

2012 Second International Conference on Innovative Computing Technology

(INTECH 2012)

**Casablanca, Morocco
18-20 September 2012**



IEEE Catalog Number: CFP1260T-PRT
ISBN: 978-1-4673-2678-0



Second International Conference on

Innovative Computing Technology (INTECH 2012)

September 18-20, 2012

Casablanca, Morocco



Technically co-sponsored by IEEE UK&RI Consumer Electronics Chapter and IEEE Broadcast Technology Chapter.
The proceedings will be archived in the IEEE Xplore.

Contents

<u>Innovative Computing Systems and Applications</u>	<u>Signal Processing</u>	<u>Web Applications and Technologies</u>	<u>Intelligent Computing Applications</u>
<u>Cloud Computing</u>	<u>Artificial Intelligence</u>	<u>Content Analysis, User Interfaces, Visualization and Modeling</u>	<u>Web Services</u>
<u>Fuzzy and Neural Network Systems, optimization algorithms</u>	<u>Human-Computer Interaction</u>		

Network and Information Security

[Game in Aloha Protocols for Wireless Data Networks](#)"3

Mohamed Lamine BOUCENNA, Malek BENSLAMA

[A Deadlock Managing Process for Distributed and Replicated Database in P2P System](#)"8

Hemam Sofiane Mounine, Hidouci Khaled Walid

[Cyber-Attack for BGP Systems Using CoPNet Model](#)"32

Abdelali EL BOUCHTI Abdelkrim HAQIQ

[Baeza-Yates and Navarro Approximate String Matching for Spam Filtering](#) "38

Monther Aldwairi and Yahya Flaifel

[MC-PIM-SM: multicast routing protocol PIM-SM with Multiple Cores Shared Tree for mobile IPv6 environment](#)"43

Youssef BADDI, Mohamed Dafir ECH-CHRIF El KETTANI

[Biometric Cryptosystems based Fuzzy Vault Approach:Security Analysis](#) "49

Maryam LAFKIH, Mounia MIKRAM, Sanaa GHOUZALI, Mohamed EL HAZITI, Driss Aboutajdine

[Quantum Cryptography based on Grover's Algorithm](#)"55

Z. Sakhi, A. Tragha, R. Kabil, M. Bennai <u>Combination Approach to Select Optimal Countermeasures based on the RORI Index</u> '''5:
Gustavo Gonzalez Granadillo, Herve Debar, Gregoire Jacob, Luigi Coppolino <u>Optimized strategy of deployment firewall policies</u> '''68
F.Bezzazi, A. Kartit, M. El Marraki and D. Aboutajdine <u>Information Security, new approach</u> '''73
Hicham Elachgar, Boubker Regragui
Mobile Networks and Network Systems
<u>Routing Metric for Wireless Mesh Networks</u> '''79
Naima EL Haoudar, Abdelilah Maach <u>Simulation Based Evaluation of MANET Routing Protocols for Static WSN</u> '''85
Ali A.S. Ihbeel, Hasein Issa Sigiuk & Abdelhadi A. Alhnsh <u>HANDOFF BETWEEN WiMAX AND WiFi NETWORKS</u> '''8;
Ait mansour Asmae, Enneya Nourddine, Ouadou Mouhammed <u>.Reducing Handover Metrics For Access Network Selection In Heterogeneous Wireless Networks</u> '''97
Mohamed Lahby, Leghris Cherkaoui, Abdellah Adib <u>An Efficient Model for Nodes Deployment Optimization in Wireless Mesh Networks</u> '''3
Tarik MOUNTASSIR, Bouchaib NASSEREDDINE, Abdelkrim HAQIQ <u>RADIUS Accounting Server Behavior with Interactive Model</u> '''9
Rohan V Deshmukh <u>Quality of Service Analysis of Control Access Scheme of Multimedia Traffic in HSDPA Channel using Markovian Arrival Process and Stochastic Reward Nets</u> '''3
Abdelali EL BOUCHTI,Abdelkrim HAQIQ <u>MAC queue size and energy-efficient of IEEE 802.11e EDCA in Wireless Multimedia Sensor Networks</u> '''9
Hicham Touil, Youssef Fakhri, Mohammed Benattou <u>An Efficient Bandwidth Management Framework for Wireless Mesh Networks</u> '''324
Ch. Pradeep Reddy, P. Venkata Krishna <u>Enhancements in AODV routing using velocity and distance</u> '''329
BISENGAR AHMED, ZYTOUNE OUADOUSSI, RZIZA MOHAMED and OUADOU MOHAMED
Software Engineering
<u>Automatic Generation of PROMELA Code from Sequence Diagram with Imbricate Combined Fragments</u> '''333
Abdelkrim Amirat, Ahcen Menasria, Mouna Ait Oubelli and Nadia Younsi

Refactor Software Architecture Using Graph Transformation Approach "339

Abdelkrim Amirat and Abderrezak Bouchouk, Mohamed Ould Yeslem and Nouredine Gasmallah

A Constraint Programming approach for coverage optimization problem in WSN""345

Abderrazak Daoudi, Youssef Kerfi, Imade Benelallam, El Houssine Bouyakhf

Classification of the Metric in ISO Model by Oriented Object Properties""34:

Zineb BOUGROUN, Adil ZEAARAOUI, M.G. BELKASMI, T.BOUCHENTOUF

Object-oriented Analysis and Design Approach for Requirements Engineering""355

A. ZEAARAOUI, Z. BOUGROUN, M.G BELKASMI, T. BOUCHENTOUF

A Method for Modelling and Organazing ETL Processes"35:

Ahmed KABIRI, Dalila CHIADMI

Digital Image/Video Processing

A medical image watermarking scheme based on Dual-Tree wavelet transform"366

Romain Mavudila Kongo, Lhousaine MASMOUDI Nadia Idrissi, Najem HASSANAIN, Mohammed CHERKAOUI, Ahmed ROUKHE

Novel Fully Automated Computer Aided-Detection of Suspicious Regions within Mammograms""375

Sabra Hamissi, Hayet Farida Merouani

Toward a Graphical Tool for Image and Video Processing Embedded Systems Design""37:

Noureddine ZHAR, Mohamed AIT ALI, Mohsine ELEULDJ

AN EASY FRAMEWORK FOR AN ACCURATE ESTIMATION OF THE STRUCTURE FROM MOTION"386

A.EL-ATTAR, H.TAIRI, M.KARIM

Motion estimation of aliased images using the phase correlation"392

Said OUSGUINE, Fedwa ESSANOUNI, Leila ESSANOUNI, Driss ABOUTAJDINE

A new method using moments correlation for action change detection in videos"396

Imen Lassoued, Ezzeddine Zagrouba, Youssef Chahir

Detection evaluation and testing region incoming people's in a simple camera view ""39;

Abderrahmane EZ ZAHOUT, Hadi Moulay Youssef and Rachid Oulad Haj Thami

Band Selection and Classification of Hyperspectral Images by Minimizing Normalized Mutual Information 3: 6

ELkebir Sarhrouni, Ahmed Hammouch, Driss Aboutajdine

Video Summarization Using Shot Segmentation And Local Motion Estimation "3; 2

Wafae SABBAR, Adil CHERGUI, Abdelkrim BEKKHOUCHA

Innovative Computing Systems and Applications

Construction of Codes Protographies LDPC Quasi-Cycliques Based on an Arithmetic Progression"3; 6

I. DIOP; S .M FARSSI, M.BA; H. B DIOUF;
<u>LMSGENERATOR: The contribution of XML technology and model transformations</u> ""422
Rachid DEHBI , Mohamed TALEA, Abderrahim TRAGHA
<u>Research of an event process designed for event & voluminous graphs to compute customized itinerary</u> ""428
Kassara Omar, Cherrat Loubna, Ezziyyani Mostapha, Essaaidi Mohammad
<u>A hybrid method for improving the SQD-PageRank algorithm</u> ""655
Ahmed Said DJAANFAR, Bouchra FRIKH and Brahim OUHBI
Signal Processing
<u>Min-Sum Algorithm Based Efficient High Level Methodology for Design, Simulation and Hardware implementation of LDPC Decoders</u> ""43:
Abdessalam.Ait madi,Ali.Ahaitouf, Anas.Mansouri
<u>A Detection System of Infant Cry Using Fuzzy Classification Including Dialing Alarm Calls Function</u> ""446
Mohammad Kia, Shabnam Kia, Neda Davoudi, Ramyar Biniazan
<u>Optimum Power Allocation for Amplify-and-Forward Cooperation Strategy in WSN</u> ""452
S. EL ABDELLAOUI, Y. FAKHRI, D. ABOUTAJDINE
<u>Unequal Error Protection Coded Interleave Division Multiple Access (UEP-CIDMA)</u> ""457
Mohamed Fathy, Esam A. A.A. Hagras, Mohamed S.El Mahallawy and Mohamed Aboul dahab
Web Applications and Technologies
<u>Extending SWRL Rules for Rules/Concepts Integration in Hybrid Ontologies</u> ""462
Zizette Boufaida, Souad Bouaicha
<u>Contextual Modelling of the User Browsing Behaviour to Identify the User's Information Need</u> ""469
Djalila Boughaleb, Nadir Farah
<u>Collaborative semantic annotation of digitized old documents</u> ""475
Mohamed El Ouaazizi and Noureddine Chenfour
Intelligent Computing Applications
<u>Intrusion Detection Based Sample Selection For Imbalanced Data Distribution</u> ""47;
Ikram Chaïri, Souad Alaoui, Abdelouahid Lyhyaoui
<u>Towards Effective Processing of Large Text Collections</u> ""487
Julian Szyma'nski, Henryk Krawczyk
<u>Modeling of a Standard Particle Swarm Optimization Algorithm in MATLAB by Different Benchmarks</u> ""493

Talha Ali Khan, Talha Ahmed Taj, Muhammad Kamran Asif, Imran Ijaz

[A word-image's System searching: Case of printed Arabic word](#)"497

Anass SMAILI, Ali LASFAR, Mohamed SBIHI

[Low rank MMSE channel estimation in MIMO-OFDM systems](#)"49;

Houda KROUMA, Malek BENSLAMA, Farouk OTHMANI-MARABOUT

Cloud Computing

[Performance Analysis Framework to Optimize Storage Infrastructure for Cloud Computing](#)"4; 7

Mohammed Fazil Ali, Ahmed Muhammad Barnawi, Abul Bashar

[Design of distributed IMS by classification and evaluation of costs for secured architecture](#)"4; 3

Hamid Allouch, Mostafa Belkasmi

[A Cloud computing approach based on mobile agents](#)"4; 9

Hamza Saouli

Artificial Intelligence

[New Decision Function for Support Vector Data Description](#)"527

Mohamed EL Boujnouni, Mohamed Jedra, and Noureddine Zahid

[Data-driven name reduction for record linkage](#)"533

Marijn Schraagen and Walter Kosters

[Optimization of Smart Choice of Shares Portfolio Using Artificial Intelligence](#)"539

M. Elhachloufi, Z. Guennoun, F. Hamza

[A Decision Algorithm for Efficient Hybrid Burst Retransmission and Burst Cloning Scheme over Star OBS Networks](#)"547

Salek Riadi, Abdelilah Maach

[Novel Simple Decision Stage of Pan & Tompkins QRS Detector and its FPGA-Based Implementation](#)"553

EL Hassan El Mimouni, Mohammed Karim

Content Analysis, User Interfaces, Visualization and Modeling

[Music Curator Recommendations Using Linked Data](#)"559

Koki Kitaya, Hung-Hsuan Huang and Kyoji Kawagoe

[Searching and Ranking Researchers by Keywords based on Author and Paper Matrix Rank](#)"562

Kingo OSAKA, Hung-Hsuan HUANG and Kyoji KAWAGOE

[Building semantic richness among natural language content](#)"567

Sulaiman Al-reyaee, P. Vijayakumar

Web Services

<u>Integration of Mobile Agent and Semantic Web Service in a mobile environment</u> "56; HAMIDA Souraya, KAZAR Okba, AMGHAR Youssef
<u>Recommendation based on Co-similarity and Spanning Tree with Minimum Weight</u> "577 Ouafae BAIDA , Najma HAMZAOUI, Abdelfettah SEDQUI, Abdelouahid LYHYAOUI
<u>Multi-Criteria Collaborative Recommender</u> "582 Najma HAMZAOUI, Abdelfettah SEDQUI, Abdelouahid LYHYAOUI
<u>Web 2.0 integration in a WEB-based Decision Support System : Effect study of social networking on decision-making</u> "587 Imene Bessedik ,Noria Taghezout and Amina Saidi
<u>Maude Specification of Web Service Composition and Adaptation</u> "593 Yasser Oussalah, Nadia Zeghib
<u>Towards Contract-Based Approach for Quality-Driven Service Component Architecture</u> "599 Maryem Rhanoui, Bouchra El Asri
 Fuzzy and Neural Network Systems, Optimization Algorithms
<u>Flight Coupling Model Effect Based Fuzzy Control Logic</u> "5: 7 Ali Mohamed Elmelhi
<u>Optimized DTC by genetic speed controller and inverter based neural networks SVM for PMSM</u> "5; 4 Aziz El Janati El Idrissi, Noureddine Zahid, Mohamed Jedra
<u>Fuzzy-Based Approach for Context-aware Service Retrieval</u> "5; 8 Mohcine MADKOUR, Abdelilah Maach, Elghanami Driss, Abderrahim HASBI
 Human-Computer Interaction
<u>Construction of an Image Descriptor from Graph Representation Based on a Primitives Detected by FAST</u> "624 Adil CHERGUI, Abdelkrim BEKKHOUCHA,Wafae SABBAR
<u>Probabilistic Query Expansion Method Using Recommended Past User Queries</u> "628 Btihal El Ghali, Abderrahim El Qadi, Mohamed Ouadou, Driss Aboutajdine
<u>Modeling of a Humanoid Robot with 18 DOF in a Virtual Environment</u> "634 Meriem MENAD, Zoubir AHMED FOITIH
<u>Feature Level Fusion in Multimodal Biometric Identification</u> "63: Souaad belhia, Abdel kader Gafour
<u>Extracting reusable fragments from Business Process using BPMN</u> "646 Maryam Radgui, Rajaa Saidi and Salma Mouline
<u>Road-signs detection by using of colour image segmentation method based on the 3D content correlation</u> "652