

By [Alyssa Danigelis](#)

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I'm about to be teleported. Romain Vakilitabar smiles warmly as he hands me a Samsung Gear VR headset and a pair of noise-canceling headphones. We're standing around a small conference table at Spark Boulder, a basement-level co-working space run by CU students. Soft electronic music plays overhead.

The 25-year-old American social entrepreneur wears a white button-down shirt over jeans. A red, green and black bracelet spelling "Kenya" - given to him by children at an

orphanage there - peeks out from his sleeve.

He tells me that what I'm about to experience isn't the final cut, and admits with a laugh that getting the video just right is taking much longer than he planned. His light brown eyes shine. I slip on the gear, and the office chairs and conference table disappear from view. The music stops. Sounding muffled and far away, Vakilitabar (pronounced "Vah-kee-lee-tah-bar") guides my hand to a button on the side of the headset that controls the cursor.

And then I'm in Kenya, standing amid roughly a dozen men, women and children who are speaking to each other under the midday sun in an unfamiliar language. Their homes are shacks patched together from old corrugated metal that crowd us on all sides. A shallow ditch dotted with trash runs alongside the shacks and out past two women scrubbing clothes in plastic tubs. Under the whitish-blue sky, lines of laundry hang listlessly between two shacks.

The sunlight is almost blinding. In the distance, a tangle of wires hangs from a telephone pole. Against one building, a woman with two toddlers clamoring at her sides sits on a plastic 10-gallon water jug, hugging herself. She says something to me but I cannot hear her over the voices of the others.

This is Kibera, Africa's largest slum, on the outskirts of Nairobi. Kibera is synonymous with extreme poverty. Sanitation and clean water are lacking. Unemployment is high and crime is as rampant as disease. Visitors are told to avoid the area - but here I am.

A woman with a gentle Kenyan accent speaks to me. "What do you see before you? Poverty? Sadness? Desperation? Lack of will? Dependence?" her voice asks. The view briefly goes dark, as if I'm closing my eyes. "No, you see me, Lucy Ochieng, 25, in my beautiful home."

"Can I show you the Kibera that I see?" Ochieng whispers.

Romain Vakilitabar led production on the film, "My Beautiful Home." Credit: Alyssa Danigelis

In the next moment, I'm standing in a busy market between stalls, facing a crowded dirt-packed road bustling with people and laughter. To my right, I'm momentarily transfixed by a man peeling carrots



over a wide container on a table. In the dim light under the market's metal awnings, a woman carrying an empty plastic pitcher brushes past me, and I turn all the way around to see a table covered in samosas ready to be fried, a shiny metal pot smoking from the fire below. I can almost smell the dough frying.

Another subtle blink and I find myself inside a small building, standing in front of a group of seated children. Vibrant unframed paintings of animals and landscapes cover the walls, overlapping. Each child concentrates quietly on

painting a tree with dark branches.

"I see creativity where there is no limitation to the creative mind, where beauty can be found and recreated anywhere and by anyone," Ochieng continues.

Despite my open mind, this isn't the tough, tragic tour I expected. And for Vakilitabar, that's the whole point.

He led production on this virtual reality experience, called "My Beautiful Home," through his new lab [PathosVR](#). He wants to take the technology beyond simply walking in someone else's shoes, seeing what she sees. He believes that strategic storytelling combined with subtle brain stimulation can turn us into more empathetic beings. When we see people as fellow humans rather than a label, we're able to tackle global problems more effectively, he argues.

For "My Beautiful Home," he added a 3 Hz frequency to the audio, which some researchers think could help stimulate the part of a person's brain involved in feeling empathy. Vakilitabar said he's not sure whether adding it actually works, but I definitely felt something through the headphones. The effect was akin to the bass thrum at a concert, only more pleasant.

His narrative aims to go further than other VR experiences that are designed to create empathy. Vakilitabar collaborated with Paris-based visual effects producer Maxime Parata on the final cut. In each scene, Ochieng challenges the viewer to see the beauty she sees, the strength, the energy, the feeling of community. When I ask about this approach, Vakilitabar cites the classic Pygmalion Effect study, where higher expectations of school children led to better academic performances.

His VR isn't about pity. It's about respect.



Kibera, on the outskirts of Nairobi, Kenya. Credit: K23 Media

### **Embracing the Unknown**

Vakilitabar grew up in Denver in a tight-knit, hard-working family. His father had come to the United States from Iran and his mother from France. The route he took to reach this point wasn't an expected one. After his sophomore year at the University of Colorado Boulder, he left school and began working at the [Unreasonable Group](#) accelerator program, which was created

for aspiring entrepreneurs. He then enrolled in [Watson University](#), a nontraditional, Boulder-based degree program for budding social entrepreneurs. After he graduated, he served as vice president of Watson for three years. Now he's seeking to bridge divides using technology.

"I started with a hypothesis, which was that by using virtual reality you can hack your body into becoming more empathetic," he said.

Vakilitabar thinks that humans are born with the capacity to be imaginative, but many lack a reference point to turn that imagination into empathy. Those who have never known what it's like to experience absolute need on a daily basis, he offered, will have trouble comprehending it.

"How can you empathize with a situation that's so foreign?" Vakilitabar asked. "You don't necessarily have those reference points."

Several years ago, Vakilitabar attempted to travel from Denmark to St. Petersburg without spending any money, just relying on the kindness of strangers. He slept on park benches, battled hunger and felt invisible. The experiment only lasted two weeks, but it transformed him. He could empathize with the homeless, and wanted to find a way to bring that capacity to others.

Last fall, he set off for Kenya with a VR camera rig that he had built himself. He accompanied a small team from the Boulder-based company [K23 Media](#) to Kibera. They planned to produce a virtual reality film for one of their clients, the nonprofit [Global One Foundation](#). When he wasn't assisting them with production, Vakilitabar recorded footage for his own VR project.

The inspiration to film in VR came a few months before his visit to Kibera, when he attended a showing of director Chris Milk's virtual reality film "[Clouds Over Sidra](#)" at a United Nations conference in New York. In the film, a 12-year-old Syrian girl walks the viewer through her life at the Za'atari refugee camp in Jordan.

By the end, Vakilitabar was in tears. "It was a humbling experience to see their resilience," he told me.



The K23 Media team in Kibera. Credit: Justin Vero, Global One Foundation

Vakilitabar is convinced of VR's potential to change how we connect with other humans and even how we learn. He became obsessed with the technology after his New York visit, and began assembling his own unique VR camera rig. GoPros mounted on helmets are everywhere, but he found that a comfortable wearable device capable of recording steady VR video didn't exist.

In his DIY rig, the main circular part was 3D-printed from high-grade polymer and had slots for 16 GoPro cameras, equally spaced eye distance apart. Although his original plan was to attach that to a helmet, it proved too heavy and unstable, so he resorted to a tripod.

Last year he'd posted a Facebook request for help constructing the rig, and a former high school classmate responded. A few weeks later, Vakilitabar said, a box arrived in the mail for him from a Boston-based, 3D-printing shop. They loved what he was doing and had produced the 3D-printed parts for free.

Luke Frydenger, founder and creative director of K23 Media, was also struck by Vakilitabar's eager optimism. In 2016, the creative agency started focusing on the conscious company sector and had a team shooting VR in Nepal that fall. They were trying to figure out who to send to Kibera from their small crew, when Vakilitabar connected with Frydenger for coffee and a conversation about VR.

"We have an affectionate term here, especially in our family, of a punk - in a good way," Frydenger said, describing their first meeting. "They do things out of the ordinary, they're going to be a little bit pushier, they're always going to push the boundaries. So he came in just looking like a young punk to me."

K23 needed a production assistant on the trip, and Vakilitabar wanted to learn VR.

"Even though he hadn't really done any VR yet, I trusted that he would just figure it out," Frydenger remarked. "He puts his brain to something and that's the outcome."



School children in Kibera. Credit: K23 Media

### **Setting Higher Expectations**

Filming in Kibera, Vakilitabar wanted to highlight the beauty he saw. "I think it's important not to just place people in Kibera, because what people see on the surface is not pretty," he said. "It's not clean. It's smoky because of the piles of trash that they're burning."

Angela Rizner, K23 Media's producer, was in Kibera with Vakilitabar. "He was a great icebreaker," she said. "He doesn't have a lot of

hang-ups around asking anyone anything." When they explained virtual reality to the kids they met, how people all the way in America would feel like they were standing next to them, the children's minds were blown, Rizner said.

She pointed out that current VR technology has limits, though. It's still an imitation of reality. "The smells are one thing, the taste of the air," Rizner said. "The collective vibration of the people and the place isn't present in VR in the same way."

That's where adding brain stimulation could help. Vakilitabar is interested in tech that increases the flow of neurotransmitters, and talked about potentially pairing techniques such as transcranial magnetic stimulation with VR one day.

In March, Vakilitabar plans to debut "My Beautiful Home" at the [Boulder International Film Festival](#), which will have a virtual reality viewing area this year. He's also working on an improved wearable rig that should make it easier to virtually embody someone else, and is already brainstorming new empathy-hacking VR projects.

"If you have high expectations of people, it may lead to increased performance, that self-fulfilling prophecy," Vakilitabar said. "What if the world changed its perception as it relates to certain big issues, as it relates to the other? I don't know the answer to that, but I think it's a question worth asking."