CONFERENCE PAPER AND BOOK CHAPTER

Title : A Gamification Approach to Preparing for the Industry 5.0 Transition: Technologies, Applications, Job Roles

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Abstract :
Industry 4.0 has a tremendous technology-push approach to transforming the manufacturing environment into an interconnected and highly automated Cyber Physical System (CPS). In this context, Industry 5.0 emphasizes the human dimension, sustainability, and resilience to make industry reconsider the role of manufacturing for society as a core creator of employment and prosperity in a highly complex and uncertain world. However, the orientation in human-machine collaboration-oriented applications and job profiles in modern manufacturing environments may be difficult given the lack of visibility on how modern technologies are about to transform existing manufacturing job roles, and create new ones. This article proposes a serious game that provides support in tackling this challenge. Tested with a logistics team of a medium-sized industrial company to foster human-machine collaboration and to rethink their current shopfloor processes, this serious game has shown promising results in enhancing participants' awareness and motivation regarding work design principles in a private industry context. The game serves as an engaging tool to initiate reflection and dialogue about potential changes.