Sudoku Slayer

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***Abstract*—The use of Constraint Satisfaction Problems(CSP) for modeling and solving Sudoku Puzzles is a natural implimentation of CSP techniques. Genetic Algorithms(GA) offer a much broader approach to the search space, but are not traditionally employed to solve Sudoku puzzles due to the puzzles structure naturally lending itself to other algorithms. The size of a Sudoku's search space is considerable and because of this, we decided to compare the use of CSP and GA's for solving Sudoku puzzles.**

I. INTRODUCTION

II. LITERATURE REVIEW

A. Sudoku as a Constraint Problem

B. Complexity and Completeness of Finding another Solution and its Application to Puzzles

C. Review of Selection Methods in Genetic Algoritms

D. Multi-Parent Recombination

III. METHODOLOGY

IV. RESULTS

V. DISCUSSION

VI. CONCLUSION

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