1. Record Nr. UNINA9910253965803321

Titolo	Machine Learning for Cyber Physical Systems [[electronic resource]] : Selected papers from the International Conference ML4CPS 2015 / / edited by Oliver Niggemann, Jürgen Beyerer
Pubbl/distr/stampa	Berlin, Heidelberg : , : Springer Berlin Heidelberg : , : Imprint : Springer Vieweg, , 2016
ISBN	3-662-48838-8
Edizione	[1st ed. 2016.]
Descrizione fisica	1 online resource (124 p.)
Collana	Technologien für die intelligente Automation, Technologies for Intelligent Automation, , 2522-8579
Disciplina	006.31
Soggetti	Computational intelligence Data mining Knowledge management Computational Intelligence Data Mining and Knowledge Discovery Knowledge Management
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Description based upon print version of record.
Nota di contenuto	Development of a Cyber-Physical System based on selective dynamic Gaussian naive Bayes model for a self-predict laser surface heat treatment process control -- Evidence Grid Based Information Fusion for Semantic Classifiers in Dynamic Sensor Networks -- Forecasting Cellular Connectivity for Cyber- Physical Systems: A Machine Learning Approach -- Towards Optimized Machine Operations by Cloud Integrated Condition Estimation -- Prognostics Health Management System based on Hybrid Model to Predict Failures of a Planetary Gear Transmission -- Evaluation of Model-Based Condition Monitoring Systems in Industrial Application Cases -- Towards a novel learning assistant for networked automation systems -- Effcient Image Processing System for an Industrial Machine Learning Task -- Efficient engineering in special purpose machinery through automated control code synthesis based on a functional categorisation -- Geo-Distributed Analytics for the Internet of Things -- Imple mentation and Comparison of Cluster-Based PSO Extensions in Hybrid Settings with

	Efficient Approximation -- Machine-specifc Approach for Automatic Classifcation of Cutting Process Efficiency -- Meta-analysis of Maintenance Knowledge Assets Towards Predictive Cost Controlling of Cyber Physical Production Systems -- Towards Autonomously Navigating and Cooperating Vehicles in Cyber-Physical Production Systems.
Sommario/riassunto	The work presents new approaches to Machine Learning for Cyber Physical Systems, experiences and visions. It contains some selected papers from the international Conference ML4CPS – Machine Learning for Cyber Physical Systems, which was held in Lemgo, October 1-2, 2015. Cyber Physical Systems are characterized by their ability to adapt and to learn: They analyze their environment and, based on observations, they learn patterns, correlations and predictive models. Typical applications are condition monitoring, predictive maintenance, image processing and diagnosis. Machine Learning is the key technology for these developments.