

Technology | Australia

Delivering AI-powered multi-sensory analytics around the world

iOmniscient

A pioneer in video analytics with more than 20 years of experience, iOmniscient partners with Lenovo OEM Solutions and Intel to bring its AI-based multi-sensory solutions to more organizations globally.

intel.



Lenovo

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Customer background

Who is iOmniscient?

iOmniscient provides advanced AI solutions for intelligent video, sound, and smell analytics. Founded in 2001, the company has provided its comprehensive analytics solutions to 30 different industries—from retail and healthcare to traffic management and smart cities. With 70+ international patents, iOmniscient specializes in solutions for providing an autonomous response in complex, crowded environments, reducing response times by 80%.¹ Its systems are designed to minimize infrastructure costs, requiring no Deep Learning for its AI and eliminating the requirement for GPUs. Its systems have been implemented by commercial and government users in more than 70 countries.

Dr. Rustom Kanga, Co-Founder & CEO of iOmniscient, begins: “Our customers appreciate that we don’t sell products; we focus on outcomes.”



¹ Data provided by iOmniscient

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The challenge

For over two decades, organizations around the world have trusted iOmniscient to provide them with intelligent crowd management solutions. Using its Artificial Intelligence Platform, iOmniscient customers can combine modular technology building blocks to create unique multisensory solutions for detection of incidents and recognition of people and vehicles involved in busy environments.

iOmniscient solutions are designed to reduce infrastructure costs to the point where an intelligent system can be less expensive to implement than a simple recording system. This is because they:

- can use existing cameras
- require fewer cameras with lower resolution
- consume 90% less storage and network bandwidth²
- use minimal CPU resources and eliminate the requirement for GPUs
- enable autonomous operations requiring fewer personnel to operate

² Data provided by iOmniscient

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The challenge

iOmniscient solutions are open and can run on almost any Intel-powered PC with a Windows operating system.

Dr. Rustom Kanga notes: “Our customers usually work with a systems integrator to determine the best hardware configuration for their needs. Naturally, we want our customers to get the best performance and value from their hardware investment, so we spent a long time evaluating which vendors’ offerings fit best with our technology.”



Video Analytics

Sound Analytics

Smell Analytics

Autonomous Multi-Sensory AI

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“iOmniscient solutions run exclusively on Intel-based systems, so we looked for vendors with an extensive Intel portfolio.”

Dr. Rustom Kanga

Co-Founder & CEO, iOmniscient

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The
solution

Joining forces with Lenovo

After evaluating the leading Intel-based hardware vendors, iOmniscient established an OEM alliance with Lenovo.

As well as recommending Lenovo hardware to prospective customers and systems integrators, iOmniscient offers plug-and-play appliances with its software pre-loaded on Lenovo ThinkEdge clients and servers, depending on the customer use case.

Intel® Core™ processors implement an improved performance hybrid architecture for enhanced professional performance, while Intel® Xeon® processors deliver trusted performance and exceptional efficiency.

Hardware

Lenovo ThinkEdge clients and servers
Intel® Core™ processors
Intel® Xeon® D processors

Software

OpenVINO™
Metro AI Suite

Services

Lenovo OEM Solutions including factory services, logistics, service, and support
Lenovo Premier Support for Data Centers
Lenovo Premier Support for PCs

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The
solution

Teaming up for success

The new OEM partnership with Lenovo complements iOmniscient's longstanding alliance with Intel®.

“Our patented AI technology enables us to run our systems exclusively on Intel architecture, without the need for third-party GPUs,” says Dr. Rustom Kanga. “This reduces the power consumption by a factor of 16, slashing both the total cost of ownership and carbon footprint of our solutions.³ We also use the OpenVINO™ platform and Metro toolkit to provide the customer with a comprehensive, integrated solution.”

iOmniscient has recently joined the [Lenovo OEM Crosswave Partner Program](#), which will see Lenovo actively promote and sell the company's solutions through its extensive worldwide channels.

³ Data provided by iOmniscient

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“We bundle Lenovo hardware with our Artificial Intelligence Platform, cameras, and networking equipment, providing a plug-and-play solution for specific easy to implement use cases—for privacy protection, graffiti detection, and understanding customer dwell time in retail environments, for example.”

Dr. Rustom Kanga

Co-Founder & CEO, iOmniscient

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The results

With Lenovo and Intel as its OEM partners, iOmniscient gets much more than just access to cutting-edge hardware. The company can also access a wide range of exclusive services, including hardware customization, software pre-load and factory services, expedited shipping, and worldwide support services.

“Having our appliances backed by Lenovo Premier Support is a huge benefit of the OEM partnership,” says Dr. Rustom Kanga. “You get the same quality of service everywhere: from Sydney to Tokyo to Dubai. We’ve got customers all over the world, and local on-site support from Lenovo helps us to offer them an excellent service that is available 24/7—improving customer trust and satisfaction with globally consistent service. It complements our own software support service where we guarantee our response times.”



Hardware scalability for deployments of any size and complexity



Rapid response and issue resolution across 70+ countries; guaranteed response times for software support



Faster market expansion through Lenovo's global sales channels

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The results

Smarter solutions

Today, iOmniscent has over 300 user applications available off the shelf for more than 30 industries—from retail and manufacturing to transportation and smart cities.

This includes detection, tracking, and recognition capabilities ranging from:

- intrusion detection and crowd counting systems
- object detection and facial recognition in crowds
- anonymized tracking in crowds
- multi-lingual license plate recognition; vehicle make and model detection
- sound analytics for 100 different sounds (e.g. glass breaking, gunshots, people shouting, etc.)
- smell analytics for infinite number of smells (e.g. food processing, sewage, gas leak)

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“Our 300+ applications can easily be combined to address complex use cases. Our Artificial Intelligence Platform can monitor crowds in a human-like way, but without human drawbacks like fatigue and attention lapses. And we have developed innovative AI technologies that do not require Deep Learning and hence we can eliminate expensive GPUs.”

Dr. Rustom Kanga

Co-Founder & CEO, iOmniscient



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“We developed AI-based systems long before the term became fashionable. We have matured our systems over more than 20 years, enabling us to deliver extremely robust solutions focused on helping our customers to save money and to make money.”

Dr. Rustom Kanga

Co-Founder & CEO, iOmniscient

Why Lenovo?

For iOmniscient, the breadth of Lenovo's Intel-based hardware portfolio set it apart from other vendors.

"Having access to Lenovo's broad portfolio means we can cater to any size of customer," says Dr. Rustom Kanga. "Some customers need small edge clients and some need larger edge servers depending on the size and scale of their deployment. We can always find Lenovo devices that fit the bill. We also find that customers like and trust the Lenovo brand."

Equally important was the depth and breadth of services and support available from the Lenovo team. "Lenovo provides tailored support that reduces the operational burden and accelerates deployment timelines," concludes Dr. Rustom Kanga. "We're excited to be part of the new Crosswave Partner Program, and are looking forward to seeing where our OEM partnership with Lenovo takes us in the future."

How can customers get plug-and-play analytics solutions?

Thanks to its OEM partnerships with Lenovo and Intel, iOmniscient offers pre-configured appliances backed by comprehensive support.

That's the power of Lenovo with Intel Inside®.

[Explore Lenovo OEM Solutions](#)

