Photos courtesy of Envera Systems

As CEO of Actuate Sonny Tai speaks on AI video analytics

Transforming the Safety and Security Industry

LAYERING AI VIDEO ANALYTICS WITH EXISTING CAMERA SYSTEMS

BY NATHAN VARN

Call it happenstance, call it coincidence, or perhaps it's also passion and personal experience that put one of today's artificial intelligence leaders on a path to revolutionize the safety and security industry—or at least transform physical security the way we know it. Artificial intelligence (AI) video analytics have quickly evolved over the last few years and continue to do so. One company that is currently leading this

across many industries is Actuate, with co-founder and CEO Sonny Tai at the helm.

Sonny knew at an early age that his "life calling was to help people," whether through resources or influence, but at first he wasn't sure how he was going to do that. Sonny was born in Taiwan, grew up in South Africa, and then moved to the United States as a teen. It was that drive to help others that had him enlisting in the United State Marine Corps after high school, but after returning from tour, he wasn't sure where to go next. "It's a common problem for veterans when they get out of the military, trying to find some direction," he says. So he went to graduate school, excited about entrepreneurship but still unsure of what startup would be best.

In late 2017 Sonny was ready to begin working on a project, "something to save lives." Being a veteran and spending his childhood in South Africa, Sonny was personally familiar with gun violence. He had "a close family friend fatally shot in a home invasion [in South Africa]. Because of that, I've always had a passion or at least interest in public safety," he says.

That initial brainstorming evolved to be Actuate today; with a co-founder, the company was incorporated in 2018. Initially, "all we did was use computer vision to detect gun threats through existing security cameras," says Sonny. Using existing camera systems mostly at private schools or within small school districts, the first product was fairly simple, but it could detect a

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gun threat and send a text message with an image. It was just the beginning of their technology, but then the 2020 pandemic hit, and nearly all of their customers shut down.

At the same time, the largest guarding company in Puerto Rico was interested in "getting into remote guarding." Many on-site guarding organizations were challenged to improve their AI systems, especially when on-site personnel weren't necessarily needed in many capacities at the time. "They wanted to see if we could build a better software for people and vehicle detection," Sonny says. Fast forward to today, and Actuate has accomplished that and more, with their solution deployed at nearly 20,000 cameras.

In addition to integrating with existing camera systems at schools, hospitals, and other commercial or public spaces, community security providers are also partnering with the Actuate team to improve solutions at many amenities and gated entrances. "We enable security camera systems to automatically see, like a human can. They can identify when someone is trespassing into a pool or identify delivery vehicles that pull up to a gate, so that the gate can open automatically," Sonny says. No additional hardware is necessary, and there is no need to have someone on site installing additional equipment.

Cost efficiency is just one benefit; another is the improved customer experience and service that security providers can offer. AI technology

HAVE A DISASTER PREPAREDNESS PLAN IN PLACE

It's essential to have an action plan in place before the hurricane season starts. The plan should outline evacuation routes, procedures for protecting the building, and essential contact information for emergency services. It's also important to communicate the plan to all employees and stakeholders to ensure everyone is aware of the steps to take in case of an emergency.

When a hurricane or natural disaster strikes, it can be difficult to find the right repair materials. To make sure you're prepared for anything Mother Nature throws your way, store critical supplies like a tarp, roofing material/patch repair kit, caulk, and sealant in an easily accessible location—if not on hand they may just become unavailable at the time of need! Also don't forget necessities such as gloves, which will come in handy both while prepping for storms and digging out post-storm restorations.

In conclusion, protecting the roof of a commercial property during a hurricane requires a proactive approach and a combination of best practices. By implementing these tips, commercial property owners can safeguard their buildings and reduce the headache that often comes with extensive repairs after a hurricane. ■

helps to reduce false alarms that can be caused by spider webs in front of a camera lens, or vehicles that pull over a loop in the ground before turning around. Both are examples of false or ghost transactions that signal a guard, agent, or operator for response when their attention is better suited for actual trespassing incidents or visitors at a gate.

Actuate's software is constantly learning, with updates that can easily be rolled out to make a service even better. For gated communities, one of the latest developments includes teaching the software to distinguish common delivery vehicles waiting at an entrance and open the gate automatically for those specific deliveries. This helps communities reduce lines and wait times at the entrance, and it mitigates the potential dangers for neighborhoods with a short entry road. Sonny says, "It makes labor more efficient as layers are added to the software and a system scales."

While the technology continues to improve, Actuate's approach remains the same. "We want to provide and build solutions that are cost friendly and cost effective to be deployed in the right situation," says Sonny. This can mean mitigating a threat, helping first responders get to a situation faster, and/or providing real-time intelligence—all without having to "break the bank." AI video analytics is just one piece of a comprehensive plan for security around a community or other location, and Sonny knows, "The best thing we can do is provide the best tools." ■

Sonny Tai enlisted in the United States Marine Corps after high school