MidTerm Exam Paper

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Abstract

Is there a way to make embedded controls smarter? Controls systems are inherently rigid, based on requirements standards that implement code. What if there was a way to have the Control System suggest better or more efficient ways to produce a desired outcome. What if the Control System user wasn't always correct in the input of the controls?

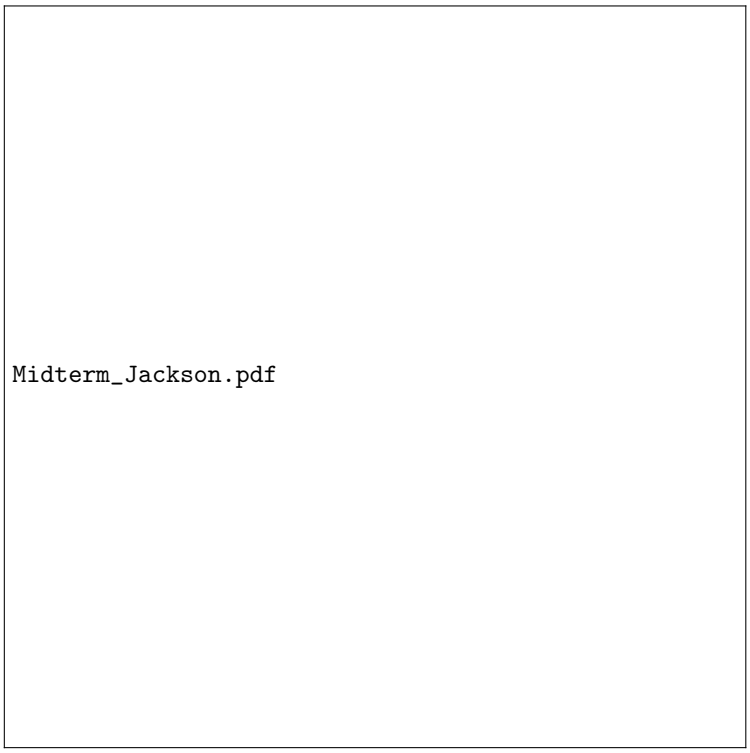
section0 Introduction

By nature of the Control System architecture, the system should follow a rigid set of rules developed, architect, and designed and documented by requirements set. So what is expected to happen in a situation, should happen and react according to those set of standards. That is the basis of controls.

Controls Systems have a basis where the system under control is managed in a way to perform a task and give certain outcome based on inputs that also include those controls. Also, there is inherently a 'controller' which may be some user or set of users that react and input commands to that system. Sometimes those controllers' inputs could be optimized.

section0 Results

The Chart **??** below is a diagram showing how much of the inputs from outside users may affect the outcome of the Controls System given a set of inputs. These outcomes can vary greatly but may also be optimized in some cases to reduce the load and/or response time from the user.



figure

Figure 0: Controls Systems Chart

section0 Conclusion

Based on the outlined findings previously stated, it is within reason to conclude that Controls Systems can be improved in nominal/critical cases where time to react, outcomes desired, and other data factors may help to improve system efficiency and desired outcomes.