A review of Fuzzy Mechanisms for E-government Security

Volume 34 - Number 7

Year of Publication: 2011

Authors:

Nadir Omer FadlElssied
Othman Ibrahim
Adil Ali A.alaziz

Abstract

Recently, e-government has become an important issue for citizens. Government services are provided using electronic media. The security of applications and infrastructures is a critical factor for e-government success. However, analysis of the various possible external threats and internal vulnerability in order to evaluate and develop solutions resolves them is needed. A huge
number of Artificial Intelligence (AI) techniques have been proposed for this purpose; fuzzy is considered as the dominant approach in this area. This paper describes the security challenges in the context of e-government. Additionally, it reviews and discusses the comparison between variant fuzzy-based techniques. This paper has concluded that; Fuzzy set theory is very useful for evaluation of e-government security.

References

- ZHANG Bo-ping ET el "Research on E-Government System Network Security Based on Immune Agent "2010 IEEE
- Jun Fei ET el "Public Satisfaction Evaluation of E-government with Fuzzy AHP" "(2009)IEEE.
- Aiyue Xia "Research of E-government Security Risk Assessment Method Using Bayesian Network "2009 IEEE
- Dang Luo et el "Evaluation on E-government Websites Based on Rough Set and Genetic Neural Network Algorithm"2010 Academy Publisher
- Mehdi Fasanghari ET el "E-Government Performance Evaluation with Fuzzy Numbers "2009IEEE
- Jun Fei ET el "Public Satisfaction Evaluation of E-government with Fuzzy AHP "2009IEEE
- Guangfu Wei ET el "Research on E-government information security risk assessment "2010 IEEE
- Ourania I. Markaki ET el" Application of Fuzzy Analytic Hierarchy Process to Evaluate the Quality of E-Government Web Sites"2010 IEEE
- Tien-Chin Wang et el "Application of TOPSIS in evaluating initial training aircraft under a fuzzy environment2006".
- Chin-Tsai ET el "Using Fuzzy AHP to Evaluate Service Performance of Travel Intermediary2009".

Index Terms

Computer Science Information Security
**Key words**

| E-government | Security | Fuzzy techniques |