网络、通信、安全

## 一种基于浓度调节的RCB算法

邵国 $\mathfrak{a}^1$ ,景伟 $\mathfrak{m}^1$ ,吴春颖 $\mathfrak{m}^2$ 

- 1.河南城建学院 计算机科学与工程系,河南 平顶山 467001
- 2.中国人民武装警察部队学院,河北 廊坊 065000

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摘要 决定入侵防御系统漏检率和误检率的关键要素是模式匹配算法,改进r连续位匹配算法可以提高入侵检测系统的性能。受生物内分泌系统通过激素浓度调节适应内外环境机制的启发,设计了人工激素浓度的动态平衡模型,构造了一种基于浓度调节的RCB算法。实验数据表明,该算法能够根据网络状态变化,自适应地调整匹配参数,具有较好的应用价值。

关键词 激素 浓度调节 入侵防御系统 r连续位匹配算法

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# Novel self-adapting r continuous bits matching algorithm based on hormone concentration

SHAO Guo-jin<sup>1</sup>, JING Wei-na<sup>1</sup>, WU Chun-ying<sup>2</sup>

- 1.Department of Computer Science, Henan Institute of Architecture and Technology, Pingdingshan, Henan 467001, China
- 2. The Chinese People's Armed Police Forces Academy, Langfang, Hebei 065000, China

#### **Abstract**

The omission factor and fallout ratio of IPS are affected by matching algorithm, and dynamic matching algorithm of radjustable pay an import role in improving performance of IPS. The mechanism of endocrine system is analyzed, a dynamic balance model of hormone concentration is designed, and a dynamic matching algorithm based on hormone concentration is constructed. Simulation tests show that the matching algorithm given in this paper has advantages of good performance, and applying prospect.

**Key words** hormone concentration adjusting Intrusion Prevention System (IPS) RCB matching algorithm

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