

TEEM 2018 Preface

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Dear TEEM Community.

We are celebrating the sixth edition of this International Conference on Technological Ecosystem for Enhancing Multiculturality – TEEM, again in Salamanca (Spain), the TEEM home, to which it returns every two years. However, this edition is extraordinary for us because we are celebrating in 2018 the eight-hundred anniversary of the University of Salamanca, which was created in 1218 and is the oldest Spanish university and one of the oldest universities in Europe [1]. This way, TEEM has the honor to share the timeline with the most outstanding university events worldwide that have been held in Salamanca in 2018, such as the Universia Rectors Meeting (concluding with the Salamanca Declaration [2]) or the annual assembly of the Observatory Magna Charta Universitatum [3].

This sixth edition maintains the same principles of the previous ones [4-8]. This is an academic event to create and consolidate a research community around the Knowledge Society topic from an interdisciplinary perspective [9] and in which one the Ph.D. students [10-15] and novel researchers might have an excellent opportunity to do networking with other peers and to be in contact with consolidated researchers all around the world.

The first edition was very successful, with 83 full papers accepted and published in the ACM proceedings, which are yet indexed in WoS and Scopus, and several special issues published in international and well-ranked journals [16-26]. The Second TEEM edition, TEEM 2014, was held in Salamanca, Spain again. It meant the consolidation of the idea behind the conference. We grew in the number of submissions, 153, and we finally published 102 papers in the conference proceedings. Several special issues in international journals [27-31] were published too. The Third TEEM edition in 2015 was held in Porto, Portugal; it was the first edition that was organized out of the University of Salamanca, starting the series of one year out of the Salamanca scope one year in Salamanca. It was very significant for the maturity of the conference. 90 full papers were accepted to be published in the proceedings, and several special issues have been organized [32-35]. In 2016 TEEM returned to the University of Salamanca and it has received a fantastic respond of the researching community. We have received 235 submissions, of which 165 have been accepted as full papers that are available in these proceedings (30% rejection ratio). Following the association of TEEM with journals, these special issues were organized [36, 37]. The TEEM 2017 was held in the University of Cádiz (Spain), 109 submissions were received, of which 84 were accepted as full papers (23% rejection ratio) This special issue was organized [38]. Current TEEM 2018 edition is held in Salamanca (as even year), 243 submissions have been received, and 151 full papers have been accepted (38% reject ratio).

The TEEM 2018 is organized in 15 thematic tracks:

- Track 1. Computational thinking in pre-university education.
- Track 2. Engineering Education and Technological / Professional Learning.
- Track 3. Evaluation in education and guidance.
- Track 4. New publishing and scientific communication ways: Electronic edition, Information metrics and digital educational resources.
- Track 5. Learning Analytics: The good, the bad and the ugly.
- Track 6. Technological innovations in biomedical training and practice.
- Track 7. Advances on Sustainable Development in Higher Education.

- Track 8. Implementation of Qualitative and Mixed Methods Researches.
- Track 9. Teacher Education for ICT integration in classroom.
- Track 10. Smart Learning.
- Track 11. Educational innovation.
- Track 12. Uncertainty in Digital Humanities.
- Track 13. 9th International Workshop on Software Engineering for E-learning (ISELEAR'18).
- Track 14. Communication, Education and Social Media.
- Track 15. Doctoral Consortium.

The computational thinking, engineering education, education evaluation, electronic edition, learning analytics, education and medicine, educational innovations, digital humanities, ISELEAR, communication, and doctoral consortium topics are consolidated ones. On the other hand, sustainable development, qualitative and mixed methods, teacher education and artificial intelligence in education topics are new at the conference.

About the TEEM 2018 conference participants, more than 225 authors distributed by 32 countries are presented in the proceedings. Besides, the International Program Committee has been incremented up to 256 members distributed by 37 countries.

TEEM Conference is an umbrella event for other activities, projects meetings, and workshops apart of the parallel sessions to present the papers submitted to the conference, which allow connecting the academic event with the society in general [39, 40]. Thus, the idea and firsts results of the “Support to the Higher Education System in Morocco as part of a rapprochement with the European Higher Education Area” project are going to be presented [41]; a workshop linked to the Erasmus+ Jean Monet project EU-Bank to provide basic knowledge on key issues about European Union financial system will be carried out [42]; an activity with young people related to H2020 WYRED project (netWorked Youth Research for Empowerment in the Digital society) [43-46] will be developed using the WYRED platform [47, 48]; and the Report of the Spanish Computing Scientific Society on Computing Education in Pre-University Stages [49, 50] will be presented.

I would like to thank the members of the Steering Committee for their counsel, the International Scientific Committee for their accurate and timely reviewing. I would also like to thank the Track Chairs for their efforts in organizing the academic issues related to each track, and the Organizing Committee for their huge effort in all the associated tasks that an international conference involves. I would like to do a special mention for the Editors-in-Chief of the linked journals that have offered special issues or slots in their regular issues for those selected and extended papers of TEEM 2018 conference that will have another in-depth review following the guidelines of each journal. Here a specific grateful note for Informatics Journal (<https://www.mdpi.com/journal/informatics>) that sponsor the best paper award of the Computational Thinking track. Last, but not least, I would like to thank the participating organizations: University of Salamanca, Research Institute for Educational Sciences at the University of Salamanca, GRIAL Research Group [51-53], European Commission, The regional government of Junta de Castilla y León, and ACM for their support.

Next year, we will continue with Seventh Edition of TEEM Conference that will be held at the University of León, Spain next 16-18 October 2019.

Salamanca, Spain, 18th October, 2018

Francisco José García-Peñalvo (TEEM 2018 Conference Chair)

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