

PERVASIVE CYBER-SECURITY EDUCATION SYSTEM

TECHNOLOGY DESCRIPTION

The technology is a Pervasive Cyber-Security Education System or PCSES that focuses on learning and practicing the studied theories. It is also an intelligent system which provides useful tips to help users.

TECHNOLOGY FEATURES

The PCSES allows users to experience what they can never do in a real legal situation. It teaches advanced materials in a simple way that even a novice can understand and practice. The system can be utilized to provide security related knowledge which by nature is very difficult to understand. It contains materials that are regularly used by hackers to familiarize users of potential cyber threats. PCSES combines both theories and practices together in a cheap, simple and professional system. Overall, this system is a unique way that utilizes a fully controlled environment by allowing users to experience them first hand.

ADVANTAGES

- Wide range of users
- Protection of users from cyber threats or hacking
- Equips users with both theory and practice on handling cyber-security threats.

INDUSTRY OVERVIEW

Main Prospect: Telecommunication Industry

Generally, anybody who has access to a website is a potential user of Pervasive Cyber-Security Education System (PCSES). Statistics revealed that 65% of internet users globally have been victims of hacking. In addition, The Malaysian Internet Exchange (MyIX) in 2013 highlighted the increase of internet traffic in Malaysia by a whopping 51% to a total amount of 349,277 Mbps, as compared to 230,631 Mbps in 2012. In January, the nation's Internet traffic stood at 22,511 Mbps – which was a 75% increase as compared to 12,880 Mbps in January 2012. By November 2013, the highest use for 2013 was recorded at 41,319 Mbps. The high usage of internet indirectly relate to the increase in the possibility of being hacked. A survey recorded of at least 675,074 internet users in Malaysia for the year 2014. Specifically, the product can also be targeted specifically for advanced system developers, security specialists and network administrators. However, currently, a number of security education system has also been made available online for free.



Dr. Ali Dehghantanha
 Faculty of Computer Science and Information Technology
 alid@upm.edu.my