Volume 8, Issue 3, September 2017

From the Editors

Welcome to the first online issue of the ASEE Computers in Education Journal. It has been a long time coming but well worth the wait. First, we would like to thank the Northeast Consortium of Engineering Education (NCEE) for many years of financial support as well as for publishing the journal for the last 34 years. All of the editors are excited about this new era and look forward to us all working together to elevate the journal and increase its impact in the engineering education community. In addition to being online, the journal will now also be listed along with several other ASEE publications in EBSCO, an academic research database. The editors hope that these changes will improve the journal’s impact factor, readership, citations, visibility, and searchability.

The Computers in Education Journal serves engineering, mathematics, and science faculties who wish to improve the quality of instruction through computers. The journal contains papers that are relevant to analog, hybrid, and digital computation in education. The journal is a forum for discussing novel approaches to engineering education involving computers. It is meant to provide a medium of exchange for innovation, publish papers on practice-informed research and research-informed practice, and contribute to the general body of knowledge with respect to computation in STEM education. Papers are welcome from any practitioners who use computers in STEM education including extended versions of papers presented at the ASEE annual conference. We hope you will consider registering on the ASEE-COED website to review papers, submit an article, or just to browse.

This inaugural online issue contains eight papers on the use of computers in engineering education. There is a large diversity of topics that range from the internet of things to fluid dynamics, digital signal processing, artificial intelligence, operating systems, virtual reality, and computer-based assessments. Wright and Welch used visible and infrared images from an IR
camera to teach digital image processing with an open-ended final project on image fusion. Ayodele et al. developed a laboratory-training module to help undergraduate students understand interfacing and connectivity in an Internet of things project. Fumo detailed the introduction of simulation modeling in a computational fluid dynamics course to help students understand model validation. DeMara et al. wrote about an innovation workshop they created to help faculty with the creation of computer-based assessments. Perhinschi summarized a course created to teach computational artificial intelligence to students not in computer science and computer engineering. Madathil et al. used virtual reality to teach technical college students in an online course how to identify potential safety hazards in a manufacturing environment. Suranauwarat addressed a simulator that was designed in order to teach students in an operating systems class about disk scheduling algorithms. Lastly, Avila-Pesántez et al. conducted a systematic literature review on serious game design with future goals of identifying research gaps as well as phases, stages and pedagogical aspects that influence the design. We hope you enjoy!