not just the amazing hardware that HP produces, it's also the people behind the company, who have supported me every step of the way."

Learn more at
hp.com/go/filmandvideo
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For more information on the film and list of digital platforms, please visit
<http://hazfilm.com/the-beyond>

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Images courtesy of HaZ Film LTD. HP provided equipment to Hasraf "HaZ" Dulull.

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