

# LIVING IN A DIGITAL WORLD

A Wellington industrial designer wows Cirque du Soleil.

**D**ylan Mulder was tired and wired. The Wellington-based 3D modeller and industrial designer had worked 14 hours a day, every day, for four months on two World of WearableArt projects. As dusk fell on the final-deadline day, he was furiously finishing a “destination-inspired” garment to unveil that evening at a VIP party thrown by WOW sponsor Air New Zealand, which had flown him to Dunedin and New Plymouth for inspiration. “It’s my take on architecture versus nature,” he says.

When the model entered the party, her black-and-white garment drew applause – and not just for its sculptural curves and LED lights. It was also WOW’s first-ever “virtual-reality” design.

Say what? To create it, Mulder used recently released virtual-reality headset HTC Vive, to transform his studio into a three-dimensional virtual world. “Effectively, you paint life-size artworks around yourself,” he explains, demonstrating how sensors in the handheld controllers turn the movements of his arms and hands into a design on a digital mannequin.

To make his design into physical components, he used a high-quality 3D-printing technique (fusing nylon powder with lasers to form objects layer upon layer). He then assembled it on a mannequin. The garment was on display in the foyer throughout the WOW awards show, which ran at Wellington’s TSB Bank Arena until early October.

Mulder, who’s been a finalist with all four of his entries over the past five years, sat nervously on opening night wondering how his piece, “Digital Stealth Gods”, would translate on stage in the fiercely contested open

“Effectively, you paint life-size artworks around yourself.”

section. Imagine ancient Egyptians still exist, and that a company has created two Darth Vader-esque outfits to update their look; now imagine this is their product-release event.

Two models wearing his designs appeared onstage to the Bowie lyrics, “Ground Control to Major Tom...” The male model – riding a device similar to Mulder’s own Solowheel electric unicycle – wore a visor operated by remote control with attached ears that rose up to reveal his face, then dropped back down. “Like a digital sarcophagus,” he recalls. “It was all I’d envisioned and more.”

The 29-year-old earned \$11,200 that night, placing third in the open section and also winning the Wearable Technology Award. He then had to leave his seat again to accept the Cirque du Soleil Performance Art Costume Award from judge Denise Tétreault, the company’s costumes, lifecycle and creative spaces director. “I was hyperventilating slightly and totally forgot to say ‘Merci’ and kiss her on both cheeks.”

Mulder won a one-month internship with Cirque’s costume and set department at their international headquarters in Montreal, return flights, accommodation and \$5000. “I’m so grateful to WOW. It’s let me experiment, demonstrate my techniques and play on popular culture – and it’s a visual diary of my design growth.”

At his studio, Mulder usually juggles around 10 commissions,



NICOLA EDMONDS

a process that begins with concept sketches, which are then turned into 3D models using computer software. One current job involves scanning the textures of different terrains to create what will eventually become blocks to line highway walls.

His five behemoth 3D printers also physically create props, models and prototypes to be mass-produced later. Non-disclosure agreements

apply, but projects on the go include a new-product prototype for a confectionery company, prosthetic legs for a sportsperson, film props and a jewellery range. But all that can wait when he joins Cirque in February. “My brain’s always racing with ideas,” says Mulder, who’s as upbeat as he is ambitious. “So I’m reminding myself to just ride the wave.” **SARAH LANG**

Above: Industrial designer Dylan Mulder at work with a virtual-reality headset and hand-controllers, which have sensors that turn the movements of his arms and hands into a design on a digital mannequin.