

Case-Based Reasoning in the Design of Mechatronic Systems

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ABSTRACT

Engineering systems increasingly rely for their performance on achieving a balance between electronics, software and mechanical systems and the transfer of functionality between those domains. The design of such mechatronic systems therefore relies on the ability of the individual domain specialists to transfer knowledge about their domain within the overall design process. Enhancing the ability of non-specialists to understand the relationships between the various system elements and to communicate with the domain specialists will serve to enhance and support the design process. The paper therefore considers a tool based around the use of case-based reasoning which is intended to provide such support by allowing a non-specialist to access information from a range of domains in a way which is easy to use and understand and which will establish and define the links between the various areas of technology.