Abstract

This paper presents a proposed autonomous mobile robot navigation scheme. The navigation of a mobile robot in an unknown environment with obstacle avoidance is based on using fuzzy logic and wavelet network. Several cases are designed and modeled in Simulink and MATLAB. Simulation results show good performance for the proposed scheme.

References

- O. Hachour, “Path planning of Autonomous Mobile Robot,” International
Comparison of Negotiation Models for Cellular Network


- P. Kumar, "Short-Term Load Forecasting using PSO Based Local Linear Wavelet Neural Network," International Journal of Instrumentation, Control and Automation, Vol. 01, No. 02, 2011.

Index Terms

Computer Science
Communications

Keywords
An autonomous mobile robot Wavelet Neural network Particle swarm optimization
Navigation
Path Planning
Obstacle avoidance