

Editorial

Maiga Chang , Rita Kuo , Ahmed Tlili , Jerry Chih-Yuan Sun , Jun Chen Hsieh 

The International Conference on Advanced Learning Technologies (ICALT) is an annual international conference organized by IEEE Computer Society and IEEE Technical Committee on Learning Technology (TCLT). After its kick-off as IWALT (International Workshop on Advanced Learning Technology) in New Zealand, 2000, ICALT has been held in many different countries to bring together people who are working on the next generation of e-learning systems and technology.

ICALT 2021 was held on July 12 to 15 as an online conference and first organized by the TCLT solely without local organizer. After rigorous review process with 19.3% full paper acceptance rate, there were 134 papers accepted. 403 Track Program Committee members from 44 different countries helped the review process. Besides 135 registered authors, there were 59 additional attendees joined the conference. The TCLT executive committee thanks all the participants for the success of ICALT 2021.

Although there was no nomination of Early Career Researcher in Learning Technologies for Winter 2021 selection this year earlier, the bulletin invited the 2019 award winner – Dr. Ig Ibert Bittencourt – to write a letter to the TCLT community. Dr. Bittencourt discussed his research field and how he got involved in it at an early age. Finally, he concluded by sharing his personal advice with those young researchers about the research journey. The nomination of the Early Career Researcher Award Winter and Fall selection are in March/April and November/December every year. We strongly encourage community members to nominate successful early career researchers for the award.

Besides the Early Career Research Award, the Women in Engineering (WiE) Panel was also another important event in ICALT since 2017. The Women in Engineering Panel in ICALT usually invites female scholars, students, or researchers in STEM areas as panelists discussing the issues regarding the challenges they have encountered in their career path. The Report from Women in Engineering Panel at IEEE ICALT 2021 written by the panel chair and panelists – Rita Kuo, Michelle Banawan, Jaelyn Domingo, Elvira Popescu, and Ramyaa Ramyaa – is published in this issue. The report summarized the issues brought out from the panelists, such as the impact of COVID-19 on careers of women in academia and the discrimination of females in STEM fields. The report also describes the solutions of solving the issues from the panelists, such as the involving activities student clubs for community support and applying the strategies learnt from the success female scholars. We hope this report can help the TCLT community understand the issues and concerns of women in the STEM area and deal with the crisis of low employment in female engineers together.

Besides the letter from the award winner and the report from the WiE panel, there are one article in Emerging Learning Technologies, one article in Collaboration Opportunities, and one article in Event Info & Call for Event Host published in this issue. The article entitled “Student engagement recognition from videos: A comparison between

deep learning neural network architectures” in the Emerging Learning Technologies section is written by Werlang and Jaques. The article presents three deep learning models (i.e., the transfer learning model, the three-dimensional convolutional model, and the engineered features model) for recognizing the learners’ emotion of engagement in learning status. The authors analyze the accuracy of the models to find the most accurate approach. Based on the emotion of learners, intelligent learning environments can provide feedback to change learners’ learning motivation and behaviors and help them achieve learning goals. The three models are trained with the DAiSEE dataset that includes 9068 videos. The results indicated that the three-dimensional convolutional model is the most accurate.

In the Collaboration Opportunities section, the article “What can we take from the pandemic to the future of Education?” written by Affounch and Salha discusses how COVID-19 pandemic affected the educational systems worldwide. The research team has already investigated teachers’ perspective, challenges, and best practices toward online learning during the pandemic in Palestine. The research team is looking for collaboration in comparative analysis between different countries in order to find the common and different factors related to culture and society. Activities and projects could be one future collaboration feature that focusing on the instructional design under emergency cases and presenting the outcomes in the conferences or workshops.

Last but not the least, Mitrovic and Rodrigo promote the 29th International Conference on Computers in Education (ICCE 2021) in the Event Info & Call for Event Host section. ICCE is an annual conference organized by the Asia-Pacific Society for Computers in Education (APSCE, <https://www.apsce.net/>) and provides researchers as well as educational practitioners interested in the design, development, use and evaluation of technologies an academic channel for in-depth discussion on e-learning in diverse disciplines. Being held online (22-26 November, 2021), ICCE 2021 includes keynote speeches, theme-based invited speeches, expert panels, workshops, Work-in-Progress Posters (WIPP), Extended Summary (ES) papers, Doctoral Student Consortia (DSC), and Early Career Workshop (ECW) in which research related to all aspects of use of computers in education is promoted.

The current submission statistics in the Bulletin of TCLT show that authors receive the first decision notification in average 23.74 days, and for the accepted articles the authors get the acceptance notification in average 44.40 days. The accepted articles are published online in average 91.43 days after they were submitted. The editorial board also decided to add a new section – Equity, Diversity & Inclusion (EDI) – which responds crisis of minorities in STEM area that addressed in the WiE panel in ICALT 2021. The section is looking for articles that discussing the issues for minorities in STEM education and how the community deal with the matter. We encourage the researchers in the engineering departments submit the current work of outreach activities in public schools – especially in the rural area – for engaging STEM education, program that ensure providing equal opportunity in employment and promotion for all person regardless the gender, race, etc., and plans for supporting a diverse engineering workspace.