

2016 International Conference on Cyber Conflict (CyCon U.S. 2016)

**Washington, DC, USA
21-23 October 2016**



**IEEE Catalog Number: CFP16F87-POD
ISBN: 978-1-5090-6172-3**

**Copyright © 2016 by the Institute of Electrical and Electronics Engineers, Inc
All Rights Reserved**

Copyright and Reprint Permissions: Abstracting is permitted with credit to the source. Libraries are permitted to photocopy beyond the limit of U.S. copyright law for private use of patrons those articles in this volume that carry a code at the bottom of the first page, provided the per-copy fee indicated in the code is paid through Copyright Clearance Center, 222 Rosewood Drive, Danvers, MA 01923.

For other copying, reprint or republication permission, write to IEEE Copyrights Manager, IEEE Service Center, 445 Hoes Lane, Piscataway, NJ 08854. All rights reserved.

****** This is a print representation of what appears in the IEEE Digital Library. Some format issues inherent in the e-media version may also appear in this print version.***

IEEE Catalog Number:	CFP16F87-POD
ISBN (Print-On-Demand):	978-1-5090-6172-3
ISBN (Online):	978-1-5090-5258-5

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) 758-2633
E-mail: curran@proceedings.com
Web: www.proceedings.com

CURRAN ASSOCIATES INC.
proceedings
.com

Table of Contents

NATO's New Cyber Domain Challenge	1
<i>Siim Alatalu</i>	
Suggestions to Measure Cyber Power and Proposed Metrics for Cyber Warfare Operations (Cyberdeterrence/Cyber Power).....	9
<i>Edwin L. Armistead</i>	
Implications of Cyber in Anti-Access and Area-Denial Counters	16
<i>Michael J. Assante</i>	
Crossing the Rubicon: Identifying and Responding to an Armed Cyber-Attack.....	22
<i>Nerea M. Cal</i>	
CMIDS: Collaborative MANET Intrusion Detection System	29
<i>Jeronymo M. A. Carvalho and Paulo C. G. Costa</i>	
Cyber Workforce Development Using a Behavioral Cybersecurity Paradigm	34
<i>Bruce D. Caulkins, Patricia Bockelman, Karla Badillo-Urquiola, and Rebecca Leis</i>	
Vulnerabilities and Their Surrounding Ethical Questions: A Code of Ethics for the Private Sector	40
<i>Alfonso De Gregorio</i>	
Acting in the Unknown: The Cynefin Framework for Managing Cybersecurity Risk in Dynamic Decision Making	44
<i>Josiah A. B. S. Dykstra, and Stephen R. Orr</i>	
Cyber Attacks: The Fog of Identity	50
<i>V.A. Greiman</i>	
International Cyber Incident Repository System: Information Sharing on a Global Scale	63
<i>Amanda L. Joyce, Nathaniel Evans, Edward A. Tanzman, and Daniel Israeli</i>	
Cyber Deterrence in Times of Cyber Anarchy	69
<i>Elsa B. Kania</i>	
Cyber Defence Information Sharing in a Federated Network	86
<i>H. Kantola and M. Levin Jaitner</i>	

Cyber Weapons: A Profiling Framework.....	94
<i>Clara Maathuis, Wolter Pieters, and Jan van den Berg</i>	
Evaluating Single Board Computer Clusters for Cyber Operations.....	102
<i>Suzanne J. Matthews, Raymond W. Blaine, and Aaron F. Brantly</i>	
Stigmatizing Cyber War: Mission Impossible?	110
<i>Brian M. Mazanec and Patricia Shamai</i>	
Extracting Attack Narratives from Traffic Datasets.....	118
<i>Jose David Mireles, Jin-Hee Cho, and Shouhuai Xu</i>	
Countering Cyber Threats: Answers from International Law	124
<i>Annachiara Rotondo</i>	
Re-thinking Threat Intelligence	131
<i>Char Sample, Jennifer Cowley, Tim Watson, and Carsten Maple</i>	
Cyber Norms for Civilian Nuclear Power Plants.....	140
<i>Christopher M. Spirito</i>	
Sovereignty in Cyberspace: Balkanization or Democratization	146
<i>Amael Cattaruzza, Didier Danet, Stephane Taillat, and Arthur Laudrain</i>	
Disruptive Innovations to Help Protect against Future Threats	155
<i>Ernest Y. Wong and Nicholas M. Sambaluk</i>	
Stuxnet as Cyber-Enabled Sanctions Enforcement	160
<i>Panayotis A. Yannakogeorgos and Eneken Tikk</i>	
Author Index	167