

# Cybersecurity in TIC-Scientist Network Infrastructures by Honeypots: Catching Cyber Threat Passively

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**Abstract.** There is a balance between security worries and right to privacy. Universities have a high risk of attack as a source of valuable information. Private and scientific information have a enormous value for an attacker but end user is worry about his privacy too. For this reason passive detection methods in cybersecurity like honeypots are the cornerstone in the defence plan. We expose the practical case of the University of Granada in the application of honeypot for the detection and study of intrusions. ...

## 1 Introduction

From earliest days, the networks have been experiencing an increasing number of attacks. Nowadays, the number of attacks increases continuously and scientist networks are a stage very interesting. There is a strong demand of security in the network and the services which are listening. In the other hand, the end users demand privacy in his network traffic. In this scene the honeypots have an important role in the detection and protection against cyber attacks.

### 1.1 Cyber-Space and Cyber-Threats

### 1.2 Scientist Networks

### 1.3 Privacy and Passive Sensors

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<sup>1</sup> When generating the PS file please avoid using the option “reverse order”.

- 2 Deploy of a S.I.E.M Based in Honeypots**
- 3 Weaknesses and Strengths of Honeypots**
- 4 Honeypots, Elements in Hybrid Machine Learning S.I.E.M**
- 5 Conclusions and Future Works**