



How Derq and Intel are Working Together to Make Streets Smarter and Safer

Written by the Derq Team

Transportation safety affects everyone. In cities across the globe, traffic cameras are a common sight at intersections, on highways, and in busy pedestrian areas. But while these cameras have long helped deter reckless driving and catch violations, there's one big piece that's been missing: real-time, predictive, and actionable intelligence.

That's where Derq and Intel come in

The AI boom bypassed the one place we need it most: our roads. At Derq, our mission is to eliminate road fatalities for drivers, cyclists, and pedestrians alike. Developed initially from groundbreaking research at MIT, our AI-powered Real-Time Perception Platform takes video feeds from traffic cameras and other nearby traffic sensors and turns them into insights cities can use to prevent crashes and improve traffic flow.

But we can't do this alone. That's why we partnered with Intel to push the boundaries of what's possible when you combine advanced AI video inference with powerful computing.

Turning Video Into Action

Cities today have more cameras than ever before. But raw video alone can't predict where the next near-miss might happen, or warn a distracted driver that a pedestrian is about to step into the crosswalk. We don't just detect crashes. We prevent them before they happen. Our platform adds that missing layer of intelligence that detects dangerous driving behaviors, identifies hotspots for violations, and even predicts where conflicts between cars and people are likely to happen.

This isn't just theory. Together with Intel, we recently put our system to the test by streaming over **100 live traffic camera feeds** through a single Intel server while maintaining high accuracy and ultra-low latency. That means cities can run powerful AI at the edge, right where the action happens, and act on safety threats in near real-time.

Intelligence is Your Edge | How Derg and Intel are Using AI and Edge Computing to Make Streets Smarter and Safer

Derg INSIGHT: AI That Does More

Derq INSIGHT dives deeper into the data, giving traffic engineers and planners rich dashboards, heatmaps, and reports to tackle longer-term safety and congestion challenges. It helps cities understand where crashes and near-misses happen most and how to address them.

The Results So Far

When we tested our solution with the powerful Intel® Xeon® Scalable processors and OpenVINO™ toolkit, we didn't just confirm performance. We showed that cities can process hundreds of high-definition streams without needing massive hardware upgrades and with low enough latency to make a real difference for drivers and pedestrians on the ground.

Looking Ahead

It's time we move from reactive traffic management to predictive crash prevention. Al won't replace city planners or traffic engineers — and we don't want it to — but it can give them superpowers. Imagine a city that not only sees what's happening on its streets but understands it in real time and predicts behavior and can act immediately to protect lives.

At Derq, we believe that smarter, safer streets aren't a distant vision. Our technology is proven and already making a difference in cities across the world. Progress is happening right now, powered by the combination of cutting-edge AI and trusted technology partners like Intel.

Want to learn more? Visit <u>derq.com</u> to see how we're helping cities around the world transform raw data into action and build a safer future for everyone on the road.

Partner Name

Derq

Booth Info

Stand 1649

