

# CATTLE SCAN INNOVATION HIGHLIGHT



### **COMPANY OVERVIEW**

Cattle Scan is an agtech start-up. Built in Ontario, Cattle Scan has developed an affordable livestock monitoring system to track the health and behaviour parameters of individual cows and of an entire herd.

### LOCATION: TORONTO, ON

# TECHNOLOGY



# **Internet of Things**



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## MILLIONS LOST DUE TO POOR CATTLE HEALTH

Animal health is a major driver of productivity in the dairy sector, with losses in the millions of dollars due to healthrelated events and mortality. Currently, most farmers track individual cows using mainly activity and visual inspection. However, by the time visual symptoms and milk drop are present, the disease has usually progressed to a point where a higher level of treatment and medical intervention is required.

#### MONITORING CATTLE HEALTH WITH IOT DEVICES

Cattle Scan has developed an affordable livestock monitoring system that tracks critical health parameters of individual cows or an entire herd. The Cattle Scan solution uses small IoT sensors that wirelessly transmit cattle health data to a hub for connection to its cloud database. Cattle Scan uses the data to monitor the herd around the clock, informing the farmer of any irregularities as they occur, and freeing up valuable time for the farmer to manage the rest of the farm.

### **TESTING THE DATA PIPELINE**

During their project, Cattle Scan used the CENGN Testbed to validate the performance of their data pipeline from their network server. After conducting three rounds of test cases, their data pipeline handled 10,000 sensors. Moving forward, Cattle Scan gained relevant information on how the different components of their solution performed under scale and gained insight on the resource requirements to scale up to 150,000 sensors. "The CENGN solutions engineering staff provided outstanding support during the project. We were able to gather key system resource requirements to move forward to 150,000 sensors."

> **Denis Tokarev** CEO, Cattle Scan