Computerized Motor Spare Parts Identifier

R.A.D.R.K. Mark* and M.L. Wickrama

Department of Science and Technology, Uva Wellassa University, Badulla, Sri Lanka

The use of image processing for physical characteristics identifier for auto spare parts selling industry systems was the aim of this research. Furthermore, this research is to develop an identifier of physical properties, which are altered in used spare parts and identify the correct spare part that should be used to replace. In Sri Lankan scenario, a replacement of a spare part is done by hand measurements and selection through manuals. An automated system could reduce time consumed in this process. The images were taken from the *USB2.0 HD UVC WebCam* and the images were processed using *MATLAB R2016a* software. *Arduino Mega 2560* development board was used to control the hardware. Moreover, the system is programmed to check the availability of the spare parts through the already established data base. *MySQL* database managing software is used to develop the database manipulation. Presently, the system can identify oil seals. Further a robotic arm and Auto Guided Vehicle to deliver the suitable part to the consumer via the fully automated process is expected to develop.

Keywords: Image processing, Spare part identifier, Automated system