## Linamar 'Factory of the Future' Partnership Event

Updated Information Presenters updated to include:

- Brandon Sheldrake, Sr. Program Manager (Linamar Manufacturing and Monitoring System)
- Jesse Webster, Engineering Supervisor and Linamar's lead for Factory of the Future

Following the presention, the following will be available to answer questions:

- Brandon Sheldrake
- Jesse Webster
- Luis Bravo, IoT Application Developer
- Markus Gadner, Manufacturing Engineer

Date Wednesday April 13, 2022 1:00pm to 2:30pm Location Microsoft Teams - calendar invite to follow registration

## Description

On Wednesday April 13th, 2022, the Research Innovation Office and College of Engineering and Physical Sciences, will be hosting a partnership event featuring a presentation from Linamar's iHub innovation facility.

Linamar will be providing an overview of their Factory of the Future project and presenting areas of interest where the company would like to collaborate with University of Guelph faculty, and support applications to Mitacs, NSERC or similar programs, to develop innovative approaches and solutions to technical challenges.

The Factory of the Future project aims to advance factory automation using advanced data collection and analytics to improve efficiency and reduce cost in Linamar's existing production facilities.

General goals and objectives for the project include:

Published on Research Alerts (https://www-research.uoguelph.ca/research/alerts)

- Connecting diverse equipment
- Collecting and analyzing complex data
- Applying insights from analytics to improve process efficiency

Some portions of the project are straightforward in their implementation. Others have greater challenges:

- Random bin picking: predict remaining stock in the bin, trigger notification
- Machine learning: extract value and identify outliers from what is predicted to be noisy data
- Machine learning: predict inflection point in tool wear to allow better planning of insert changes (advance notice for technician to arrive, coordinate multiple changes in the same instance to reduce interruptions)

The desired output for the project includes the immediate application to a subject product line achieving near-zero operator interaction. Beyond this initial goal, Linamar is looking to develop cost effective approaches that can be applied to other similar equipment across the company.

In this virtual partnership session, Brandon Sheldrake, Sr. Program Manager (Linamar Manufacturing and Monitoring System) and Jesse Webster, Engineering Supervisor and Linamar's lead for Factory of the Future, will provide an overview of the project and areas in which company is looking to develop partnerships. Following the presentation, Brandon, Jesse, and their colleagues Luis Bravo (IoT Application Developer) and Markus Gadner (Manufacturing Engineer) will be available to answer any questions that you may have.

Researchers interested in partnering with Linamar will be encouraged to work with Research Innovation Office to develop short project proposals for consideration.

## To RSVP for this event, please contact Gregor Lawson, Industry Liaison Manager

(lawsong@uoguelph.ca) Alert Classifications**Category:** Workshops and Events

## **Disciplines:**

Information and Communications Technology Physical Sciences and Engineering