

# 多媒体传感网络学习监控实时反馈方法研究

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**摘要:** 为了降低多媒体传感器网络的数据丢包和时间延迟, 提高网络学习的监控实时反馈能力, 提出了基于线性移位自适应寻优的多媒体传感网络学习监控实时反馈方法. 构建多媒体传感网络的节点优化部署模型, 采用簇内传感节点融合跟踪方法进行多媒体信息融合和二维熵特征提取, 根据传感节点的阈值进行模糊自适应加权控制, 结合线性移位信道分配方法进行多媒体传感网络学习监控反馈链路均衡处理, 采用智能寻优算法进行多媒体传感网络传输延迟控制, 提高数据的实时反馈能力. 仿真结果表明, 采用该方法进行多媒体传感网络学习监控实时反馈控制, 数据输出的丢包率较低, 多媒体信息反馈的时延较小, 整个网络的链路均衡性较好.

**关键词:** 多媒体传感网络; 学习; 监控; 传输延迟控制; 信道均衡

## Research on Real-time Feedback Method for Multimedia Sensing Network Learning Monitoring

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**Abstract:** In order to reduce the multimedia sensor network data packet loss and time delay, improve the real-time feedback ability of monitoring network learning, proposes a multimedia sensor network optimization based on linear shift adaptive learning monitor real-time feedback method. The optimal deployment model of multimedia sensor network, the sensor nodes within the cluster fusion tracking method for multimedia information fusion and the two-dimensional entropy feature extraction, fuzzy adaptive control based on sensor node weighted threshold, combined with linear shift channel allocation method for multimedia sensor network learning monitoring feedback link equalization, using intelligent optimization algorithm for multimedia sensor network transmission delay control, improve the ability of real-time feedback data. Simulation results show that using the method of multimedia the sensor network monitoring real-time feedback control, output data lost packet rate is low, the time delay of the multimedia information feedback is small, and the link balance of the whole network is better.

**Key words:** multimedia sensing network; learning; monitoring; transmission delay control; channel equalization

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