



PRO-VE 2021

Smart and Sustainable Collaborative Networks 4.0

22nd IFIP Working Conference on Virtual Enterprises

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PRO-VE 2021 Special Session

Collaborative learning networks with industry and academia

Currently, understanding the scope and potential of digital technologies in the context of their application and use in specific businesses and industries is not at all an effortless task. Therefore, and considering the rapid technology evolution, manufacturing personnel and leadership's skills and competencies must evolve more frequently. Consequently, it is necessary to promote the upskilling and reskilling of their workforce through hands-on experience on industry 4.0 technologies. Thus, new infrastructures need to be developed for technology experience and demonstration based on the living labs, innovation labs, and fab labs concepts. The collaboration between the different actors involved, academia, applied research centres, technological centres and industry, appears as the effective formula in a dynamic teaching-learning process, evolutive and fundamentally adapted to different contexts of transforming industries. It results in a natural opportunity to explore collaborative networks, involving different actors and covering in a vertical way the whole learning chain, from fundamentals and theoretical concepts to experimentation in laboratory environment and experimentation in real environment (in learning factories and in industrial lines and pilots). In this special session, we aim to highlight the critical role of collaborative networks to promote a rich learning environment between industry and academia. Moreover, must be explored the types and nature of collaborative learning that can be provided to companies to address the digitization challenges in order i) to reduce the mismatch between the qualification of the available workforce and the changes in industrial demands, ii) to increase the availability of skilled and qualified workforces and engineers, and iii) to improve the awareness of the importance of effective technical education of all hierarchical levels. This special session welcomes studies (empirical and theoretical) that advance research on educational frameworks/schemes, supporting tools, and collaborative practices between academia and industry to facilitate collaborative learning. Real application and demonstration cases are also welcome, describing the methodology used to define, analyse and evaluate the educational objectives and success.

Topics/ Keywords

- Innovative learning schemes/framework among academia, applied research centres, technological centres and industry
- Collaborative models among academia, applied research centres, technological centres and industry
- Upskilling and Reskilling experiences and best practices in industry 4.0
- Business models for living labs, innovation labs, and fab labs
- Roadmaps for Upskilling and Reskilling of manufacturing personnel
- Leadership's skills and competencies for digital transformation

Session Organizers

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Submission procedure

Special sessions are included in the main Conference and follow the same reviewing process.
Short abstracts submission (150 words): March, 15th, 2021
Full papers submission: April, 16th, 2021
Acceptance Notice: May, 31st, 2021
Camera Ready Submission: June, 20st, 2021

Acceptance of papers is based on the **full paper** (up to **8** pages). Each paper will be evaluated by three members of the International Program Committee.

When submitting on the web site, you have to indicate the name of the special session.

Submission procedure available on: www.pro-ve.org, with copy by email to the chairs of the special session.