



## INTELENSE INNOVATION HIGHLIGHT



Intelense

### COMPANY OVERVIEW

Intelense is an Ontario-based global Artificial Intelligence (AI) and Data Analytics company with a mission to create a safer world, starting with the public-safety sector. Intelense's AI program enables cameras to become intelligent and responsive without the need for additional investment in existing infrastructure. This removes the need for manual camera monitoring and replaces it with an efficient, automatic solution which can identify and report issues such as shoplifting, trespassing, and other security threats in real-time, so they can be dealt with right away.

**LOCATION:** TORONTO, ON

### TECHNOLOGY



**Data Centre and Cloud**



Intelense

Dinesh Prasanna, CEO  
[dinesh@intelense.com](mailto:dinesh@intelense.com)  
[intelense.com](http://intelense.com)

Rick Penwarden, Sr. Manager, Marketing  
[rick.penwarden@cengn.ca](mailto:rick.penwarden@cengn.ca)  
[cengn.ca/projects](http://cengn.ca/projects)

### TODAY'S OUTDATED MONITORING PRACTICES

Presently, video feeds for police dispatches are monitored manually. Identifying dangerous instances that may need emergency services, such as a robbery, relies solely upon the capabilities of the individual monitoring the feeds. Fatigue and other factors increase the chance of human error, causing missed incidents or delayed reports. On top of this, the video streams being monitored pose privacy concerns with data storage, as personal identities can be determined from stored footage.

### ENHANCING VIDEO SURVEILLANCE DETECTION

In response to the market's outdated monitoring practices, Intelense's device-agnostic AI platform, KEN, instantly enables cameras to be intelligent. KEN can automatically detect a potential instance of concern based on video feeds from existing surveillance cameras by detecting disturbances in the optical flow of the images. KEN learns user patterns and gets smarter over time, continuously improving daily summaries and incident alerts. Additionally, Intelense does not store or collect any identifiable personal traits as a strict policy and is easily integrated with next-gen 911 services.

### IMPROVING ACCURACY AND VALIDATING SCALABILITY

Intelense utilized CENG's testbed and Nvidia Tesla T4 GPU cores to sufficiently train their AI platform and increase its detection accuracy to 87%. CENG's GPU servers made it possible to scale the computer vision models to 700 per server. With this, Intelense was able to validate their platform can support 10,000 simultaneous camera feeds. This project reduced their deployment cost by 30% and will allow Intelense to confidently implement their solution as a smart city platform.

**"Based on the results of our scalability testing, Intelense was able to lower product costing to customers while keeping margins the same. This has led to a direct increase in customers."**

Dinesh Prasanna

CEO

Intelense

