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บทความที่เกี่ยวข้อง

Real-Time Seven Segment Display Detection and Recognition Online System using CNN

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Abstract. Typically, manufacturing machines represent their working status via the seven-segment LED display. The operators have to read the machine working status periodically. The process information time-lagging and human-error may occur. These causes may defect the output products and reduce manufacturing productivity. This research paper proposes a real-time and automatic machine display tracking system. The proposed real-time seven-segment LED display recognition system is designed to apply to the actual machines in the manufacturing. However, the camera installation problem degrades the image qualities such as machine vibration, light reflection, brightness, and camera view's frame changes. The proposed **R**eal-time **S**evens segment **D**isplay detection and recognition online system using **C**NN (RSDC) consists of the camera controller module and the **I**nterpretation of **S**even-**S**egment display (ISS) framework. The RSDC can track the machine's display and interpret the camera images to numerical data using the machine learning technique to handle the installation problems. The experiment result shows that the proposed ISS framework has an interpretation accuracy of 91.1%.

Keywords: Seven-Segment Display Detection, Seven-Segment Recognition, Convolution Neural Network, Detection, Recognition.

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