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基于BP神经网络的有控炸弹攻击区拟合分析 [\(PDF\)](#)

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Title: Attack Zone Fitting and Matlab Simulation of Guided bomb Based on BP Neural Network

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摘要: 针对目前用传统的线性回归等方法拟合有控炸弹攻击点所存在的问题,文中提出了采用BP神经网络算法对某有控炸弹的攻击点进行拟合的新方法。该方法可以用Matlab仿真软件实现,其拟合效果直观。有控炸弹攻击点与攻击条件可以通过神经网络的阈值和权重来表现。通过实例说明了应用BP神经网络进行有控炸弹攻击区拟合,不但具有算法可行性好、拟合精度高、速度快,而且运算简单,在实战中很有参考价值和工程实用价值。

Abstract: According to traditional linear regression analysis technique fitting existence problem of attack points of guided bomb, the paper presents a new method of back propagation neural network algorithm(BP) which fit attack points of some guided bomb was proposed. The relation between attack points of guided bomb and attack conditions can be displayed with threshold and weight of BP neural network. The results of simulation show that the BP method has not only good feasibility and high precision, but also simple operation. Matlab was used in the process of simulation. The conclusion possesses reference value and practical engineering value in real application.

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