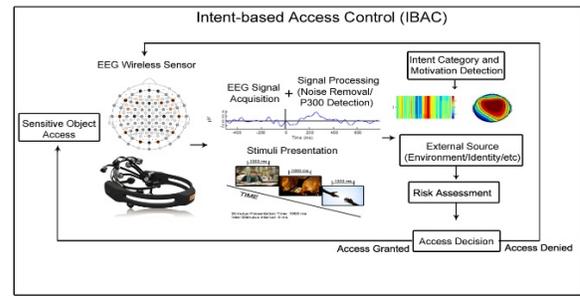


INTENTION BASED ACCESS CONTROL FOR HIGH SECURITY



INVENTORS:

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TITLE:

Intention Detection as an Access Control Measure Using Electroencephalogram Signals

IP PROTECTION:

US Provisional Application – 62/021,285

OVERVIEW:

The technology addresses the insider threat through the development of a novel non-identity-based access control mechanism that determines why access is being requested as opposed to identifying who has requested access.

TARGET MARKETS:

High Security, Military, Aviation, Banking, Police, Boarder Control

BACKGROUND

According to the 2014 SpectorSoft Insider Threat survey, the nature of insider threats (authorized persons misusing their authorization) makes it harder to detect such attacks and protect against them. As a result it has led to \$2.9 trillion in employee fraud losses globally per year. In the US alone, organizations suffered \$40 billion in losses due to employee theft and fraud.

TECHNOLOGY OVERVIEW

The technology addresses the “Pre-crime” aspect in the insider threat context. It detects an intention of access and therefore detects an existence of a plan to commit maleficence and prevents a crime before it happens. It bridges the gaps between Cognitive Psychology, Brain-Computer Interface (BCI), and Information Technology security as it uses the EEG signals as the main physiological signals to detect intentions and motivation of a user requesting access to protected resources. This solution opens new commercial application in the Intention detection, motivation detection, Pre-crime and mainly non-identity-based access control areas. The novelty of this solution is that it addresses the insider threat from the access control layer by proposing a non-identity-based access control mechanism that investigates “WHY” access is being requested as opposed to authenticating an identity and answering “WHO” is requesting access. It investigates the possibility of detecting intentions and motivations of access. It investigates the possibility of the proposed access control system, Intent-based Access Control, in detecting and preventing the insider threat.

BUSINESS OPPORTUNITY

UOIT looks to work with companies in a way that helps develop a relationship that is tailored around their interests. Thus, are happy to explore collaborations, licenses, options, assignments, etc. It is the belief that only through enabling the company to utilize their business model will the UOIT technology be able to make impact within the marketplace.

ABOUT UOIT

UOIT conducts high-quality, rigorous research designed to meet the research and development needs of business and industry and benefit society. Whether the focus is on developing hydrogen-from-nuclear or fuel-cell technologies, improving network security or understanding youth crime, we are committed to interdisciplinary research and development that addresses social, environmental, health and economic challenges.