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## Researchers at Deakin's Mediated Intelligence in Design investigate AI applications for smart floor

Researchers are set to explore how a combination of artificial intelligence and the sensing ability of a revolutionary product made in Geelong can create smart buildings that have built-in response capability.

Dave Cairns, Geelong Advertiser

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Chris Gilby and Jaakko Kaidesoja, from Imagine Intelligent Materials.



## Materials.

It has already developed a prototype of a smart floor that can sense falls and generate a text message to raise an alert.

Working with Imagine, researchers at Deakin's Mediated Intelligence in Design (MInD) lab are about to investigate how smart surfaces might affect the built environment.

Lab director Tuba Kocaturk said being able to process data in real-time had the potential to improve the efficiency and safety of buildings.

But Professor Kocaturk said most sensors in buildings worked on the principle of sense and respond.

"When you sense something, it is already too late to take an action," she said.



Tuba Kocaturk from Deakin University

She said there was great value in being able to predict an event by using artificial intelligence alongside the sensing and signal processing capacity offered by Imagine.

The project is working with the Shenzhen Institute of Advanced Technology, part of the Chinese Academy of Sciences.

MInD lab research fellow Rui Wang said her ageing parents were among a growing population of older



Smart Machines forum presented by the Geelong Manufacturing Council on Thursday, Imagine executive chairman Chris Gilbey said other potential applications were being discussed with global companies.

The combination of low-cost graphene coatings over large

surfaces and edge-based signal processing meant valuable information could be harvested on changes to pressure, moisture, stress and temperature.

"We are looking for partners in flooring, mining, health care, trucking, building, coatings, automotive and apparel," Mr Gilbey said.

He said he would welcome interest from companies in the Geelong region.