# AOMS TECHNOLOGIES INNOVATION HIGHLIGHT

aoms.

## COMPANY OVERVIEW

Co-founded by 3 post-grad students at the University of Waterloo, AOMS Technologies provides various industries with IoT based solutions to monitor industrial assets and processes in real-time. Since 2015, AOMS has grown from 3 founders working out of Communitech to 27 full-time employees now located in Toronto, Ontario.

**LOCATION:** TORONTO, ON

## TECHNOLOGY


**Internet of Things**

## NO REAL TIME MONITORING FOR INDUSTRIAL ASSETS AND PROCESSES

Within industries such as construction, and oil/gas, there's a lack of real time monitoring tools available. Usually, work is done manually to check different metrics, like air quality, gas levels, concrete temperature, and asset tracking, which makes managing equipment and maintenance dates a hectic task. Without these real time monitoring tools available, ensuring worker health and safety is difficult and time consuming. AOMS Technologies provides users with industry specific end-to-end IoT solutions to collect data and analyze it to ensure real-time monitoring.

## AOMS' IOT BASED SOLUTIONS

Designed to provide real-time insights into various attributes in specific industries, AOMS created 3 different IoT based platforms to assist 3 different industries; LumiCon to ensure safety, quality, and efficiency on construction sites, LumiAPM to monitor industrial assets, and LumiRem to monitor subsurface temperature distributions in Oil & Gas facilities. Each of these platforms collects data from AOMS IoT sensors installed on site to provide users with a variety of cloud-based analytics required to effectively monitor their work environments.

## INCREASING SAMPLING RATES FROM 100Hz TO 1kHz

Looking to demonstrate that their cloud platform can support enough sensors to collect data on a typical die-cast production operation, AOMS came to CENGN. AOMS needed to reach data acquisition rates up to 1kHz to support die-casting operations. AOMS tested both a group of 30 sensors and 450 sensors to establish if their cloud platform could receive and analyze large-volume raw data effectively. After testing, AOMS achieved their goal of 1kHz with 30 sensors and achieved a load of 150 sensors at 1kHz with a 99.97% success rate. With their software stack production ready, AOMS is ready to support more and larger customers with their IoT solution.

**"CENGN's infrastructure provided valuable information on the performance limits of our software to transition our software to production."**

**Charles Fung,**

**Dir. Software Engineering**

**AOMS**


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