

10th European Conference on Information Warfare and Security 2011

(ECIW 2011)

**Tallinn, Estonia
7-8 July 2011**

Editors:

Rain Ottis

ISBN: 978-1-62276-536-2

Printed from e-media with permission by:

Curran Associates, Inc.
57 Morehouse Lane
Red Hook, NY 12571



Some format issues inherent in the e-media version may also appear in this print version.

Copyright© The Authors, (2011). All Rights Reserved.

No reproduction, copy or transmission may be made without written permission from the individual authors.

Papers have been double-blind peer reviewed before final submission to the conference. Initially, paper abstracts were read and selected by the conference panel for submission as possible papers for the conference.

Many thanks to the reviewers who helped ensure the quality of the full papers.

Printed by Curran Associates, Inc. (2012)

Published by Academic Conferences Ltd.
Curtis Farm Kidmore End
Reading RG4 9AY UK

Phone: 441 189 724 148

Fax: 441 189 724 691

info@academic-conferences.org

Additional copies of this publication are available from:

Curran Associates, Inc.
57 Morehouse Lane
Red Hook, NY 12571 USA
Phone: 845-758-0400
Fax: 845-758-2634
Email: curran@proceedings.com
Web: www.proceedings.com

Contents

Paper Title	Author(s)	Page No.
Preface		iv
Biographies of Conference Chairs, Programme Chair, Keynote Speaker and Mini-track Chairs		v
Biographies of contributing authors		vi
Legitimate Defenses Against Dangerous Archenemies. The Justifications by U.S. Presidents for the Initiation of Military Operations in the Persian Gulf and Kosovo, 1991-2003	<i>Kari Alenius</i>	1
Use of Compression Methods for Data Security Assurance	<i>Dominic Asamoah and William Oblitey</i>	ï
Cyber Security: Time for Engagement and Debate	<i>Debi Ashenden</i>	11
This is not a Cyber war, its a...? Wikileaks, Anonymous and the Politics of Hegemony	<i>David Barnard-Wills</i>	17
Potential Threats of UAS Swarms and the Countermeasure's Need	<i>Laurent Beaudoin, Antoine Gademer, Loica Avanthey, Vincent Germain and Vincent Vittori</i>	24
Developing Intelligence in the Field of Financing Terror - an Analytical Model of Anti-Terror Inter Agency and Cross Border Cooperation: The Security of Financial Systems Dimension	<i>Alexander Bligh</i>	31
A Secure Architecture for Electronic Ticketing Based on the Portuguese e-ID Card	<i>Paul Crocker and Vasco Nicolau</i>	38
Evaluation of the Armed Forces Websites of the European Countries	<i>Pedro Cunha, Parçidio Gonçalves, Vítor Sá, Sérgio Tenreiro de Magalhães and Miguel Pimenta</i>	50
Estonia After the 2007 Cyber Attacks: Legal, Strategic and Organisational Changes in Cyber Security	<i>Christian Czosseck, Rain Ottis and Anna-Maria Talihärm</i>	57
An Usage-Centric Botnet Taxonomy	<i>Christian Czosseck and Karlis Podins</i>	65
User-Centric Information Security Systems - A Living lab Approach	<i>Moses Dlamini Jan Eloff, Marek Zielinski¹ Jason Chuang¹ and Danie Smit</i>	73
Intrusion Detection Through Keystroke Dynamics	<i>João Ferreira, Henrique Santos and Bernardo Patrão</i>	81
The Computer Security of Public/Open Computer Spaces: Feedback of a Field Study in Europe	<i>Eric Filiol</i>	106
Perverting eMails: A new Dimension in Internet (in)Security	<i>Eric Filiol, Jonathan Dechaux and Jean-Paul Fizaine</i>	91
Evaluating Cyber Security Awareness in South Africa	<i>Marthie Grobler, Joey Jansen van Vuuren and Jannie Zaaiman</i>	113

Paper Title	Author(s)	Page No.
Missionaries of Peace – The Creation of the Italian Identity in the Representation of the Political Discussion in Favour of Italy's Participation in the Iraq War in <i>Il Corriere della Sera</i>	<i>Marja Härmänmaa</i>	122
Thoughts of war Theorists on Information Operations	<i>Arto Hirvelä</i>	127
Live-Action Role-Play as a Scenario-Based Training Tool for Security and Emergency Services	<i>Sara Hjalmarsson</i>	132
Computer Games as the Representation of Military Information Operations – A Philosophical Description of Cyborgizing of Propaganda Warfare	<i>Aki-Mauri Huhtinen</i>	141
Information Security Culture or Information Safety Culture – What do Words Convey?	<i>Ilona Ilvonen</i>	148
Strategic Communication and Revolution in Military Affairs: Describing Actions and Effects	<i>Saara Jantunen</i>	155
A Case-Study on American Perspectives on Cyber and Security	<i>Saara Jantunen and Aki-Mauri Huhtinen</i>	163
Evolutionary Algorithms for Optimal Selection of Security Measures	<i>Jüri Kivimaa and Toomas Kirt</i>	172
Botnet Detection: A Numerical and Heuristic Analysis	<i>Luís Mendonça and Henrique Santos</i>	185
Analysis and Modelling of Critical Infrastructure Systems	<i>Graeme Pye and Matthew Warren</i>	194
Modelling Relational Aspects of Critical Infrastructure Systems	<i>Graeme Pye and Matthew Warren</i>	202
A Study on Cyber Secured eGovernance in an Educational Institute: Performance and User Satisfaction	<i>Kasi Raju</i>	211
Steps towards Monitoring Cyberarms Compliance	<i>Neil Rowe, Simson Garfinkel, Robert Beverl, and Panayotis Yannakogeorgos</i>	221
Distributed Denial of Service Attacks as Threat Vectors to Economic Infrastructure: Motives, Estimated Losses and Defense Against the HTTP/1.1 GET and SYN Floods Nightmares	<i>Libor Sarga and Roman Jašek</i>	228
Legal Protection of Digital Information in the era of Information Warfare	<i>Małgorzata Skórzewska-Amberg</i>	237
Criteria for a Personal Information Security Agent	<i>Ewald Stieger and Rossouw von Solms</i>	245
International Criminal Cooperation in the Context of Cyber Incidents	<i>Anna-Maria Talihärm</i>	253
Methods for Detecting Important Events and Knowledge From Data Security Logs	<i>Risto Vaarandi</i>	261
Locating the Enemy	<i>Marja Vuorinen</i>	261
Australian National Critical Infrastructure Protection: A Case Study	<i>Matthew Warren and Shona Leitch</i>	275

Paper Title	Author(s)	Page No.
PhD Papers		281
Security Considerations for Virtual Platform Provisioning	<i>Mudassar Aslam and Christian Gehrman</i>	283
A Mobile and Quick Terrorism	<i>Anthony Desnos and Geoffroy Gueguen</i>	291
Regulatory Compliance to Ensure Information Security: Financial Supervision Perspective	<i>Andro Kull</i>	298
Behaviour Profiling for Transparent Authentication for Mobile Devices	<i>Fudong Li, Nathan Clarke, Maria Papadaki and Paul Dowland</i>	307
Description of a Practical Application of an Information Security Audit Framework	<i>Teresa Pereira and Henrique Santos</i>	315
Fight Over Images of the State Armed Forces and Private Security Contractors	<i>Mirva Salminen</i>	323
Non Academics		331
A Proposal for Domain Name System (DNS) Security Metrics Framework	<i>Andrea Rigoni and Salvatore Di Blasi</i>	333
Work in progress		337
Malicious Flash Crash Attacks by Quote Stuffing: This is the way the (Financial) World Could end	<i>Robert Erra</i>	339