MINISTRY OF EDUCATION AND SCIENCE OF UKRAINE TERNOPIL IVAN PULUJ NATIONAL TECHNICAL UNIVERSITY FOREIGN STUDENTS DEPARTMENT

COMPUTER SCIENCE DEPARTMENT

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INFORMATION TECHNOLOGY OF SECURITY AND PRIVACY DECISIONS WITH DATA

122 Computer Science and Information Technologies

Abstract of a Master’s Thesis

Ternopil 2018

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| The thesis has been carried out at the Computer Science Department of Ternopil Ivan Puluj National Technical University, Ministry of Education and Science of Ukraine | |
| **Supervisor:** | Ph.D., Lecturer of Computer Science Department  **Taras Sitkar,**  Ternopil Ivan Puluj National Technical University |
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Defence of a thesis will be held at the Meeting of the State Examination Board №32 on February 24, 2018 at 10.00 in Ternopil Ivan Puluj National Technical University (46001, Ternopil, Ruska st. 46, building №1, room 702)

GENERAL CHARACTERISTIC OF THE THESIS

**Actuality of the thesis.** We conducted the first large-scale study of password-strength meters, finding that meters did affect user behavior and security. Meters led users to create longer passwords. However, unless the meter scored stringently, the resulting passwords were only marginally more resistant to password cracking attacks.

**The aim of the thesis:** To develop the information technology privacy and safe Datas

Thesis tasks:

1. To justify the methods of secured password.
2. To make passwords more computationally expensive to guess during offline attacks
3. To develop the information technology privacy and safe Data.
4. To present the Datas from hackers

**The object of the research:** make significantly longer passwords that included more digits, symbols, and uppercase letters**.**

**Novelty of the results:** Security And Privacy Decisions With Data.I focus on studies of user behavior in creating passwords. My data-driven approach to passwords examines both security metrics and user behaviors.

**The practical significance:** A password’s resistance to an offline attack is highly situational. It depends on the way passwords are stored, including the type of hash function used to store the password

**Thesis approbation.** The results have been reported at the VI International scientific and technical conference of young researchers and students «Current issues in modern technologies», Ternopil, November 16-17, 2017.

**The structure of the thesis.** The thesis consists of explanatory notes and graphical presentation. The explanatory notes consist of introduction, 7 sections, conclusions,

references, and appendices. The thesis size: explanatory notes – 122 pages of the A4 format, graphical presentation – 7 sheets of the A1 format.

MAIN CONTENT OF THE THESIS

**In introduction** the importance and actuality of the subject of the thesis have been represented.

**Іn the first section** analytical review of research method has been carried out. A handful of other researchers have also evaluated the effectiveness of using personalized examples derived from users’ own data or the overall ecosystem in helping users make privacy and security decisions.

**Іn the second section** The Selection Of A Guessing Attack To Model Is Crucial To Analysing Password Guess Ability. Researchers have long investigated how to guess passwords.

**Іn the third section** Online advertisers track users as they traverse the Internet, constructing profiles of individuals to enable targeted advertising based on each user’s interests.

**Fourth section** is devoted to the problems of health and safety regulations. That is, the problems of electrical safety in the laboratory, static electricity and spark hazards etc. are considered.

**Fifth section** deals with ecological examination law of Ukraine, environmental protection and ecological development.

Conclusions

1 Justifying the methods of secured password for the authentication ecosystem which is vulnerable to a number of attacks has been finally concluded

2 Making passwords more computationally expensive to guess during offline attacks so that If a user is phished, the attacker gets the password in plaintext

3 To develop the information technology privacy and safe Data’s, it is most important that a password not be trivially predictable. In what is known as an online attack.

4 To present the Data’s from hackers Passwords are generally too short to provide much resistance to attacks and users tend to put digits and symbols at the end of the password and capital letters at the beginning.

LIST OF PAPERS PUBLISHED BY THE AUTHOR OF THESIS

1. Balogun Tolulope Emmanuel, Security And Privacy Decisions with Data / Book of abstract of the VI International scientific and technical conference of young researchers and students «Current issues in modern technologies», Ternopil, November 16-17, 2017, vol.2. – Ternopil, TNTU Press. – 6 p.

ANNOTATION

Master’s thesis is devoted to the development of information technology of Security And Privacy Decisions With Data. In the thesis presented main part of Security And Privacy Decisions With Data, the economical part, the ecology part and the safety part. As a result, the information technology was developed.

**Keywords:** Usable security, computer security, passwords, authentication