

MEDIA RELEASE

Wednesday 10th July 2019

Research project to target real-time sensors for infrastructure

Mthing, an innovative Internet of Things (IoT) project bringing together key industry and research partners, will research new satellite navigation monitoring sensors for infrastructure design and construction projects.

[Monitum](#), a Brisbane company of professional surveyors and geologists, has teamed up with researchers at [QUT](#) and the [Innovative Manufacturing Cooperative Research Centre \(IMCRC\)](#), in a project that aims to lower construction costs, create safer building practices and boost jobs in Australian manufacturing and construction.

The 18-month project will use advanced Global Navigation Satellite Systems (GNSS) signal processing techniques to record near-real time measurements of infrastructure projects that will be both more accurate and faster than using traditional manual measuring techniques.

The project aims to develop GNSS IoT sensors that will provide cost-efficient constant and high-precision monitoring that will connect to cloud services and provide instant alerts.

Currently the cost of purchasing and maintaining precise positioning sensors restricts their viability for mass monitoring applications. The Mthing project aims to produce sensors with a lower cost that will give them greater market potential for broader uses.

Monitum Principle and Director Lee Hellen said the research was a step in the right direction for jobs in a knowledge economy and advanced manufacturing in Australia.

Mr Hellen said the research, by prevented unforeseen downtime, could save the construction industry millions of dollars in lost productivity.

“Australia is seen as a global leader in measurement, engineering and construction knowledge,” Mr Hellen said.

“However Australian construction projects have become increasingly more expensive to build and maintain and are growingly reliant on imported technology products and manufacturing to deliver agile and lean processes.

“Our research collaboration is invested in manufacturing a globally competitive monitoring IOT sensor system that will provide new opportunities for building and maintaining infrastructure in Australia.”

Mr Hellen said the research could save the construction industry millions in lost productivity enabling, through time saved on more effective designs and monitoring of construction and building maintenance.

QUT research leader Professor Yanming Feng said connected GNSS with embedded intelligence and data analytics offered effective solutions to many industry challenges.

“QUT is pioneering the research in this direction and we are pleased to explore research in this field with the Mthing collaboration project,” Professor Feng said.

IMCRC CEO and Managing Director David Chuter said effective monitoring of civil structures required breaking new ground in technology, processes and services.

“The Internet of Things has opened up new possibilities for Australia’s manufacturing and construction industry - collecting, analysing and incorporating infrastructure information into practical applications and services that increase the efficiency, effectiveness and productivity of infrastructure design and construction projects”, Mr Chuter said.

“The Mthing project explores these possibilities and creates, with its next generation of cost-effective GNSS IoT solution, new avenues for other Australian construction and manufacturing businesses to investigate and adopt IoT into their operations to future-proof and ensure sustained commercial outcomes for their business – both locally and through export.”

###

Media contacts

Jana Kuthe, IMCRC, +61 416 735 666, jana.kuthe@imcrc.org

Rod Chester, QUT Media, +61 7 3138 9449, rod.chester@qut.edu.au

Lee Hellen, Monitum, +61 7 3554 0291, lee.hellen@monitum.com.au