

ADMISSION

The webinar will be hosted on the Microsoft Teams platform.

The registration fee is 100.00 Euro + VAT*, where applicable (bank charges are not included).

CISM will financially support participants in the Advanced Webinar by providing registration fee exemption to PhD and researchers.

Online registration is available at <https://www.cism.it/en/activities/courses/E2013>

A message of confirmation will be sent to accepted participants.

The application deadline is November 26, 2020.

For further information, please visit CISM website.

* Italian VAT is 22%.

For further information please contact:

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ACADEMIC YEAR
2020

Centre International des Sciences Mécaniques
International Centre for Mechanical Sciences



ARTIFICIAL INTELLIGENCE FOR SMART MANUFACTURING

Advanced Webinar

CISM-UniUD Joint course
coordinated by

Marco Sortino
University of Udine
Italy



November 30 - December 1, 2020

ARTIFICIAL INTELLIGENCE FOR SMART MANUFACTURING

The large amount of data that are nowadays provided by sensor and machines in the manufacturing plants gives a unique chance to increase the competitiveness of companies. Advanced functions such as predictive maintenance, advanced quality and process adaptation and optimization are possible thank to mature technologies and methodologies such as artificial intelligence and machine learning, computer vision, collaborative robotics, additive manufacturing and many others.

This workshop aims at presenting up-to-date information on the latest developments – research and industrial experience – in the field of artificial intelligence techniques for manufacturing plants, thus providing an international forum for a beneficial exchange of ideas, and promoting a favorable cooperation between research and industry.

ORGANIZED IN COLLABORATION WITH

Friuli Innovazione, Udine, Italy

COMET, Pordenone, Italy

Joanneum Research, Graz, Austria

PROGRAMME

Monday, November 30

- | | |
|---------------|--|
| 08.15 - 08.45 | Registration |
| 08.45 - 09.00 | Welcome address
Paolo Gardonio
Marco Sortino |
| 09.00 - 10.30 | Machine Learning: state of the art and future perspectives
Christian Micheloni |
| 10.30 - 11.00 | <i>Break</i> |
| 11.00 - 12.30 | Predictive Maintenance
Marco Sortino |
| 12.30 - 14.00 | <i>Lunch Break</i> |
| 14.00 - 15.30 | A perspective of the application of Smart Manufacturing
Gianni Campatelli |
| 15.30 - 16.00 | <i>Break</i> |
| 16.00 - 17.30 | Smart Monitoring of Machining Processes
Roberto Teti |

Tuesday, December 1

- | | |
|---------------|---|
| 09.00 - 10.30 | Intelligent Machine Tools and Process Optimization
Giovanni Totis |
| 10.30 - 11.00 | <i>Break</i> |
| 11.00 - 12.30 | Advances in Industrial Applications of Computer Vision
Vojislav Petrovic
Matthias R  ther |
| 12.30 - 14.00 | <i>Lunch Break</i> |
| 14.00 - 14.45 | Artificial Intelligence for Siderurgical Plants
Marco Ometto |
| 14.45 - 15.30 | Computer Vision applications
Daniele Fornasier |
| 15.30 - 16.00 | <i>Break</i> |
| 16.00 - 16.45 | Smart Manufacturing
Giuseppe Sarag   |
| 16.45 - 17.30 | Closing remarks
Marco Sortino |

LECTURERS

Marco Sortino (3 lectures)
Course Organizer, University of Udine, Italy

Christian Micheloni (2 lectures)
University of Udine, Italy

Gianni Campatelli (2 lectures)
University of Florence, Italy

Roberto Teti (2 lectures)
University of Naples, Italy

Giovanni Totis (2 lectures)
University of Udine, Italy

Vojislav Petrovic and **Matthias R  ther** (2 lectures)
Joanneum Research, Austria

Marco Ometto (1 lecture)
Danieli, Italy

Daniele Fornasier (1 lecture)
BeanTech, Italy

Giuseppe Sarag   (1 lecture)
Wartsila Corporation, Finland