

Web-based remote monitoring and control system for mechatronics module

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Abstract

The design and implementation of networked control laboratory which provides a flexible web-based interface to access mechatronics module located in laboratory is described. The web interface is designed using Advantech Studio software technology which gives the students great flexibility remote monitoring and control. This system established a user-friendly and efficient technology for providing interactive online laboratory experiments for distance students. This study describes the development and use of a novel website to improve the learning of mechatronics concepts. The main contributions of this study are as follows. (1) A distance learning platform is developed and experimentally tested with mechatronics module. (2) Learning exercises are specifically targeted to the objective of the laboratory. (3) The proposed system has an intuitive and convenient platform. (4) The technical aspects of the proposed platform are also presented.

Key words: IP CAM; Mechatronics; Monitoring and control system;
Web-based