DOUBLE LAYERS FUZZY LOGIC BASED MOBILE ROBOT
PATH PLANNING IN UNKNOWN ENVIRONMENT

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ABSTRACT—A path planning method of mobile robot using both fuzzy logic and
driver’s driving experience is proposed. Double layers fuzzy logic is used to control both
the speed and the turning angle of the mobile robot. A method of “virtual target” is
introduced to deal with the problem of local minimal, which often occurs in local path
planning. The results of simulation and experiment show its effectiveness and feasibility.

Key Words: mobile robot; fuzzy logic; trap escaping; path planning