Framework for Socio-Technical Issues in Requirements Engineering for Developing Resilient Machine Vision Systems Using Levels of Automation through the Lifecycle

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Abstract : This research is to examine the impacts of using data to generate performance requirements for automation in visual inspections using machine vision. These situations are intended for design and how projects can smooth the transfer of tacit knowledge to using an algorithm. We have proposed a framework when specifying machine vision systems. This framework utilizes varying levels of automation as contingency planning to reduce data processing complexity. Using data assists in extracting tacit knowledge from those who can perform the manual tasks to assist design the system; this means that real data from the system is always referenced and minimizes errors between participating parties. We propose using three indicators to know if the project has a high risk of failing to meet requirements related to accuracy and reliability. All systems tested achieved a better integration into operations after applying the framework.