

The main goal of this thesis is to generalize Micheal Herdy's algorithm for solving Rubik's cube using evolutionary strategies for a 4D Rubik's cube. The thesis then studies its characteristics, attempts to improve it, and compares the results with the findings of El-Sourani and Borschbach. The thesis explains the chosen projection of a four-dimensional object into 3D, and slightly suggests the intuition for a better understanding and idea. This work also includes a graphic environment in which everything can be demonstrated visually.