

# Theme park company uses computer vision to prevent incidents and improve customer experience

## Challenge:

- Every hospitality company wants to keep its guests safe. This company decided to increase guest safety by introducing automation.
- Relying solely on human monitoring was challenging due to the size of the properties and the significant number of guests.
- The company introduced automation to its safety-inspection process to both capture unsafe incidents and respond in a timelier manner.
- This used machine learning and artificial intelligence linked to computer vision and powered by existing security cameras.

**Industry:** Hospitality

Location: North America

Technology and services:

Data, artificial intelligence, and

machine learning



#### Solution:

- Working with long-time partner Capgemini, the company developed a program to ensure the data collected from its security cameras was of a high standard. It needed to be consolidated and cleansed and noise had to be removed before it could be used for meaningful analytics.
- There was also a need to train the computer-vision model.
   The solution was synthetic data. Since safety incidents were rare, Capgemini trained the AI- and ML-enabled models to identify problems by creating a virtual environment with a gaming engine that replicated the physical properties.
- Using an on-premises infrastructure, Capgemini developed and deployed a sub-second video-stream processing pipeline integrated with the camera networks and alerting system, so safety incidents are identified in real-time.
- The computer-vision solution was integrated with the security desk to ensure operations are connected to the system.

### Result:

- The automation system successfully identifies safety events with 98 percent accuracy.
- The end-to-end latency means the system can identify issues within seconds for faster response times.
- Automated safety inspections drive efficiencies and cost savings.
- The projected cost savings will exceed \$100 million a year across the company's properties.

### For more details, please contact:

#### Ali Arian

IT Transformation Manager Insights and Data Global Practice ali.arian@capgemini.com

## About Capgemini

