

2017 Information Security for South Africa (ISSA 2017)

**Johannesburg, South Africa
16-17 August 2017**



**IEEE Catalog Number: CFP1766I-POD
ISBN: 978-1-5386-0546-2**

**Copyright © 2017 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:	CFP1766I-POD
ISBN (Print-On-Demand):	978-1-5386-0546-2
ISBN (Online):	978-1-5386-0545-5
ISSN:	2330-9881

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

Contents

Introduction.....	iv
Focus.....	v
Conference Committees.....	viii
Review Committee	ix
Review Process.....	xii
Enriched Nudges Lead to Stronger Password Replacements ... but Implement Mindfully <i>Karen Renaud and Verena Zimmermann</i>	1
The Importance of Security Culture for Crowd Energy Systems <i>Mohammad Aldabbas, Stephanie Teufel and Bernd Teufel</i>	10
Compliance with the Protection of Personal Information Act and Consumer Privacy Expectations - A Comparison between the Retail and Medical Aid Industry <i>Adele Da Veiga, Ruthea Vorster, Colin Pilkington and Hanifa Abdullah</i>	16
Investigating the Electromagnetic Leakage from a Raspberry Pi <i>Ibraheem Frieslaar and Barry Irwin</i>	24
Towards the Development of an Effective Intrusion Detection Model <i>Sarathiel Chaipa and Mariki M Eloff</i>	32
Big Data Science for Predicting Insurance Claims Fraud <i>David Kenyon and Jan Eloff</i>	40
Design and Application of Link: A DSL for Frame Manipulation <i>Sean Pennefather and Barry Irwin</i>	48
Organizational Information Privacy Strategy and the Impact of the PoPI Act <i>Marc Pelteret and Jacques Ophoff</i>	56
A Privacy and Security Threat Assessment Framework for Consumer Health Wearables <i>Javan Mnjama, Greg Foster and Barry Irwin</i>	66
Forensic attribution in NoSQL databases <i>Werner Hauger and Martin Olivier</i>	74
Evaluating the Severity of Trust to Identity-Management-as-a-Service(IdMaaS) <i>Nkosinathi Mpofu and Wynand van Staden</i>	83
Analysis of Mozambican Websites: How do they Protect their Users? <i>Ambrosio Patricio Vumo, Josef Spillner and Stefan Köpsell</i>	90
Underlying Finite State Machine for the Social Engineering Attack Detection Model <i>Francois Mouton, Alastair Nottingham, Louise Leenen and Hein S. Venter</i>	98
Benchmarking a Mobile Implementation of the Social Engineering Prevention Training Tool <i>Francois Mouton, Marcel Teixeira and Thomas Meyer</i>	106