

**SPECIAL ISSUE ON SENSORS AND ARTIFICIAL INTELLIGENCE  
FOR SMART EDUCATION ENVIRONMENTS: PART 2  
GUEST EDITOR: CHIH HSIEN HSIA (NATIONAL ILAN UNIVERSITY)**

**PREFACE**



Sensor-based data collection, management, and utilization have emerged as pivotal trends in education applications. To delve into the realms of smart education and smart campus paradigms within the framework of Artificial Intelligence of Things (AIoT), the development of an education-status-predicting module becomes imperative. This module would be tasked with discerning learners' behaviors and contextual learning environments by establishing connections with various sensing devices. Therefore, we must look toward developing an AI-based efficient smart education/learning framework for an education platform. In this special issue (SI), ideas that combine AI and sensors technologies to improve the learning and campus environments will be presented. The goal of this SI is to highlight state-of-the-art works that deal with the use of AI for educational applications. It aims to promote and continue discussions on smart education/learning systems that might combine hardware/software and multiple sensors with the goal of creating more efficient and attractive learning environments. By applying AI and sensors in education, school operational efficiency, campus safety, and quality of education can be improved. The SI solicited high-quality research results in all related areas.

This SI is on “Sensors and Artificial Intelligence for Smart Education Environments-Part 2” for Sensors and Materials. It focuses on state-of-the-art AI technology to create the chance for potential improvement of smart education/learning framework services. All the papers were submitted by researchers working in AI and big-data-related fields. This SI contains five papers categorized into design of intelligent tracking of athletes at sports events, neural network and structural models in educational performance analysis, backpropagation neural networks in education, exploring electronic pacifier intervention for enhancing sucking ability in preterm infants, and biometric technology based on convolutional neural networks for distance education. These papers are related to the smart education/learning applications, not only machine learning but also deep learning, that greatly affect the performance of sensors in education.

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Prof. Chih-Hsien Hsia  
Department of Computer Science and Information Engineering  
National Ilan University  
Taiwan