## Performance of 4 phase SRM for various controllers and optimized using genetic algorithm

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III. DESIGN OF FUZZY PI CONTROLLER

Abstract

- IV. GENETIC ALGORITHM SYSTEM
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This paper presents the idea of using the Switched Reluctance Motor (SRM) as an alternative to previously used drives, in wide good and other industrial applications. In order to show the advantage of the SRM, the speed control of a switched reluctance motor (SRM) is designed by blending two artificial intelligence techniques, genetic algorithms and fuzzy PI control. Here the Genetic Algorithm (GA) is used to optimize the rules of fuzzy inference system. The importance of the fuzzy PI controller is highlighted by comparing the performance of various control approaches, including PI control and fuzzy control for speed control of SRM motor drive in terms of rise time, settling time, overshoot and it is optimized using GA.

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