

Lecture Notes in Networks and Systems

Volume 580

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Preface

Education is the cornerstone of any society, and it serves as one of the foundations for many of its social values and characteristics. State-of-the-art and novel methodologies and technologies allow researchers, designers, and domain experts to pursue Technology Enhanced Learning (TEL) solutions targeting not only cognitive processes but also motivational, personality, or emotional factors. Nowadays, we can identify two main legs, providing necessary and complementary strengths to a TEL-oriented design process: Appropriate technologies should be applied, and appropriate methods should guide such application. Technologies in TEL can deliver smart, personalized, tailored, and motivating learning solutions. Methods come from different fields, such as psychology, medicine, computer science, and from diverse communities, where collaboration and co-working are used, such as maker communities and participatory design communities. In addition, learning analytics can help manage big data to enhance learning opportunities for learners and educators alike, for instance, by supporting self-regulated learning or adaptation of the learning material.

As to these topics, the annual appointment of MIS4TEL established itself as a consolidated fertile forum where scholars and professionals from the international community, with a broad range of expertise in the TEL field, share results and compare experiences. The calls for papers of the 12th edition of the conference welcomed novel research in TEL and expanded on the topics of the previous editions: It solicited work from new research fields, ranging from artificial intelligence and agent-based systems to robotics, virtual reality, Internet of things, and wearable solutions, among others, concerning methods and technological opportunities, and how they serve to create novel approaches to TEL, innovative TEL solutions, and valuable TEL experiences.

The result of the call for papers is that both the main tracks of mis4TEL 2022 and its three related workshops such as Artificial Intelligence for Education (Ai4Ed), Technology Enhanced Learning in Nursing Education (NURSING), and Reflections and Dialogues around Smart Technology (ResiSTo) contribute to novel research in TEL and expand on the topics of the previous editions. This volume presents the papers that were accepted for the main track of mis4TEL 2022.

All papers underwent a peer-review selection: Each paper was assessed by three different reviewers, from an international panel composed of about 65 members from 21 countries. From a total of 33 articles, the program of mis4TEL 2022 counts 23 contributions, 12 full papers, and 11 short papers from diverse countries.

We would like to thank all the contributing authors, the members of the Program Committee, the reviewers, the sponsors, and the Organizing Committee for their hard and highly valuable work. Thanks for your help—MIS4TEL 2022 would not exist without your contribution.

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