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Disciplina	670.42028563
Soggetti	Computational intelligence Artificial intelligence Manufactures Computational Intelligence Artificial Intelligence Machines, Tools, Processes
Lingua di pubblicazione	Inglese
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Livello bibliografico	Monografia
Nota di contenuto	Experiences from 10 years LEAD Factory and the roadmap for the next decade -- On the quick and dirty Learning Factory within the industry A dual case study -- Designing of a AM learning factory using interactive videos as a didactic approach -- An IoT learning factory demonstrator of remote diagnostics using low-cost didactic devices -- A project based learning approach for the development of learning factory in the engineering curriculum -- digiTeachVR Digitally enhanced Teaching Platform for improving data science skills and virtual reality competences in cross disciplinary engineering education -- Empowering STEM Students with Digital Skills A Training Approach at UCN Industrial Playground -- Balancing the Three legged Stool of Learning Factories -- Learning factory concept tailored for engineering programmes for underserved communities -- A cyber-physical toolbox for teaching digital construction technical configuration learning tactics and hands on testing and evaluation in dedicated courses -- Learning Factory for Integrating Engineering Technology and Business Management Education -- Biologicalisation in Learning Factories

learning concept and lab demonstrator for biofluids for metal processing -- Progress and Reflection of Learning Factory -- Development of experiential learning framework for autonomous vehicle education -- Development and validation of a training framework towards the integration of Smart Microgrids into manufacturing a case from the lifts industry.

#### Sommario/riassunto

This book presents peer-reviewed papers from 14th International Conference on Learning Factories (CLF 2024) that took place from April 17–19, 2024, at the University of Twente, the Netherlands. CLF 2024 continued the successful CLF conference series targeting the latest research and development in the field of learning factories. The book is organized into two volumes and covers state-of-the-art research insights towards Learning Factories of the Future including learning factory design, Industry 5.0, digital twinning and VR/AR, 5G/6G in learning factories, AI for manufacturing systems, human-centred work design, human-robot collaboration, sustainability in learning factories, as well as cross-learning factory product/production systems. The book seamlessly integrates theory with real-world practice, empowering learners such as students, qualified engineers, and workers to keep pace with rapidly evolving technologies and methodologies, through enhancing learning factories. It also helps society and industry effectively manage future transitions with addressing current topics around digitalization, sustainability, and lifelong learning in industry.