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# Emerging Technologies for Education

6th International Symposium, SETE 2021 Zhuhai, China, November 11–12, 2021 Revised Selected Papers



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#### **Preface**

SETE 2021, the Sixth Annual International Symposium on Emerging Technologies for Education was held in conjunction with ICWL 2021 and jointly organized by Beijing Normal University-Hong Kong Baptist University United International College (UIC) and the Hong Kong Web Society.

Fueled by ICT technologies, the e-learning environment in the education sector has become more innovative than ever before. Diversified emerging technologies containing various software and hardware components provide the underlying infrastructure needed to create an enormous range of potential educational applications incorporated with proper learning strategies. These prevalent technologies might also lead to changes in the educational environment and thus in learning performance. Moreover, new paradigms are also emerging with the purpose of bringing these innovations to a certain level where they are widely accepted and sustainable. Therefore, the SETE symposium aims at serving as a meeting point for researchers, educationalists, and practitioners to discuss the state-of-the-art and in-progress research, exchange ideas, and share experiences about emerging technologies for education. This symposium also provides opportunities for the cross-fertilization of knowledge and ideas from researchers in diverse fields that make up this interdisciplinary research area. We hope that the implications of the findings of each work presented at this symposium can be used to improve the development of educational environment.

This year's event was held in Zhuhai, a prefecture-level city located on the west bank of the Pearl River estuary on the central coast of southern Guangdong province and in a sector of the Guangdong-Hong Kong-Macau Greater Bay Area of China. This year we received 58 submissions from authors in seven countries and/or regions worldwide. Following a strict double-blind review process, 33 full papers and 10 short papers were selected, yielding acceptance rate of 74%. These contributions covered the latest findings in areas such as digital technology for education, ICT for education, and the application of various AI-related research and technology for education.

SETE 2021 featured 1) the Guangdong-Hong Kong-Macau Bay Area Artificial Intelligence Summit Forum and 2) the Internet of Things Enter UIC event with over 20 renowned academicians as guest speakers. For the SETE 2021 presentations, in addition to the General Track on Emerging Technologies for Education, we had organized four special tracks and two workshops, namely, Track 1: Digital Technology, Creativity, and Education; Track 2: Education Technology (Edtech) and ICT for Education; Track 3: Education + AI; Track 4: Adaptive Learning, Emotion and Behaviour Recognition and Understanding in Education; Workshop 1: The 5th International Symposium on User Modeling and Language Learning (UMLL 2021) and Workshop 2: The 4th International Workshop on Educational Technology for Language Learning (ETLL 2021).

Last but not least, we would like to express our thanks to the Organizing Committee and particularly to the local organizing co-chairs for their time and efforts contributing

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to the success of the conference. We would also like to express our gratitude to members of the Program Committee for their timely reviews and professionalism. However, above all else, we would like to express our sincere thanks to all the diligent, hardworking authors for their outstanding contributions and continual support to devise emerging technologies for education.

November 2021

Weijia Jia Yong Tang Raymond Lee Michael A. Herzog Hui Zhang Tianyong Hao Tian Wang

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