**Satakunta University of Applied Sciences**

Training Brochure

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**Robotics**

Title:

Advanced Robotics in Smart Manufacturing

Description:

Industrial manufacturing has been relying on robots for the past decades. Smart manufacturing processes are developing by using more and more robots as technology continues to enter the mainstream. These new robots will not be used only in the most monotonous or dangerous parts of the manufacturing but they will work more flexibly, learning new methods, in close collaboration with humans and also by making even critical desicions by themselves.

In this training we will take a look at state-of-the-art robotics in smart manufacturing, familiarize with collaborative robots and discuss the future of smart manufacturing from the advanced robots’ point of view. The main goal of this training is to open your mind to think the future again. Can we manufacture all the products with robots? What are the main challenges in balancing between human and automation?

This training will introduce a holistic view to smart industrial robotics and their safety, the role of collaborative and QA-oriented robots in smart manufacturing and examples of robots driving manufacturing growth. If you plan to work with robots of tomorrow, it’s time to tune up the thinking! Enroll now!

Training dates:

25.1.2021 – 29.1.2021

Duration:

Online webinars/workshops ([link to Teams](https://teams.microsoft.com/l/meetup-join/19%3ameeting_OTVkM2NhZGQtNWJkOC00NjFiLWJjMTctMTAyMTkxOTQ2YzEx%40thread.v2/0?context=%7b%22Tid%22%3a%22505baed7-dce1-4559-a839-157d16fffe6f%22%2c%22Oid%22%3a%227d1f0e89-7806-4c69-a7b8-55244d1ccc86%22%7d)) on:

1. Monday 25.1. at 2 pm – 4 pm (CET)
2. Wednesday 27.1. at 2 pm – 4 pm (CET)
3. Friday 29.1. at 2 pm – 4 pm (CET)

Inquiry-Based Learning assessments on:

1. Tuesday 26.1.
2. Thursday 28.1.

Location:

Teams + Web

Price:

Free

Software used:

Teams + workshop platform

Learning objectives:

Robots will have more and more wide-ranging tasks in smart manufacturing of tomorrow. Ongoing industrial revolution is changing the way we think and experience the robots around us. The earlier we are opening our thinking to the new features of robots, the earlier we are ready to make plans for robotics comprehensive integration in all parts of smart manufacturing.

Learning outcomes of this training

1. Absorb a holistic view to smart industrial robotics
2. Get to know the principal features that enable the advanced robots

Structure of the training

1. Webinar 1
2. Assessment 1
3. Webinar 2
4. Assessment 2
5. Workshop with an introduction

Who should enroll:

Vocational teachers and educators who’d like to learn about the more wide-ranging tasks of advanced robots and their key enabling technologies in smart manufacturing.

Why choose this training:

The training will give ideas, how to bring different knowledge and examples of advanced robotics in smart manufacturing to the automation education. The new technologies will create more jobs than destroy them. Those who are ready to take advantage of the robots, will win this race!

Skills and knowledge gained:

State of the art robotics in smart manufacturing, collaborative robots, QA-oriented robots, examples of robots driving manufacturing growth

Lecturer:

Mirka Leino, PhD (Tech), Head of Automation Research Team, Principal lecturer, Satakunta University of Applied Sciences

LinkedIn: <https://www.linkedin.com/in/mirka-leino-2a24801b/>

Certificate:

Participants in the Advanced Robotics in Smart Manufacturing training will receive a Talentjourney certificate with the trainer's signature.

Reflect, learn and internalize:

Through examples of advanced robotics participants will develop their capacity to study and design advanced robotics in development of smart manufacturing.

Learn from the best:

Mirka Leino is technology and robotics enthusiastic with a PhD in Techonology. She is coordinating various automation technology projects and her current personal research work includes intelligent machine vision and advanced robotics in the development of smart manufacturing, as well as international technology transfer and research institute-enterprise collaboration. She has authored dozens of publications on different levels in the field of machine vision, intelligent robotics, technology transfer and industry collaboration.

Networking:

Participants will be encouraged to interact and collaborate with different stakeholders, and when possible, in cross-disciplinary teams.