Personal Information

Name	**Ismail Adel Altaharwa**
Place and date of birth	**Amman, Jordan. Aug. 1984**
Faculty	**Information Technology and Systems**
Department	**Computer Information Systems**

Qualifications

Qualification	Specialization	University of donor rank	Date
B.Sc.	Computer Science	The Hashemite University, Zarqa, Jordan	Sep. 2005
M.Sc.	Computer Science	Al-Balqa Applied University, Assalt, Jordan	Jun. 2008
PhD	Computer Science and Information engineering	National Taiwan University of Science and Technology, Taipei, Taiwan (R.O.C.)	Aug. 2014

Specialization and domain of interest

Specialization	**Information Security**
Domain of interest	**Evolutionary Algorithms, Machine Learning, Information Retrieval, Data Mining**

Specialization and domain of interest

Title and abstract of the doctoral thesis (within 150 words)

Automatic Analysis and Detection of JavaScript Malware

Drive-by downloads continue to be the basis for many kinds of large-scale web attacks. The detection of Drive-by downloads and heap spraying attacks has been receiving serious research attention. The appearance of complex obfuscation patterns make the two primary challenges preventing the development of large-scale, real-time detectors of drive-by downloads become contradictory. On one hand, fabrication of disguised transformations (massively and heavily obfuscated scripts) thwarts capabilities of static analysis. On the other hand, dynamic analysis incurs excessive overhead along with other limitations. To ameliorate this situation, we

propose Drive-by Disclosure, a novel complementary solution to bridge the gap between dynamic and static approaches. Drive-by Disclosure leverages availability of AST representation to predict script's latent behaviors statically. This approach facilitates distinction between scripting practices of drive-by downloads and disguised transformations. Subsequently, in order to reliably detect drive-by downloads, dynamic analysis will only be applied to the scripts that are identified as disguised. Compared to the state-of-the-art solutions, Drive-by Disclosure minimizes analysis overhead of JSAND to less than 24%. Also, it improves JSAND's detection rate by more than 29 absolute percentage points. Further, the combination of JSAND and Drive-by Disclosure attains two times better accuracy than Cujo.

Career Experience

Job Title	Place of work	Date
Assistant professor	The University of Jordan	Aug. 2014
Part- Time lecturer	The University of Jordan	Jan. 2007- Sep. 2009
Lab supervisor	The University of Jordan	Nov. 2006 - Sep. 2009

Administrative works and committees

Administrative work and committee	Date
Acting chairman of Computer Information Systems & Business Information Technology Departments	Sep. 2016
Dean's Assistant for Quality and Development	Sep. 2014 - Sep. 2015
Director for Graduate programs	Sep. 2014 - Sep. 2015

Recent Publications within last five years

Name of researcher	Research title, Publisher, Date
Nazeeh Ghatasheh, Ismail Al-Tahrawa, Bilal Al-Ahmad and Mua'ad Abu-Faraj	Dead Sea Starvation: Towards Enhanced Monitoring of Water Resources by Modeling Meteorological Variables and Remote Sensing Data. Journal of Software Engineering and Applications. 9(12): 588-600, 2016.

Ismail Adel AL-Taharwa, Hahn-Ming Lee, Albert B Jeng, Kuo-Ping Wu, Cheng-Seen Ho, Shyi-Ming Chen	JSOD: JavaScript obfuscation detector, Security and Communication Networks, John Wiley and Sons Inc. 8(6) 1092-1107, Apr.
Jui-Sheng Chou, Chien-Kuo Chiu, Mahmoud Farfoura, Ismail Al-Taharwa	Optimizing the prediction accuracy of concrete compressive strength based on a comparison of data-mining techniques, Journal of Computing in Civil Engineering, American Society of Civil Engineers, 25(3), 242-253, 2010
Ismail Al-Taharwa, Alaa Sheta, Mohammed Al-Weshah	A mobile robot path planning using genetic algorithm in static environment, Journal of Computer Science, Science Publication 4(4), Apr. 2008

Scientific conferences and symposia

Conference Title	Place and date of conference	Type of participation
14th IEEE Trustcom/ BigDataSE/ISPA	Helsinki, Finland, Aug. 2015	1. Full paper accepted in the main conference(10 pages, double column) 2. Session chair
11th IEEE Trustcom/ BigDataSE/ISPA	Liverpool, England, Aug. 2012	Regular paper accepted (6 pages double column)
13th IEEE ICACT	Phoenix park, South Korea, Feb. 2011	Full paper accepted in the main conference (6 pages, double columns)
International Symposium on Grids and Clouds	Taipei, Taiwan, Mar. 2011	Full paper accepted (10 pages single column)

Training courses

Name of course	Date

Teaching activities

Taught Courses	Bachelor	Graduate
Database Management Systems	☒	❑
Algorithms Theory	☒	❑
Operating Systems	☒	❑
Computer Ethics	☒	❑
Data Mining	☒	❑
Information Security and Safety	☒	❑
Web Application development-1	☒	❑
Web Publishing	☒	❑
Applications of Information systems	☒	❑
Data Structures	☒	❑
Operation Research	☒	❑
Computer Skills for Humanities	☒	❑
System Analysis and Design	☒	❑

Membership in scientific and professional bodies and societies

Name and place of scientific body and society	Date
Jordanian Computer Society	2015-

Awards

Name of Award	Donor and place of award	Date
PhD Full scholarship	National Science Council of Taiwan, Ministry of Science and Technology, Taiwan, (R.O.C.)	Sep. 2009