

2015 International Conference on Information & Communication Technology and Systems (ICTS 2015)

**Surabaya, Indonesia
16 September 2015**



**IEEE Catalog Number: CFP1589Y-POD
ISBN: 978-1-5090-0097-5**

**Copyright © 2015 by the Institute of Electrical and Electronic 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 publication is a representation of what appears in the IEEE Digital Libraries. Some format issues inherent in the e-media version may also appear in this print version.***

IEEE Catalog Number:	CFP1589Y-POD
ISBN (Print-On-Demand):	978-1-5090-0097-5

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

KN-Keynote Speech

- KN-1 How ICT Changes Quality Assurance in Graduate Education and Research? - From Knowledge Transfer to Cognitive Skill Improvement - (1 - 2)
Shinobu Hasegawa
- KN-2 Interaction with Wearable Computers: Challenges and Perspectives (3 - 4)
Simon Perrault
- KN-3 Measurement and Processing for Potential of Unbalanced Complex Kinetics of Heart Rate Variability (5 - 6)
Tomohiko Igasaki
-

T1-Track 1

- T1-1 Detection of Alzheimer's Disease using the Statistical Approach from 3D Magnetic Resonance Image (7 - 10)
Devvi Sarwinda, Ibnu Daqiqil Id
- T1-2 Ultrasound B-mode Imaging using Adapted Time of Flight for Ultrasound Fat Measurement Sensor (11 - 16)
Norlida Buniyamin, M. Hazwan Abdul Halim, Zainuddin Mohamad
- T1-3 Support Vector Machine with Multiple Kernel Learning for Image Retrieval (17 - 22)
Muhammad Athoillah, Isa Irawan, Elly Imah
- T1-4 Porn Picture Files Scanning Method Based On The Number of Picture Files In A Directory (23 - 28)
Ario Yudo Husodo, I Gede Pasek Suta Wijaya
- T1-5 Analysis Of Cement Sales Forecast Pattern Changes In Cement Indonesia Ltd (Persero) Using Artificial Neural Network :East Java Sales Area (PIC)
Wiwik Anggraeni, Avia Riska Syofiani
- T1-6 Spinal Curvature Determination from X-Ray Image using GVF Snake (35 - 40)
Madha Christian Wibowo, Tri Arief Sardjono
- T1-7 A New Implementation Of Cultural Algorithms based on Inter-Personal Interaction Influence (41 - 48)
Arash Zaeim, Mahdi Hassani Goodarzi, Mahdi Masoomzadeh
- T1-8 Teeth Segmentation on Dental Panoramic Radiographs Using Decimation-Free Directional Filter Bank Thresholding and Multistage Adaptive Thresholding (49 - 54)
Rarasmaya Indraswari, Agus Zainal Arifin, Dini Adni Navastara, Naser Jawas
- T1-9 Protein Family Identification using Markov Chain as Feature Extraction and Probabilistic Neural Network (PNN) as Classifier (PIC)
Toto Haryanto, Rizky Kurniawan, Sony Muhammad
- T1-10 Calving Events Detection and Quantification from Time-lapse Images in Tunabreen Glacier (61 - 66)
Sigit Adinugroho, Dorothée Vallot, Pontus Westrin, Robin Strand
- T1-11 General Pattern Identification of Debugging System (67 - 72)
Falahah, Iping S Suwardi, Kridanto Surendro
- T1-12 Color Correction Using Improved Linear Regression Algorithm (73 - 78)
Yuita Arum Sari, R.V. Hari Ginardi, Nanik Suciati

- T1-13 Improving Tibia and Femur Segmentation Recovery Based on Double Labelling Technique (79 - 82)
Kardiva Indah Pangestuti, Eko Mulyanto Yuniarno, I Ketut Eddy Purnama
- T1-14 Document Subjectivity and Target Detection in Opinion Mining Using HMM POS-Tagger (83 - 88)
Amir Hamzah, Naniek Widyastuti
- T1-15 Identification of Oil Palm Plantation in Ikonos Images using Radially Averaged Power Spectrum Values (89 - 94)
Soffiana Agustin, R.V. Hari Ginardi, Handayani Tjandrasa
- T1-16 K-Medoids Algorithm on Indonesian Twitter Feeds for Clustering Trending Issue as Important Terms in News Summarization (95 - 98)
Diana Purwitasari, Chastine Fatichah, Isye Ariesianti, Nur Hayatin
- T1-17 Fast Discrete Curvelet Transform And HSV Color Features For Batik Image Classification (99 - 104)
Nanik Suciati, Agri Kridanto, Mohammad Farid Naufal, Muhammad Machmud, Ardian Yusuf Wicaksono
- T1-18 An Epileptic Attack Detection Based on The Principle Components Analysis (PCA) (105 - 108)
Siswandari Noertjahjani, Adhi Susanto, Risanuri Hidayat, Samekto Wibowo
- T1-19 Images Processing of Facial Expression to Predict the Customer Opinion towards a Product (109 - 112)
Anneke Annassia Putri Siswadi, Adang Suhendra, Astie Darmayantie
- T1-20 Implementation of Naïve Bayes Method for Product Purchasing Decision using Neural Impulse Actuator in Neuromarketing (113 - 118)
Tryono Taqwa, Adang Suhendra, Matrisya Hermita, Astie Darmayantie
- T1-21 Classification of Textile Image using Support Vector Machine with Textural Feature (119 - 122)
Ratri Pawening, Rohman Dijaya, Thomas Brian, Nanik Suciati
-

T2-Track 2

- T2-1 Ease of Use Analysis of In-Game Interface Design in DotA 2 for Beginners Using Saw Method (123 - 126)
Arvyn Dila Wijaya, Fuad Baskara, Mutiara Romana Kusuma, Richard Simon Bernhard
- T2-2 Down Syndrome and Non-Down Syndrome: Electromagnetic Radiation for the Physical and Psychological Conditions (127 - 132)
Zunairah Hj Murat, R.S.S.A. Kadir, Nadiah Kamaruzaman, Mastura Rosdi
- T2-3 Improving Concentration Through Picture Selecting Game Based on Kinect Sensor for Student with Intellectual Deficiencies (133 - 136)
Dandhi Kuswardhana, Nenden Nur'Aeni, Juhanaini, Shinobu Hasegawa
- T2-4 Review of A Framework for Audiovisual Dialog-Based in Human Computer Interaction (137 - 140)
Hasanudin, Marina Agathya, Muhammad Brilliant Subaweh, Rizky Akbar, Sri Supadmini
- T2-5 3D ITS Campus on the Web: A WebGL Implementation (141 - 144)
Anny Yuniarti, Ardian Atminanto, Anggi Mardasatria, Ridho Rahman Hariadi, Nanik Suciati
- T2-6 Sitting to Standing and Walking Therapy for Post-Stroke Patients using Virtual Reality System (145 - 150)
Wijayanti Nurul Khotimah, Rizka Wakhidatus Sholikah, Ridho Rahman Hariadi
- T2-7 Visualization Model of Small and Medium Enterprises (SMEs) Telematics Services Potentiality Map in Indonesia (151 - 156)
Eneng Tita Tosida, Sufiatul Maryana, Hermawan Thaheer, Ferdy Arrahman
- T2-8 First Aid Simulation Game With Finite State Machine Model (157 - 162)
Rosalina Eka Dianty, Alfian M. Azhari, M. Faris Al Hakim, Anny Yuniarti, Imam Kuswardayan, Darlis Herumurti

- T2-9 Batik Classification using Neural Network with Gray Level Co-occurrence Matrix and Statistical Color Feature Extraction (163 - 168)
Christian Sri Kusuma Aditya, Mamluatul Hani'ah, Rizqa Raaiqa Bintana, Nanik Suciati
-

T3-Track 3

- T3-1 A Multi-Strategy Approach for Information Extraction of Financial Report Documents (169 - 174)
Siti Mariyah, Dwi Hendratmo Widyantoro
- T3-2 Analysis of Virtual Worker Website freelancer.com (175 - 180)
Axelyo Primastomo, Eva Utari Cintamurni Lubi, Ferdi Areanto, Gerry Hadiwijaya, Rina Noviana
- T3-3 An Evaluation of Twitter River and Logstash Performances as Elasticsearch Inputs for Social Media Analysis of Twitter (181 - 186)
Pingkan P. I. Langi, Widyawan, Warsun Najib, Teguh Bharata Adji
- T3-4 Synchronizing Learning Material on Moodle and Lecture Based Supportive Tool: The REST Based Approach (187 - 192)
Irwan Kautsar, Shin-Ichiro Kubota, Yasuo Musashi, Kenichi Sugitani
- T3-5 A Study of Students' Acceptance Toward Mobile Learning in Higher Education Institution in Indonesia (193 - 196)
Sary Paturusi, Arie Lumenta, Yoshifumi Chisaki, Tsuyoshi Usagawa
- T3-6 Improving the Accuracy of COCOMO's Effort Estimation Based on Neural Networks and Fuzzy Logic Model (197 - 202)
Riyanarto Sarno, Johannes Sidabutar, Sarwosri
- T3-7 Decomposition Using Refined Process Structure Tree (RPST) and Control Flow Complexity Metrics (203 - 208)
Indra Gita Anugrah, Riyanarto Sarno, Ratih Nur Esti Anggraini
- T3-8 A Conceptual Information Technology Framework to Support Rice Farming in Timor Leste (209 - 214)
Edio Da Costa, Handayani Tjandrasa, Supeno Djanali
- T3-9 Mobile Application for Scheduling of Medical Staff in Emergency Condition using Integer Programming (215 - 218)
Ahmad Saikhu, Victor Hariadi, Laili Rochmah
-

T4-Track 4

- T4-1 Traffic Congestion Distribution in Social Opportunistic Networks (219 - 224)
Bambang Soelistijanto
- T4-2 Increasing the capacity of the secret data using DE pixels blocks and adjusted RDE-based on Grayscale Images (225 - 230)
Mohammed Hatem Ali Al-Huti, Tohari Ahmad, Supeno Djanali
- T4-3 Modification of Key Scheduling For Security Improvement in XTEA (231 - 236)
Osvari Arsalan, Achmad Imam Kistijantoro
- T4-4 Prototype of Cloud Based Document Management for Scientific Work Validation (237 - 240)
Agus Muliantara, Ngurah Agus Sanjaya Erawan, I Made Agus Setiawan, I Made Widiartha
- T4-5 Design and Implementation of Digital Signal Processing Algorithm on ARM Cortex M4 Microcontroller Based Pulse Oximetry System (PIC)
Pratondo Busono
- T4-6 Comparative Study of QRS Detection Algorithms based on Derivative and Digital Filter Method for Automatic ECG Signal Analysis (PIC)

Pratondo Busono

T4-7 An Efficient Grid-Based Framework for Answering Tolerance-Based Skyline Queries (251 - 256)

Bagus Jati Santoso, Ge-Ming Chiu, Retno Mumpuni
