Keynote Speaker

Design Thinking Course Development as an Evolution of Engineering Design

Kenji Matsui^{a,*}

^aOsaka Institute of Technology, Japan

*Corresponding Author: kenji.matsui@oit.ac.jp

Abstract

Last couple of years, many industries and schools have been looking at the importance the Design Thinking approach for their new business development and education. In this talk, major aspects of Design Thinking in relation with engineering and technology will be explored. As one of initiatives of problem-based learning for engineering design, ME310 is a year-long graduate course at Stanford's School of Engineering that educates young innovators from different disciplines. It has been taught since 1967. A couple of challenging projects from ME310 will be introduced and the key issues of the course development will be discussed. Some practical tools for radical innovation have been proposed from various organizations in order to introduce the Design Thinking process more systematically. As one of the effective examples, Foresight and Innovation tools from Innovation Leadership Board will be introduced. Finally, as an on-going project example, we will talk about our challenges implementing the Design Thinking approach in terms of our study of wearable speech enhancement system for laryngectomies.