论文

新特征选择方法下的信号调制识别

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摘要
针对通信信号的特点, 该文提出了一种适用范围较广的新的特征选择方法。它运用高效、稳健的遗传算法, 按照使同一类别特征的集群程度和不同类别特征的分离程度达到最佳的评价准则, 筛选出一高质量的特征子集, 并结合证据理论的精细结构, 在一个较大的信噪比变化范围内, 得到了较高的调制识别率, 计算机模拟结果证实了该方法的优越性。

关键词   特征选择   遗传算法   证据理论   调制识别

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Recognition of modulation signal based on a new method of feature selection

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Abstract
According to the characteristic of communication signals, a new method of feature selection is presented. In this method, the efficient and robust genetic algorithm is used to sift out qualified feature subset, under the rule of clustering level of same classifications and separating level of different classifications. With the fine structure of evidence theory, a considerable recognition ratio is obtained under a wide range of SNR environment. Finally, the effectiveness of this method is proved by computer simulation.

Key words   Features selection   Genetic algorithm   Evidence theory   Recognition of modulation

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扩展功能

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