A 26-year-old billionaire is building virtual border walls—and the federal government is buying

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Palmer Luckey on stage during questions at end of panel discussion "Forecasting VR's Adoption Over the Next 5 Years". In Hahn Auditorium of Computer History Museum in Mountain View, California. Wearing grey T-shirt featuring white Oculus VR logo in center. Creative Commons CC0 1.0 Universal Public Domain Dedication

On a Friday afternoon in late July, a crowd of techies, military types and a few civilians deployed to the new Irvine, Calif., headquarters of Anduril Industries, a defense tech start-up, to sip hibiscus margaritas and admire the sensor towers and carbon-fiber drones on display. Dave Brubeck tinkled over the sound system, and the dress code skewed office casual and pastel, offset by the bright red pop of a lone "Make America Great Again" hat by the taco bar.

After an hour of socializing amid surveillance equipment, Palmer Luckey, the company's 26-year-old near-billionaire founder, mounted a stage for the ribbon-cutting. Luckey had wanted to use the company's namesake sword—a legendary weapon in "The Lord of the Rings" wielded by the hero Aragorn—for the ceremony. A replica of the movie prop hangs on the wall in the office, dramatically underlit with a purple bulb. But Luckey had just gotten back from his honeymoon and hadn't had time to sharpen it.

Armed instead with large scissors, and wearing his trademark uniform of Hawaiian shirt, cargo shorts and flip-flops, he dropped some Tolkien on the audience.

"Anduril," he said, leaning into the long Elvish vowels, "means Flame of the West. And I think that's what we're trying to be. We're trying to be a company that represents not just the best technology that Western democracy has to offer, but also the best ethics, the best of democracy, the best of values that we all hold dear."

Along remote stretches of the U.S.-Mexico border, and on the perimeters of military bases around the world, Luckey's vision was already becoming reality. Customs and Border Protection is using Anduril's high-tech surveillance network as a "virtual wall" of interlinked, solar-powered sentry towers that can alert agents of suspicious activity, and the company has signed similar deals with U.S.

and U.K. military branches.

Whether those kinds of missions represent the best of Western values is a debate preoccupying the biggest companies in Silicon Valley. At leading software firms such as Google, Amazon, Microsoft and Salesforce, employees are loudly condemning their companies' involvement in military research. The controversy even reached online furniture retailer Wayfair, where employees staged a walkout to protest the sale of beds to border camps.

Luckey, who has emerged as one of the tech industry's most outspokenly right-wing figures, has welcomed this battle. Under his banner, Anduril is a venture capital-backed start-up that has proudly joined the ranks of the military-industrial complex.

Like Peter Thiel, whose Founders Fund led investments in the firm totaling $58.5 million, Luckey is a public supporter of President Trump with libertarian leanings. In a Washington Post op-ed last summer, Luckey and Trae Stephens, a partner at Founders Fund and Anduril's chairman, made the case for U.S. tech companies to work more closely with the government in order to retain an advantage over Russia and China, which they identify as America's key rivals for 21st century military dominance.

At a conference earlier in July, Thiel, who served on Trump's transition team in 2016, went so far as to suggest that the CIA and FBI should investigate Google for treason, for possibly aiding the Chinese military while spurning the Department of Defense.

But there's more than ideology behind Luckey's embrace of the U.S. military, which had a $730-billion budget in 2019. Anduril is hoping to follow in the footsteps of two other Founders Fund companies—software company Palantir, which was co-founded by Thiel

and sells analytics capabilities to intelligence, law enforcement agencies and private industry; and Elon Musk's rocket company SpaceX, which has contracts with the armed services to launch satellites—in breaking into the staid defense contracting industry, which has long been dominated by big firms such as Boeing, Raytheon and Lockheed Martin.

So far, it's working. Since opening its doors in 2016, Anduril has hired more than 100 employees and signed a number of vendor contracts. The company declined to say how much it was paid for its pilot program with Customs and Border Protection, but contracts that were recently unearthed by the immigrant rights advocacy group Mijente show that Anduril has since received more than $5 million from the agency via two intermediary contractors called Govplace and Impres Technology Solutions.

It has also found an increasing number of clients in the armed forces. Earlier this week, the U.S. Marine Corps announced a $13.5-million contract with Anduril for similar perimeter surveillance systems for four bases around the world—including one in Yuma, Ariz., that hugs the southern border. Britain's Royal Marines have also enlisted Anduril's services, and according to a report by the Intercept in March, the company has been tapped to work on the Defense Department's Project Maven, which aims to bring advanced machine learning technology to bear on the battlefield. (Google employees specifically protested their company's involvement in the initiative, prompting the company's withdrawal from the bidding process.)

Anduril was born out of controversy. In 2014, Luckey sold his first company, the virtual reality start-up Oculus, to Facebook for $2.3 billion. When on campus, he made his presence known in the parking lot with a desert-tan Humvee equipped with machine gun mounts and toy guns. In 2017, Luckey was pushed out of the social media giant after news reports that he had donated to a political group called Nimble

America, which bought billboards featuring anti-Hillary Clinton memes during the lead-up to the 2016 presidential election.

With an estimated personal fortune of more than $700 million from his Oculus stake, he was free to do whatever he liked as a follow-up to Facebook. Instead of just driving around in military hardware, he decided to make it.

Anduril's core product is its Lattice software system, which takes in data from any number of sensors—cameras, Lidar scanners, satellite imagery—then uses machine learning to make it legible to human operators. With enough training, the system can, the company claims, learn the difference between a distant cluster of cattle roaming into view and a caravan of vehicles, and alert the user—whether a border patrol agent or a Marine on watch for possible base intruders—only when a potential risk crops up.

Once alerted, a Lattice user can strap on a pair of VR goggles and get a bird's-eye view of what triggered the alarm, or toggle between the individual streams coming from each sensor. The goal is to give users a kind of local omniscience—perfect situational awareness of what's around every corner and behind each hill.

Putting the secret sauce in the software rather than the hardware allows Anduril to build systems from relatively inexpensive, commercial-grade sensors and quickly deploy them into the field. It's an approach that has succeeded in the satellite industry, where companies such as Planet Labs launch hundreds of small, relatively cheap satellites into space and rely on advanced software to stitch the images together.

The company is also manufacturing its own towers and autonomous drones to feed into Lattice, and contracted with former "MythBusters" host Jamie Hyneman to build a firefighting tank prototype, as a first step

toward using Anduril's systems to combat wildfires in the future. Luckey also refuses to rule out building weapons down the line—but for now the company is focused on perfecting the all-seeing eye.

In pushing back against advanced military projects, employees at companies such as Google, Amazon and Microsoft have argued that such powerful systems will inevitably be misused. Luckey thinks that gets the issue backward: Less-ethical actors are already trying to build powerful military artificial intelligence and robotics systems, so the U.S. needs to build them to ward off disaster.

"We have to realize that countries like China are weaponizing artificial intelligence and using it not just to create totalitarian police states in their own countries but exporting that technology to other countries that are going to use it to build their own totalitarian police states," Luckey said at the ribbon-cutting. "When you give a government really advanced technology and there aren't any safeguards in place against the way you use it and there aren't any thoughts about the ethics behind it, you're going to end up trending towards building a police state. The United States is a very different place."

That gives America—and its tech companies—a special responsibility, one it shies away from with excessive self-flagellation, he suggests.

"We've shown throughout history that we are leaders in using technology ethically, using technology responsibly," Luckey continued. "We have to continue to lead, the same way that we led with nuclear weapons, where we were able to define the way that they were used because we were the leader in the space."

Critics of Anduril don't share Luckey's rosy view of American power. Mijente, the immigrant rights advocacy group, published a statement Wednesday along with details of Anduril's contracts with Customs and

Border Protection and the Marines, calling it part of "a surveillance apparatus where algorithms are trained to implement racist and xenophobic policies."

"Anduril's business model is predicated on contracts targeting immigrant communities—however we know what happens at the border very quickly comes into the interior. Anyone in this country who cares about human rights should join us in calling for an end to this dangerous surveillance," said Jacinta Gonzalez, Mijente senior campaign organizer, in a statement.

Palantir, too, has faced an increasing drumbeat of criticism, most recently over reports revealing that its software is used to directly facilitate Immigration and Customs Enforcement raids on workplaces.

The Trump administration's immigration crackdown and harsh treatment of migrants are broadly unpopular in Silicon Valley, but the association hasn't prevented Anduril from hiring enough talent to fill its considerably larger new headquarters. Although many new employees hail from the defense or security industries, or from the military, a significant number left jobs at companies such as Google, Blizzard, Apple and Juul to work at Anduril.

Nor has Luckey's embrace of controversy scared away capital. As soon as he snipped the ribbon onstage and the music picked back up, groups of investors who had flown down from Silicon Valley started circling him and his fellow Anduril executives. They were venture capitalists from blue-chip funds hoping to get a cut of the next fundraising round, drawn to the Flame of the West.