Automated Decision Making in Airport Checkpoints Bias Detection toward Smarter Security and Fairness

ABSTRACT

Automated decision making emerges as the enabler for risk-based and smarter security. However, ethics, privacy, and the General Data Protection Regulation (GDPR) provide a very challenging setting along with monitoring fairness and bias detection when applying artificial intelligence (AI) security solutions.

**EXISTING SYSTEM**

* As profiling and automated processing of information emerge as enablers for more efficient, risk-based and smarter security, growing concerns on ethics and privacy are reflected on the adapting regulatory and legal framework
* In this context and by examining the airport checkpoint as the most challenging and regulated security case system implemented a solution monitoring the fairness of intelligent Manual surveillance systems of an airport and any critical infrastructure. The embedded algorithms receive input from distributed sensors and high-level information and infer suspicious incidents and visitors’ trustfulness level.
* However, the system may result in biased conclusions because of biased sources and/or algorithms. Consequently, we suggest a bias detection system, which exploits a structured representation of Legal regulations, and compare them to association rules extracted by the input and output datasets.

**Disadvantages**

* + The System is very less security lack of the General Data Protection Regulation (GDPR).
  + The System is Manual.

**PROPOSED SYSTEM**

* In the proposed system, the system investigates the potentials of automated security decision making in terms of operational and technological opportunities, evaluating the threats and implications according to the latest privacy and ethical framework, given also the recent GDPR release.
* In particular, the system focuses on data mining and machine-learning applications and relevant risks, also proposing an expert system capable of analyzing fairness and detecting deviations that might potentially lead to discrimination and violations of human rights.

**Advantages**

* The system is automated due to GDPR.
* The system is an effective by automated trace of passenger behaviors.

**SYSTEM REQUIREMENTS**

➢ **H/W System Configuration:-**

➢ Processor - Pentium –IV

➢ RAM - 4 GB (min)

➢ Hard Disk - 20 GB

➢ Key Board - Standard Windows Keyboard

➢ Mouse - Two or Three Button Mouse

➢ Monitor - SVGA

**Software Requirements:**

* Operating System - Windows XP
* Coding Language - Java/J2EE(JSP,Servlet)
* Front End - J2EE
* Back End - MySQL