

Advanced Data Analytics for IIOT and Smart Manufacturing

July 18-21, 2022

Monday	Tuesday	Wednesday	Thursday
Welcome	Manufacturing Systems Modeling and Optimization	ML for Design	Conditions and Anomalies
Course Landscape. Cases for Context: Food, Fiber, Packaging, Complex Assemblies 9:00-10:15 AM	(Digital Twinning / Modeling) 9:00-10:15 AM	9:00-10:15 AM	9:00-10:15 AM
Break 10:15-10:30 AM	Break 10:15-10:30 AM	Break 10:15-10:30 AM	Break 10:15-10:30 AM
Learned Models of Processes 10:30 AM-12:00 PM	Learned Models of Manufacturing Systems 10:30 AM-12:00 PM	Inverse Imaging Problems ML and Optimization 10:30 AM-12:00 PM	Condition Monitoring Trees and Regressors 10:30 AM-12:00 PM
Lunch 12:00-1:00 PM	Lunch 12:00-1:00 PM	Lunch 12:00-1:00 PM	Lunch 12:00-1:00 PM
Learned Digital Twins of Process used for Design and Simulation and Control / Optimization 1:00-2:30 PM	Learned Digital Twins of Systems used for Design and Simulation and Control / Optimization 1:00-2:30 PM	Security, Systems Data Security / Encryption and Learning 1:00-2:30 PM	Training for Anomaly Detection Video based condition monitoring 1:00-2:30 PM
Break 2:30-2:45 PM	Break 2:30-2:45 PM	Break 2:30-2:45 PM	Break 2:30-2:45 PM
Hands on Exercises - project options, teaming, and start Continuous Processing 2:45-4:15 PM	Examples & Group Work Systems / Line 2:45-4:15 PM	Examples & Group Work Desisng and Inverse Problems 2:45-4:15 PM	Group Work - Presentations Complex Assembly and Test 2:45-4:15 PM
Break 4:15-4:30 PM	Break 4:15-4:30 PM	Break 4:15-4:30 PM	Close
Review and Recap of the Day 4:30-5:00 PM	Review and Recap of the Day 4:30-5:00 PM	Review and Recap of the Day 4:30-5:00 PM	