Young Members Column
Press-in Technology Promotional Platform by Adapting Augmented Reality (AR)

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I'm Azizul Hakim Bin Azizuddin, a final year student at Universiti Tun Hussein Onn Malaysia (UTHM). In pursuing my final year project, Dr. Nor Azizi Yusoff acted as my project supervisor and introduced to me the Press-in Technology. I was given a task to create a platform promoting silent piling technology using augmented reality (AR). Due to the Covid-19 pandemic situation, one of the challenges faced by the International Press-in Association (IPA) is the restriction of face-to-face meetings among Board of Directors and technical committee members. This research was conducted in order to recognize an alternative way in delivering the information to related people in the absence of face-to-face meeting. Nowadays, smartphones are the common gadget used by every people in this world. Therefore, one of the possible, fastest, and safest ways to deliver information or data regarding silent piling technology is by using a mobile application that is available in every type of smartphone.

One of the up-to-date technologies is the Augmented Reality (AR). AR is a combination of virtual world and the real world. It allows a level of immersion that no virtual equipment can provide. This study focused on applying AR as a platform to promote silent piling technology. The developed application is a reasonable option to be used for construction industry and education sectors. This mobile application may lead the digital revolution in any university. It also contains powerful features, including cloud-based authoring system which can transform the education institution using these tools and enhance the learning programs. General knowledge associated with press-in technology are also available on this platform. Therefore, it is potentially applicable as a tool to train workers on site in a safe environment with minimum risks. In summary, augmented reality may be one of the potential ways of communication during this pandemic situation. Further applications could be developed for other civil engineering applications.

I'm happy to be involved in this interesting journey. Please visit my video presentation related to this project at https://youtu.be/pncHWXcZHj4. Thank you.

Fig. 1. Scanning the augmented reality using zapcode on site, the concept

Fig. 2. Augmented reality platform for press-in technology