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| Seminar Title | : Design and evaluation of a kinesthetic-control based alphabet learning game for primary school students   |
| Speaker       | : T Venkateswara Rao ( Rollno : 519id1003)  |
| Supervisor    | : Prof. Dhananjay Singh Bisht   |
| Venue         | : Room No. ID-007, Creative Automation Lab., Dept. of Industrial Design   |
| Date and Time | : 10 May 2022 (5.15 pm)   |
| Abstract      | <p>: In the present day, primary-education institutions are actively exploring digital tools for teaching and training children. As a consequence, we find various pedagogical systems being increasingly supported by various advanced technological tools and platforms offering interesting digital learning environments.</p> <p>The aim of this research work is to share the outcomes of an exercise to integrate kinesthetic technology in embodied-learning activities for augmenting classroom learning of English alphabets to primary school students. Today, a popular tool used for implementing interactive learning systems is the Microsoft Kinect device. The device can be deployed in a typical "catcher game" setting where a player may interact with the game kinesthetically and attempt to catch synthetic targets which appear to be falling from the top of a digital screen. In the past, such a catcher game paradigm has been adopted by different researchers to improve fundamental literacy and numeracy activities in children using digital games. Such learning-based games have primarily focused on the development of cognitive skills, motor skills, and academic skills.</p> <p>In this study, a catcher game was developed using Kinect technology to augment learning of the English alphabets using a recognition and reward game strategy. In a playful classroom setting, 18 primary school students (Class 2 and 3) with variable knowledge of the English alphabet were provided English alphabet training with the help of a digital game. Their alphabet recognition performance was compared with a control group of 16 students before and after the game-based learning treatment. The results showed a statistically significant improvement (<math>p &lt; 0.05</math>) in the intervention group as compared to the control group. The results point positively to the idea that interactive game-based learning could contribute positively and significantly to child development when combined smartly with the traditional modes of classroom learning.</p> |