

32h Design of a Fuzzy Logic Control System for Interacting Tanks

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Fuzzy logic is a form of computing based on degrees of truths, rather than the traditional Boolean “true-false”, or binary logic. It is a formal mathematical theory for the representation of uncertainty, which is critical in the control of complex systems. The purpose of this project was to design and program a fuzzy logic control scheme to be applied to a system of two interacting tanks. The objective of the control scheme is to maintain steady state levels in the tanks, even under conditions of critical disturbance. The development and implementation of the algorithm, as well as, the design and construction of the two-tank apparatus will be discussed.