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formation reconfiguration process includes two distinct manoeuvres an escape manoeuvre for a malfunctioning uav and a replacement movement for an alternative uav related to its position trajectory planning consists in finding a time series of successive joint angles that allows moving a robot from a starting configuration towards a goal configuration in order to achieve a task such as grabbing an object from a conveyor belt and placing it on a shelf similar to time optimal trajectory planning energy optimal trajectory planning uses kinematics and dynamics as constraints and many optimization algorithms such as neural networks simulated annealing algorithms genetic algorithms and improved chaos optimization algorithms to arrive at the planned trajectory results quickly and efficiently

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