Big Data and Cloud Computing for Industrial Applications

Manufacturing industry collects large volumes of data, generated from a wide range of sources in different formats and quality levels. But what is data without insight? This course will help you master the fundamental concepts of big data, cloud computing and smart decision making for industrial analytics.

The course provides knowledge and insights in handling and processing data, using machine learning and data analytics in the cloud environment. The course also contains cloud computing-, data analytics- and machine learning principles as well as cloud services.

YOU WILL LEARN TO

- Describe the advantages and disadvantages of using cloud computing and the most important driving forces and obstacles for using cloud computing in the manufacturing sector.

- Describe and understand the most important prerequisites and challenges for using big data and machine learning within the manufacturing sector.

- Demonstrate the ability to practically and theoretically translate knowledge within cloud services for applications in production, logistics and product development.

- Describe the high-level design decisions and machine learning pipeline for building production machine learning systems, and concepts of scalable machine learning models.

TEACHER

Anas Fattouh | anas.fattouh@mdh.se
Anas Fattouh is a researcher in automatic control with a focus on time-delay systems. He has more than twenty years of academic experience conducting research and teaching in control theory and related topics. His research focuses on developing new frameworks for modeling, controlling, and optimizing dynamic systems.

DETAILS

STUDY PERIOD: Nov 8, 2021 – Jan 16, 2022
STUDY PACE: 33% (approx. 13 hours/week)
CREDITS: 5
For more information about the course and how to apply, visit
mdh.se/en/malardalen-university/education/further-training/smart-production

ENTRY REQUIREMENTS

40 credits in Engineering/Technology and at least two years' experience in full-time employment in a relevant area within industry. Since the course is given in English, you need knowledge of the English language. If you do not have the formal qualifications required, you can have your eligibility evaluated based on knowledge acquired in other ways, such as work experience, other studies etc.

PREMIUM

This course is part of the Premium project, which is co-funded by the Knowledge Foundation. Learn more about Premium at mdh.se/premium

MÄLARDALEN UNIVERSITY

Mälardalen University (MDH) is one of Sweden's largest HEIs, with 16 000 students reading courses and programmes in Business, Health, Engineering and Education. At MDH, research is conducted within all areas of education. MDH's close cooperation with the private and public sectors enables us to help people feel better and the earth to last longer.

GET AHEAD.
STAY AHEAD.

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