

Editorial

This issue of the IJEE (41-4) has two sections. The first is a special issue of selected and expanded papers from the 2022 and 2024 Capstone Design Conferences.

During the 2024 Capstone Design Conference that was held from June 3 to June 5 in Knoxville Tennessee, USA, authors were invited to contribute to a special issue of the IJEE reflecting the highlights from the 2022 and 2024 Capstone Design Conferences.

Professors Matthew Swenson – Mechanical Engineering, University of Idaho, and Bridget Smyser – Northeastern University, Boston, took the lead to guest edit the issue. The authors of the expanded papers were informed that the submitted papers will be reviewed for originality, context, justification (evidence and/or assessment), and impact. Nine papers were successful and they are included in this issue.

I am grateful to Professors Swenson and Smyser for suggesting the special issue, and the time and effort they devoted to select, and arrange for reviews.

The second section has contributions in varied topics including:

Diversity, STEM, Engineering Ethics, Demographic Factors, Creativity, Entrepreneurship, Action Research, Peer Instruction, First-Year Students, Major Selection, Leadership, Engineering Identity, Professional Practice, Doctoral Students, Role of Math, Academic Achievement, Persistence, Self-efficacy, Engagement, and Fluid Mechanics Modules.

I hope the readers find the papers in this issue to be interesting and informative.

There is an ongoing concern among educators that students use AI instead of doing the work required themselves. It is ironic that recently the situation was reversed in a workplace. It was reported in the popular media that a company (Builder.ai) collapsed when it was discovered that they used hundreds of human engineers to do the work and claimed that it was done by AI. It goes without saying that deception is inexcusable. If they had employed hundreds of engineers to provide solutions to their customers without resorting to deception it would have been a totally different situation.

A view on the role of humans versus machines upon which one may reflect is attributed to Milton Hershey (1857–1945) the successful businessman who created one of the world's biggest chocolate companies. When Mr. Hershey watched two huge steam shovels tear apart the ground his foreman told him: "These machines do the work of 40 men.", Mr. Hershey replied, "Take them off. Hire 40 men."

Ahmad Ibrahim