

2015 International Conference on Emerging Trends in Networks and Computer Communications

(ETNCC 2015)

**Windhoek, Namibia
17 – 20 May 2015**



**IEEE Catalog Number: CFP1596N-POD
ISBN: 978-1-4799-7708-6**

Table of Contents

S. No.	Title of Paper and Authors	Page No.
1.	A Simulation Design of LTE Communication System under Adaptive Modulation Schemes <i>Emmanuel Migabo, Thomas Olwal</i>	1-6
2.	Design and Simulation of a Bluetooth Communication System <i>Kevin Mhlanga, Matiko Mafumo, Prosper Sotenga, Thato Phate, Thomas Olwal</i>	7-12
3.	The Internet of Things in Agriculture for sustainable rural development <i>Nomusa Dlodlo, Josephat Kalezhi Kitwe</i>	13-18
4.	The Internet of Things in Transport Management in South Africa <i>Nomusa Dlodlo</i>	19-26
5.	RF Radiation Exposure Levels from the Valombola Base Station, in the Faculty of Engineering and IT Vicinity, Ongwediva, Namibia <i>Clement Temaneh-Nyah, Erikson Victor Ongwediva</i>	27-31
6.	A Comparative Analysis of MANET Routing Protocols for Low Cost Rural Telemetry Wireless Mesh Networks <i>S. M. Sheikh, R. Wolhuter and G-J van Rooyen</i>	32-37
7.	Towards Better Communication in Adaptive System-On-Chip for Multicore Architectures <i>Nentawe Gurumdimma, Abderazak Ben Abdallah, Shawulu Nggada</i>	38-43
8.	Simulation of a Smart Water Metering Network in Tsumeb East, Namibia <i>Linda N. Shitumbapo and Clement N. Nyirenda</i>	44-49
9.	A Fuzzy Metric for Collection Tree Protocol in Wireless Sensor Networks <i>Frans S. Shafuda and Clement N. Nyirenda</i>	50-55
10.	Shilling Attack Detection in Collaborative Recommender Systems using a Meta Learning Strategy <i>Wilander Bhebe and Okuthe P. Kogeda</i>	56-61
11.	Evolutionary Computation in Artificial Board Game Playing through Genetic Weight Evolution <i>Chirag Suryakant Thaker, Dharm Singh Jat, Axel Jerom Xoagub</i>	62-66
12.	Human Action Recognition Using a Semantic- Probabilistic Network <i>Mykyta Kovalenko, Svetlana Antoshchuk and Juergen Sieck</i>	67-72
13.	The 21st Century Namibian Classroom: An E-Reader Approach <i>Mohammed Shehu, Nobert Rangarirai Jere</i>	73-78
14.	Initial Investigation of Industrial Control System (ICS) Security Using Artificial Immune System (AIS) <i>Mercy Bere, Hippolyte Muyingi</i>	79-84
15.	A Proposed Framework to Measure Growth of Critical Information Infrastructure Protection in Africa <i>Alfred Musarurwa, HusinJazri</i>	85-90
16.	Exploring Challenges of Biometric Technology Adoption: A Namibian Review	91-94

17.	A Modular Software Architecture to Interact with Media Facades <i>Letellier, Jens Reinhardt, Jürgen Sieck, Michael Thiele-Maas</i>	95-98
18.	Challenges in Protecting Personnel Information in Social Network Space <i>Meghna Chaudharya and Harish Kumar</i>	99-104
19.	A client server application for the recognition of artefacts in a museum <i>Juergen Sieck, Hanna Balakhontseva, Svetlana Antoshchuk</i>	105-109
20.	Analysis of Impact of hidden Primary Receiver on interference modeling in Power, Contention and hybrid Control Schemes <i>Ireyuwa Elginosa, Olutayo.O Oyerinde</i>	110-113
21.	An Impact Review on Internet of Things Attacks <i>Attlee M. Gamundani</i>	114-118
22.	A Cloud Computing Augmenting Agricultural Activities in Marginalized Rural Areas: A Preliminary Study <i>Phumlani T. Simelane, Okuthe P. Kogeda, Manoj Lall, South Africa</i>	119-124
23.	Cognitive Radio Ad-Hoc Networks: Attacks and Its Impact <i>Ramesh babu B, Meenakshi Tripathi , Manoj Singh Gaur, Dinesh Gopalani, Dharm Singh Jat</i>	125-130
24.	Using Digital Forensic Readiness Model to Increase the Forensic Readiness of a Computer System <i>Jeff Mutunda Kazadi, Husin Jazri</i>	131-137
25.	Big Data: Emerging Technological Paradigm and Challenges <i>Chirag Suryakant Thaker, Dharm Singh Jat , Addmore Machanja, Edward Nepolo</i>	138-143
26.	Numerical Analysis of the Impact of Shadow fading in Power control and Contention control interference management schemes in Cognitive Radio <i>Ireyuwa E Igbinosa, Olutayo.O Oyerinde, Viranjay. M SrivastavaI, Stanley Mnene</i>	144-147
27.	On the Impact of Propagation Models on TV White Spaces Measurements in Africa <i>Hope Mauwa, Antoine Bagula, Marco Zennaro and Guy-Alain Lusilao Zodi</i>	148-154
28.	A Hardware based Model for an Asset Monitoring and Tracking System: Case of Laptops <i>Admire Mhlaba, Muthoni Masinde</i>	155-161
29.	Three-dimensional Object Recognition based Intelligence System for Identification <i>Chiranji Lal Chowdhary, Kanguana Muatitjeja, Dharm Singh Jat</i>	162-166
30.	Challenges in Protecting Personated Information in Cyber space <i>Kirti Thakur, Harish Kumar</i>	167-171
31.	Dual Secured Hybrid Image Watermarking In Wavelet and Singular Domain <i>Madhuri Agarwal, Dharm Singh Jat and Naveen Choudhary, Isaac Nhamu</i>	172-178
32.	Enhancing Cloud Connectivity among NRENs in the SADC region through a Novel Institution Cloud Infrastructure Framework (ICIF) <i>Nalina Suresh, Jameson Mbale, Alfredo Terzoli, Tulimevava Kaunapawa Mufeti</i>	179-184