



**The International Conference on
Information Technology:
New Generations**

**April 12-15, 2015
The Flamingo Hotel, Las Vegas, Nevada,
USA**



**ITNG 2015
ADVANCE PROGRAM**

April 12, 2015 - SUNDAY

5:00pm - 8:00pm: REGISTRATION (Convention Center-Red Rock Area)

6:00pm - 8:00pm: PRECONFERENCE RECEPTION (Red Rock Area)

April 13, 2015 - MONDAY

8:00am - 5:00pm: REGISTRATION (Convention Center- Red Rock Area)

8:00am - 9:00am: BREAKFAST

9:00am - 9:10am: Conference Opening Remarks by
Shahram Latifi, ITNG Chair, University of Nevada, Las Vegas
(Location: Red Rock 6-8)

9:10am - 10:00am: Keynote by **Mr. Jerry L. Davis**, Ames Research Center, NASA
The Cost of Information Insecurity
(Location: Red Rock 6-8)

10:00 am - 10:30 am :CoffeeBreak

PARALLEL SESSIONS:

A SESSIONS (Red Rock 6-8)

SESSION MA1: Information Systems and Internet Technology I.

CHAIR: Dr. Narayan Debnath, Winona State University, USA

Co-CHAIR:

10:30am - 12:30pm

10:30-10:50 A Context-Aware Paratransit System
Chyi-Ren Dow, Yu-Hong Lee and Zhen-He Ye

10:50-11:10 Mobile Agent-Based Service Migration
YanjunZuo and Jigang Liu

- 11:10-11:30 A Prototype Spatio-temporal Database Built On Top of Relational Database
Yun Tian, Yanqing Ji and Jesse Scholer
- 11:30-11:50 Bitmap-Based On-Line Analytical Processing of Time Interval Data
Philipp Meisen, Diane Keng, Tobias Meisen, Marco Recchioni and Sabina Jeschke
- 11:50-12:10 Accuracy improvement for spatial computation-based end-to-end network measurement
Go Hasegawa, Yusuke Iijima and Masayuki Murata
- 12:10-12:30 Financial measuring of incremental deliveries in software projects
Sandro Magalhaes Manteiga, Andre Gomes Lamas Otero, Adilson Marques da Cunha and Luiz Alberto Vieira Dias
- 12:30-12:50 Performance Measures for Online Advertising Systems
Ben McInroy and Wenying Feng
- 12:50-1:30 Lunch

SESSION MA2: Information Systems and Internet Technology II

CHAIR: Dr. Narayan Debnath, Winona State University, USA

Co-CHAIR:

1:30pm - 3:30pm

- 1:30-1:50 A Fault Tolerant Election Protocol in Asynchronous Distributed Systems with Fail-Stop Model
Sung-Hoon Park
- 1:50-2:10 An analysis on the adoption of KS tools and their related factors
Angela Siew-Hoong Lee, Tong-Ming Lim and Lip-Sum Thi
- 2:10-2:30 Storage Optimization for Non Interactive Dining Cryptographers (NIDC)
Pablo Garcia, Jeroen van de Graaf, German Montejano, Daniel Riesco, Narayan Debnath and Silvia Bast
- 2:30-2:50 Investigate SPRON Convergence Time Using Aggressive Chord and Aggressive AP-Chord
Teck Min Chin and Tong Ming Lim
- 2:50-3:10 Applying Scrum in an Interdisciplinary Project using Big Data, Internet of Things, and Credit Cards
Rene Esteves Maria, Luiz Antonio Rodrigues Junior, Luiz Eduardo Guarino de Vasconcelos, Adriano Fonseca Mancilha Pinto, Paulo Takachi Tsoucamoto, Henrique Nunweiler Angelim Silva, Airton Lastori, Adilson Marques da Cunha and Luiz Alberto Vieira Dias

3:10-3:30 Particle Swarm Optimization for the Minimization of Power Losses in Distribution Networks
Joseph Abugri and Marc Karam

3:30-4:00 Coffee Break

SESSION MA3: Model Driven Data Science.

CHAIR: **Dr. Luiz A. Vieira Dias, ITA, Brazil**

Co-CHAIR:

4:00pm - 6:30pm

4:00-4:20 On the Generation of Full-fledged Code from UML Profiles and ALF for Complex Systems
Federico Ciccozzi, Antonio Cicchetti and Mikael Sjödin

4:20-4:40 SMARTCore: From Singlecore to Multicore Model-Driven Engineering of Embedded Systems
Federico Ciccozzi, Diarmuid Corcoran, TiberiuSeceleanu and DetlefScholle

4:40-5:00 IFA2S – In-Flight Awareness Augmentation Systems
Andre Luiz Pierre Mattei, Adilson Marques da Cunha, Luiz Alberto Vieira Dias, Pedro Carlos da Silva Euphrasio, OnofreTrindade, Jr. and Claudio M. Toledo

5:00-5:15 Nanosatellite Event Simulator Development Using Scrum Agile Method and Safety-Critical Application Development Environment
André Luiz Pierre Mattei, Adilson Marques da Cunha, Luis Alberto Vieira Dias, Eloi Fonseca, Osamu Saotome, Paulo Takachi, Gildárcio Sousa Gonçalves, Thoris Angelo Pivetta, Victor da Silva Montalvão, CassioKendiTakamori, Felipe Lopes de Freitas, ManasseisAlves Ferreira, Mateus Andrade Almeida and Gabriel Gonçalves de Oliveira Rodrigues

5:15-5:30 Internet of Things and the Credit Card Market
Guilherme Augusto Lopes Ferreira, Gildarcio Sousa Goncalves, Andre Gomes Lamas Otero, GlaydsonLuizBertoze Lima, Paulo TakachiTsoucamoto, Paulo Cesar LouzadaVillaca, Lineu Fernando StegeMialaret, Adilson Marques da Cunha and Luiz Alberto Vieira Dias

5:30-5:45 A Fuzzy Decision Support Approach for Model-Based Tradeoff Analysis of Non-Functional Requirements
MehrdadSaadatmand and SaharTahvili

5:50-6:10 Cluster Analysis and Artificial Neural Networks A Case Study in Credit

Card Fraud Detection
Emanuel Carneiro, Luiz Dias, Adilson Cunha and Lineu Mialaret

6:10-6:30 On Bias Corrected Estimators of the Two Parameter Gamma Distribution
Ashok Singh, Anita Singh and Dennis Murphy

6:10-6:30 Exploring Timing Model Extractions at EAST-ADL Design-level using Model Transformations
Alessio Bucaioni, Saad Mubeen, Antonio Cicchetti and Mikael Sjödín

B SESSIONS (Red Rock 3)

SESSION MB1: Security and Privacy in Next Generation Networks I.

CHAIR: **Dr. Kashif Saleem, King Saud University, Saudi Arabia**

Co-CHAIR:

10:30am - 12:30pm

10:30-10:50 Implementation vulnerability associated with OAuth 2.0: A case study on Dropbox
Bruce Wu, Tung Nguyen and Mohammad I Husain

10:50-11:10 A Lightweight Key Freshness Scheme for Wireless Sensor Networks
Ata Ullah Ghafoor, Muhammad Sher, Muhammad Imran, and Kashif Saleem

11:10-11:30 Vectorization on Poly1305 Message Authentication Code
Shay Gueron and Martin Goll

11:30-11:50 Using Unrestricted Mobile Sensors to Infer Tapped and Traced User Inputs
Trang Nguyen

11:50-12:10 Safeguarding Web Surfing with URL Blacklisting
Tara Baniya, Dipesh Gautam and Yoohwan Kim

12:10-12:30 Data Warehousing Based Computer Forensics Investigation Framework
Waleed Halboob, Ramlan Mahmood, Muhammad Abulaish, Haider Abbas and Kashif Saleem Khan

12:30-1:30 Lunch

SESSION MB2: Security and Privacy in Next Generation Networks II.

CHAIR: Dr. KashifSaleem, King Saud University, Saudi Arabia

Co-CHAIR:

1:30pm - 3:30pm

- 1:30-1:50 LPSSE: Lightweight Phrase Search with Symmetric Searchable Encryption in Cloud Storage
Mingchu Li, Wei Jia, Cheng Guo, Weifeng Sun and Xing Tan
- 1:50-2:10 Access Control Model Based on Trust and Risk Evaluation in IDaaS
Fei Liu, Jing Wang, Hongtao Bai and Huiping Sun
- 2:10-2:30 Security and design Challenges in Cyber-Physical Systems
Yenumula Reddy
- 2:30-2:50 Privacy-preserving Mechanism for Monitoring Sensitive Data
Rafael Tomé de Souza and Sergio D. Zorzo
- 2:50-3:10 A Novel Approach to Detect Tampered Wireless Network Applications
Victor Clincy and Hossain Shahriar
- 3:10-3:30 Healthcare Privacy: How Secure Are the VOIP/Video-Conferencing Tools for PHI Data?
Sweta Gurung and Yoohwan Kim
- 3:30-4:00 Coffee Break

SESSION MB3: Security and Privacy in Next Generation Networks III.

CHAIR: Dr. KashifSaleem, King Saud University, Saudi Arabia

Co-CHAIR:

4:00pm - 6:00pm

- 4:00-4:20 Analysis of Security Vulnerabilities of Cloud Computing Environment Service Models and its Main Characteristics
AntenehGirma, Moses Garuba and Jiang Li
- 4:20-4:40 Analysis of DDoS Attacks and an Introduction of a Hybrid Statistical Model to Detect DDoS Attacks on Cloud Computing Environment
AntenehGirma, Moses Garuba, Jiang Li and ChunmeiLui
- 4:40-5:00 Taxonomy of Delegation Model
Amir Ali, UmmeHabiba and M. AwaisShibli
- 5:00-5:20 Network Intrusion Detection using Diversity-based Centroid

Mechanism

Muhammad ShafiqueGondal, Arif Jamal Malik and FarrukhAslam Khan

5:20-5:40

Relationship between Lucas Sequences and Gaussian Integers in Cryptosystems

Aleksey Koval

5:40-6:00

Analysis of the Scalability and Stability of an ACO Based Routing Protocol for Wireless Sensor Networks

KashifSaleem, AbdelouahidDerhab, Mehmet A. Orgun, and Jalal Al-Muhtadi

SESSION MC1 – POSTERS (Hallway)

CHAIR:

Co-CHAIR:

10:30am - 12:30pm

(Location: Hallway)

Deadlocks in different Operating Systems

HelidonKarcanaaj, EdraBumci, IgliTafaj and Julian Fejzaj

Facebook Privacy Management Simplified

Shih-wei Fang, DananjayaRajamanthri and Mohammad I Husain

Interest Flooding Attack Countermeasures Assessment on Content Centric Networking

MatteoVirgilio, Guido Marchetto and Riccardo Sisto

Android vsiOS Security: A Comparative Study

Ibtisam Mohamed and Dhiren Patel

Facebook Privacy Management Simplified

Shih-wei Fang, DananjayaRajamanthri and Mohammad I Husain

Information Security Culture Critical Success Factors

Mohammed Alnatheer

Strategy as a prerequisite of Enterprise Web 2.0 implementation

Fayez Alqahtani

A Model of the Factors Influencing Enterprise Architecture Evolution in Organizations

AyedAlwadain and AiiadAlbeshri

SESSION MC2 – POSTERS(Hallway)

1:30pm - 3:30pm

(Location: Hallway)

E-commerce concerns: Latin American factors in transactional websites

Jaime Diaz, CristianRusu, CristianBarria and César Collazos

Adopting Collaborative Workflow Pattern: Lesson Learned
Antonio Capodiecì, Giuseppe Del Fiore and Luca Mainetti

Implementations of file locking mechanisms, Linux and Windows
NevilaXoxa, AldigerMehilli, Iglitafa and Julian Fejzaj

The stimulation of round robin and priority scheduling algorithm
Iglitafa, EnriFeka and Julian Fejzaj

Evaluation of accomplishment of DO-178C objectives by CMMI-DEV 1.3
Alan Ferreirós and Luiz Alberto Vieira Dias

A Case Study Using Testing Technique for Software as a Service (SaaS)
Alexandre da Silva, Lucas Correa, Adilson Cunha and Luiz Dias

An Attempt to Find Information for Multi-dimensional Data Sets
Yong Shi and Sunpil Kim

April 14, 2015 - Tuesday

7:00am - 5:00pm: REGISTRATION (Convention Center-Red Rock Area)

8:00am - 9:00am :BREAKFAST (Red Rock Foyer)

9:10am - 10:00am: Keynote by **Dr. Sergiu Dascalu**, University of Nevada, Reno

**Harnessing the Power of Computer Science and Engineering to
Support Data-Intensive Research Projects in Nevada**
(Location: Red Rock 6-8)

10:00am - 10:30am: CoffeeBreak

PARALLEL SESSIONS:

A SESSIONS (Red Rock 6-8)

SESSION TA1: Networking and Wireless Communications I

CHAIR: **Dr. Yenumula Reddy, Grambling State University, USA**

Co-CHAIR: **Dr. Sonya Zhang, Cal Poly, USA**

10:30am - 12:30pm

10:30- 10:50 Use of Centrality Metrics to Determine Connected Dominating Sets
for Real-World Network Graphs
NatarajanMeghanathan

- 10:50-11:10 Evaluating the Effect of 3D World Integration within a Social Software Environment
Hani Bani-Salameh and Clinton Jeffery
- 11:10-11:30 Comparison of Multi-user Timing offset Resilient Uplink OFDMA Schemes with Optimal Power Control
Jin-hui Lee, Dong-jun Na and Kwonhue Choi
- 11:30-11:50 Towards scalability in systems with write operations in relational databases
Leonardo Silva, Leandro Vasconcelos, Glauco Silva and LuizVasconcelos
- 11:50-12:10 Design of Low-Cost On-Board Auto-tracking Antenna for Small UAS
Sai Ram Ganti and Yoohwan Kim
- 12:10-12:30 A Technology-Business-Environment Model for Effective Internet Entrepreneurship Education
Sonya Zhang
- 12:30-1:30pm Lunch

SESSION TA2: Networking and Wireless Communications II

CHAIR: Dr.Yenumula Reddy, Grambling State University, USA

Co-CHAIR: Dr. Sonya Zhang, Cal Poly, USA

1:30am - 3:30pm

- 1:30-1:50 A Minimum Channel Switch Routing Protocol for Cognitive Radio Ad hoc Networks
NatarajanMeghanathan and MesafintFanuel
- 1:50-2:10 Low Cost Unmanned Aerial Vehicle Monitoring Using Smart Phone Technology
Paul Wong, Duong Nguyen, Ahmed Abukmail, Richard Brown, Robert Ryan and Mary Pagnutti
- 2:10-2:30 Intrusion detection system against SinkHole attack in wireless sensor networks with mobile sink
Guerroumi Mohamed, AbdelouahidDerhab, and KashifSaleem
- 2:30-2:50 Implementing Packet Transfer in wireless Networks Using PyGame
Yenumula Reddy and Anthony Cherry
- 2:50-3:10 Parental Awareness and Mediation of Children's Internet Use in Kuwait

Samir Hamade

3:10-3:30 Pedagogical Support Using Moodle Workflows
Kevin Gary

3:30-4:00 Coffee Break

SESSION TA3: Wavelets and Validated Numerics

CHAIR: **Dr. Teruya Minamoto, Saga University , Japan**

Co-CHAIR:

4:00pm - 6:30pm

4:00-4:25 Automatic detection of early esophageal cancer from endoscope
image using fractal dimension and discrete wavelet transform
Jumpei Yamaguchi, Akihiko Yoneyama and TeruyaMinamoto

4:25-4:50 Image quality assessment for measuring the degradation by using
the dual-tree complex discrete wavelet transform
Hajime Omura and TeruyaMinamoto

4:50-5:10 No-reference image blur assessment in the DWT domain and
blurred image classification
Akihiko Yoneyama and TeruyaMinamoto

5:10-5:30 Image Compression with Average Interpolating Lifting Scheme on
Triangular Lattice
Kensuke Fujinoki

5:30-5:50 Convolution and Correlation Theorems for Wigner-Ville Distribution
Associated with Linear Canonical Transform
MawardiBahri and RyuichiAshino

5:50-6:10 Fractional Hilbert transforms of biorthogonal wavelets
*Akira Morimoto, RyuichiAshino, KazumaIkebe, Motoi Tatsumi and
Takeshi Mandai*

6:10-6:30 Reproducible Triangular Solvers for High-Performance Computing
Roman Iakymchuk, David Defour, Sylvain Collange and StefGrallat

6:30-7:30 **ITNG 2015 Planning Meeting (Bryce Room, by invitation)**

7:30-8:00 Award Ceremony (Red Rock 6-8)

8:00- 9:30 Conference Dinner Reception (Garden View Terrace)

B SESSIONS (Red Rock 3)

SESSION TB1: Software Engineering I

CHAIR: **Dr. Glauco Carneiro**, University of Salvador (UNIFACS), Brazil

Co-CHAIR:

10:30am - 12:30pm

- | | |
|---------------------|---|
| <u>10:30- 10:50</u> | An approach to Business Process Recovery from Source Code
<i>Luiz Alexandre Pacini Rabelo, Antonio Francisco do Prado,
Wanderley Lopes de Souza and Luís Ferreira Pires</i> |
| <u>10:50-11:10</u> | Fuzzy Time Constraint Propagation Mechanism for Workflow Nets
<i>Joslaine Freitas and Stéphane Julia</i> |
| <u>11:10-11:30</u> | A study of test techniques for integration with Domain Driven Design
<i>Eloisa Santos, Delano Beder and RosângelaPenteado</i> |
| <u>11:30-11:45</u> | Adaptable Design for Root Cause Analysis of a Model-Based Software Testing Process
<i>MikkoNieminen and TomiRäty</i> |
| <u>11:45-12:00</u> | Investigating the Link between User Stories and Documentation Debt on Software Projects
<i>Henrique F. Soares, Nicolli Souza Rios Alves, ThiagoSouto Mendes, ManoelMendonca and Rodrigo Oliveira Spinola</i> |
| <u>12:00-12:15</u> | Visual approach for change impact analysis: a controlled experiment
<i>Fernanda Delfim, LilianScatalon, Jorge Prates and Rogério Eduardo Garcia</i> |
| <u>12:15-12:30</u> | Identifying Similarity of Software in Ecosystems - An Exploratory Study
<i>Luisa Ramírez and Heitor Costa</i> |
| <u>12:30-12:50</u> | A System based on Ontology and Case-Based Reasoning to Support Distributed Teams
<i>Rodrigo Rocha and Ryan RibeiroAzevedo</i> |
| <u>12:50-1:10pm</u> | Using Developers Contributions on Software Vocabularies to Identify Experts
<i>Katysco de F. Santos, Dalton D.S. Guerrero, Jorge C.A. de Figueiredo</i> |
| <u>1:10-1:30pm</u> | Lunch |

SESSION TB2: Software Engineering II

CHAIR: Dr. Paulo Caetano da Silva, University of Salvador, UNIFACS, Brazil

Co-CHAIR:

1:30pm - 3:30pm

1:30-1:50 A Software Framework for Identifying the Law of Demeter Violations
Roberto Mellado, Gabriel Moreira, Adilson Cunha and Luiz Dias

1:50-2:10 A Fuzzy Logic Model for Predicting the Development Schedule of
Software Projects
Cuauhtémoc López-Martín

2:10-2:30 MuAsmetal: An Experimental Mutation System for Asmetal
Osama Alkrarha and JameleddineHassine

2:30-2:45 Criteria and Guidelines to Improve Software Maintainability in Software
Product Lines
Gustavo Vale, Ramon Abílio, André Freire and Heitor Costa

2:45-3:00 Detecting Code Smells in Software Product Lines - An Exploratory
Study
Ramon Abílio, Juliana Padilha, Eduardo Figueiredo and Heitor Costa

3:00-3:15 Making GUI Testing Practical: Bridging the Gaps
PekkaAho, Matiaz Suarez, AtifMemon and TeemuKanstrén

3:15-3:30 Towards a framework for gamification design on crowdsourcing
systems: The G.A.M.E. Approach
JailsonBrito, Vaninha Vieira and Adolfo Duran

3:30-4:00 Coffee Break

SESSION TB3: High Performance Computer Architecture & Green Computing

CHAIR: Dr. Cameron Seay, North Carolina A&T State University

Co-CHAIR:

4:00pm - 6:40pm

4:00-4:20 LightVN: A Light-Weight Testbed for Network and Security
Experiments
QuamarNiyaz, Weiqing Sun, RaoXu and MansoorAlam

4:20-4:40 High-Performance Biomedical Association Mining with MapReduce
YanqingJi, Yun Tian, FangyangShen and John Tran

4:40-5:00 Integrated Design Patterns for Control System Analysis and Synthesis
*Zechariah Gajadhar, Anjali Dhobale, William Babikian, Michael
Rubenacker and Shouling He*

<u>5:00-5:20</u>	Evaluation of Online Power-Down Algorithms <i>James Andro-Vasko, Wolfgang Bein, Hiro Ito and DaraNyknahad</i>
<u>5:20-5:40</u>	Optimizing Border Patrol Operations Using Unmanned Aerial Vehicles <i>DoinaBein, Wolfgang Bein, Bharat Madan and AshishKarki</i>
<u>5:40-6:00</u>	Smart Grid Security Risks <i>Rajeev Agrawal and Jeffrey Anu</i>
<u>6:00-6:20</u>	Joint Write-Once-Memory and Error-Control Codes <i>Xudong Ma</i>
<u>6:20-6:40</u>	Cloud Computing: Digital Forensic Solutions <i>Mehrdad Sharbaf and Emi Morioka</i>
<u>6:30-7:30</u>	<u>ITNG 2015 Planning Meeting (Bryce Room, by invitation)</u>
<u>19:30-20:00</u>	Award Ceremony (Red Rock 6-8)
<u>20:00-21:30</u>	Conference Dinner Reception (Garden View Terrace)

SESSION TC1 – Posters(Hallway)

10:30am -12:30pm (Location: Hallway)

Using Hadoop on the Mainframe: A Big Solution for the Challenges of Big Data
Rajeev Agrawal, Anirudh Kadadi, Cameron Seay and Yannick Barel

Using Personas to Support the Goals in User Stories
Pankaj Kamthan

Risk Management Lifecycle Implementation Services in SOA
Erasmonteiro and Paulo Caetano da Silva

Experience report on agile tests implementation
Danielle Menendez, Thiers Sousa, Elisa Menendez and Paulo Caetano da Silva

Project management using the Scrum agile method: A case study within a small enterprise
Breno Lisi Romano and Alan Delgado Dasilva

Deploying Integrated Environment for Software Testing Tools
BrenoLisi Romano, Adilson Marques Da Cunha and Ricardo Bragagnolle De Souza

An experiment of mutual interference between automotive LIDAR scanners
Gunzung Kim, Jinseon Song, Jeongsook Eom and Yongwan Park

An Obstacle Classification Method Using Multi-Feature Comparison Based on 2D LIDAR Database
Moohyun Lee, Gunzung Kim and Yongwan Park

SESSION TC2 – POSTERS(Hallway)

4:00pm - 6:30pm (Location: Hallway)

Deadlock-freeness Scenarios Detection in Web Service Composition
Lígia Maria SoaresPassos and Stéphanie Julia

Hardware Development: Agile and Co-Design
Glaydson Luiz Bertoze Lima, Guilherme Augusto Lopes Ferreira, Osamu Saotome, Adilson Marques da Cunha and Luiz Alberto Vieira Dias

Modeling Recursive Search Algorithms By Means of Hierarchical Colored Petri Nets and CPN Tools
Clarimundo Júnior, Rita Julia and Stéphanie Julia

A Parallel GPU Implementation of the TimberWolf Placement Algorithm
HaidarHarmanani and Ahmad Al-Kawam

ApplyingThe Method Of Diverse Redundancy In Cloud Based Systems For Increasing Reliability
Seilkhan Boranbayev, Sanzhar Altayev and Askar Boranbayev

Applying Data Mining Techniques To Intrusion Detection
Jonathon Ng, Deepti Joshi and Shankar Banik

Implementation of Security Systems for Prevention of Loss of information at Organizations of Higher Education
Askar Boranbayev

7:30-8:00 Award Ceremony (Red Rock 6-8)

8:00-9:30 Conference Dinner Reception

April 15, 2015 - Wednesday

7:00am-8:00am: REGISTRATION (Convention Center-Red Rock Area)

7:00am - 8:00am: BREAKFAST (Red Rock foyer)

A SESSIONS (Red Rock 6)

SESSION WA1: Innovative Technologies and Practices in Education, and Simulation

CHAIR: **Dr. Liliana Favre, Universidad Nacional de Buenos Aires, Argentina**

Co-CHAIR:

8:00am - 10:00am

8:00-8:20 GLIESE, a framework for experimental game development
Federico Améndola, Martín Fernández and Liliana Favre

8:20-8:40 Computer Security Training Recommender for Developers:
Leveraging the Power of Static Analysis and Vulnerability

Repositories
Muhammad Nadeem

- 8:40-9:00 Training Through Simulation for Digital Battlefield
CristianBarria, CristianRusu, Claudio Cubillos and Jaime Diaz
- 9:00-9:20 Heuristic Evaluation as a Complement to Usability Testing: A Case Study in Web Domain
Freddy Paz, Freddy Asrael Paz, Daniela Villanueva and José Antonio Pow-Sang
- 9:20-9:40 A Multiple View Interactive Environment to Support MATLAB and GNU/Octave Program Comprehension
Ivan Lessa, Glauco Carneiro, Miguel Monteiro and Fernando Abreu
- 9:40-10:00 OPEN SLOT
- 10:00-10:30 Coffee Break

SESSION WA2: Future of Digital Health

CHAIR: **Dr. Christoph Thuemmler, Edinburgh Napier University, UK**
Co-CHAIR:

10:30am - 12:30pm

- 10:30-10:50 The Role of mHealth Applications in Societal and Social Challenges of the Future
MašaIsaković, JakaCijan, Urban Sedlar, Mojca Volk and JanezBešter
- 10:50-11:10 Opportunities and Challenges of Internet-based Health Interventions in the Future Internet
Ai Keow Lim and ChristophThuemmler
- 11:10-11:30 Future Internet in Surgical Operating Theatre
Ahmed ElsherbinyHasan, AloisPaulin, Armin Schneider and ChristophThuemmler
- 11:30-11:50 Automatic Fall Detection Using Mobile Devices
Melissa Mulcahy and Stan Kurkovsky
- 11:50-12:10 Managing the chicken-and-egg problem for hydrogen powered Vehicles and the Corresponding Infrastructure
Martin Zsifkovits and Markus Günther
- 12:10-12:30 OPEN SLOT

B SESSIONS (Red Rock 3)

SESSION WB1: Data Mining

CHAIR: **Dr. Ibraheem Alolyan, King Saud University, Saudi Arabia**

Co-CHAIR:

8:00am - 10:00am

- | | |
|--------------------|---|
| <u>8:00-8:20</u> | PERSEC: A Middleware for Multiple Encryption in Web Services
<i>Allan Araújo and Paulo Caetano da Silva</i> |
| <u>8:20-8:40</u> | Dataless Data Mining: Association Rules-based Distributed Privacy-preserving Data Mining
<i>Vikas Ashok, Karthik Navuluri, Ahmed Alhafdhian and Ravi Mukkamala</i> |
| <u>8:40-9:00</u> | Intelligent Mobile App for Traffic Monitoring
<i>Mark Smith</i> |
| <u>9:00-9:15</u> | Collecting and Mining Big Data for Electric Vehicle Systems Using Battery Modeling Data
<i>Chung-Hong Lee and Chih-Hung Wu</i> |
| <u>9:15-9:30</u> | Linear Optimization with Fuzzy Objective Function and Constraints
<i>Ebraheem Alolyan</i> |
| <u>9:30-9:45</u> | Low Birth Weight prediction based on maternal and Fetal Characteristics
<i>Mali Abdollahian and Nadeera Gunaratne</i> |
| <u>9:45-10:00</u> | Using the Web 1T 5-gram Database for Attribute Selection in Formal Concept Analysis to Correct Overstemmed Clusters
<i>Guymon Hall and Kazem Taghva</i> |
| <u>10:00-10:30</u> | Coffee Break |

SESSION WB2 : Imaging and Potpourri

CHAIR: **Dr. Frederick Harris, University of Nevada, Reno**

Co-CHAIR:

10:30am - 12:30pm

- 10:30-11:50 Change Detection in Satellite Images using Self-Organizing Maps
Michael Santos, Elcio Shiguemori, Rodrigo Mota and Alexandre Ramos
- 10:50-11:10 Improved Histogram-Shifting-Imitated Reversible Data Hiding Scheme
Pyung-Han Kim, Dae-Soo Kim and Kee-Young Yoo
- 11:10-11:30 Qubits or Symbolic Substitutions for General-purpose Quantum Computing
C.H. Wu
- 11:30-11:45 A Boltzmann Machine Implementation for the D-Wave
John Dorband
- 11:45-12:00 A Light-based Immersive Visualization Environment for Imaginative Actualization: A New Technology for Psychological Understanding
Liane Gabora
- 12:00-12:15 GPU Based Sound Simulation and Visualization
Torbjorn Loken, Sergiu Dascalu and Frederick Harris
- 12:15-12:30 Constructing 2D Shapes by Inward Denting
Laxmi Gewali and Pratik Hada

Conference Conclusion

END OF SCHEDULE.....