

## 模式识别技术的无线通信网络安全系统可靠性评价

邹 蕾<sup>1</sup>, 穆泉伶<sup>2</sup>

(1 吉林警察学院 信息工程系, 吉林 长春 130117; 2 吉林建筑大学 电气与计算机学院, 吉林 长春, 130119)

**摘 要:** 文章提出了基于模式识别技术的无线通信网络安全系统可靠性评价模型.首先对无线通信网络安全系统可靠性评价的研究进展进行分析,找到各种模型的局限性,然后采集无线通信网络安全系统可靠性的历史数据,引入模式识别技术刻画无线通信网络安全系统可靠性的变化特点,建立无线通信网络安全系统可靠性评价模型,最后与其它无线通信网络安全系统可靠性评价模型进行了对照实验,结果表明,本文模型的无线通信网络安全系统可靠性评价正确率达到了 95%以上,远远超过无线通信实际应用要求范围,而且无线通信网络安全系统可靠性评价效率高,获得其它模型更优的无线通信网络安全系统可靠性评价结果,具有较高的实际价值.

**关键词:** 无线通信网络; 安全状态备; 可靠性分析模型; 变化特征; 验证性测试

### Reliability evaluation of wireless communication network security system based on pattern recognition technology

ZOU Lei<sup>1</sup>, MU Quan-ling<sup>2</sup>

(1 Department of information engineering, Jilin Police College, Changchun 130117, China;

2 School of electrical and computer engineering, Jilin Jianzhu University, Changchun 130119, China)

**Abstract:** In this antical a reliability evaluation model of the wireless communication network security system based on pattern recognition technology is proposed . Firstly, the research progress of the reliability evaluation of wireless communication network security system is analyzed, and the limitations of various models are found. Then, the historical data of the reliability of wireless communication network security system are collected, and the change characteristics of the reliability of wireless communication network security system are characterized by the introduction of pattern recognition technology. Finally, the reliability evaluation model of wireless communication network security system is established Compared with the reliability evaluation model of wireless communication network security system, the results show that the accuracy of reliability evaluation of wireless communication network security system of this model is more than 95%, which is far beyond the practical application range of wireless communication. Moreover, the reliability evaluation efficiency of wireless communication network security system is high, and the better wireless communication network security system of other models is obtained The result of reliability evaluation has high practical value.

**Key words:** wireless communication network; security state backup; reliability analysis model; change characteristics; verification test

**作者简介:**

邹 蕾 女, (1975-), 硕士, 讲师.研究方向为计算机应用技术.E-mail: zoulei.office@163.com.

穆泉伶 女, (1974-), 硕士, 副教授.研究方向为从事智能建筑、系统结构方面研究.