2016 International Conference on Advanced Computer Science and Information Systems (ICACSIS 2016)

Malang, Indonesia 15-16 October 2016



IEEE Catalog Number: ISBN:

CFP1619R-POD 978-1-5090-4630-0

Copyright © 2016 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:
 CFP1619R-POD

 ISBN (Print-On-Demand):
 978-1-5090-4630-0

 ISBN (Online):
 978-1-5090-4629-4

ISSN: 2330-4588

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



Table of Contents

Invited Speakers

TPP and The Future of The Digital Economy in The Asia Pacific Region Jim Foster	
1 - 8	
Overview The Development of Tele Health and Mobile Health Application in Indonesia Budi Wiweko, Aulia Zesario, Prince Gusti Agung	
9 - 14	
Wearable Computing with Computer Input Just by Sight for Health Care <i>Kohei Arai</i>	
15 - 22	
Overview of Taiwan Information Security Center and its Research on Privacy Ye-nun Huang, Szu-Chuang Li	
23 - 32	
Vnovelodge Home	
Knowledge Home	
Ramjee Prasad	
33 - 38	
Trajectory Simulation in Communities of Commuters	
Ashish Dandekar, Stéphan Bressan, Talel Abdessalem, Huayu Wu, Wee Siong Ng	
39 - 42	
DVB-T Signal Analysis on Passive Coherent Location System in Single Frequency Network <i>Karel Juryca, Jan Pidanic, Zdenek Nemec</i>	
43 - 52	
Computer Networks and High Performance Computing	
Collision Algorithms for Breaking Megrelishvili Protocol: Theory and Numerical Experiments	
Muhammad Arzaki, Bambang Ari Wahyudi	
53 - 60	

Federated Document Search Using Hybrid Peer-to-peer Network for Plagiarism Dete	ection
Widyanto Bagus Priambodo, Gladhi Guarddin	

61 - 66

Analysis Factors of IPv6 User Acceptance Against Security Aspects Based on Concept of Technology Acceptance Model (TAM) and Technology Threat Avoidance Theory (TTAT)

Dion Kristadi Leksono, Yudho Giri Sucahyo

67 - 72

Elliptic Curve Cryptography based Key Management for the M2M Local Cloud Platform

Bayu Anggorojati, Neeli Rashmi Prasad, Ramjee Prasad

73 - 78

Pervasive Device and Service Discovery Protocol In XBee Sensor Network

Sabriansyah Rizqika Akbar, Wijaya Kurniawan, Mochammad Hannats Hanafi Ichsan, Issa Arwani, Maystya Tri Handonoo

79 - 84

Development of A Laser---based Localization System in An Outdoor Setting --- Design and Performance Evaluation of Transmitter and Receiver Component

Radite Praeko Agus Setiawan, Gerry A. Krisnahadi, I Dewa Made Subrata, Muhammad Ikhwan Hanif, Slamet Widodo

85 - 90

Design of Remote Control for Smart Home Using Interaction Design Method

Hurriyatul Fitriyah, Edita Rosana Widasari, Denny Sagita R, Hadis Bagus A

91 - 96

Factors Analysis that Affecting the User Acceptance towards IPv6 Transition

Medi Kartika, Yudho Giri Sucahyo

97 - 102

Health Capability: The Representation of IoT in Health Domain among Jakartans

Tommy Prayoga, Juneman Abraham

Sensor Node for Data Sampling and Correlation Analysis of CO2 Concentration with Air Humidity, Temperature, and Light Intensity

Aulia Arshad, Novian Habibie, Ari Wibisono, Petrus Mursanto, Widijanto Satyo Nugroho, Wisnu Jatmiko

111 - 116

Vehicle Traffic Monitoring Using Single Camera and Embedded Systems

Rindra Wiska, Machmud R Alhamidi, Novian Habibie, Ari Wibisono, Petrus Mursanto, Doni H Ramdhan, Wisnu Jatmiko

117 - 122

Targets detection Analysis in the Passive Coherent Location System in Single Frequency Network

Karel Juryca, Jan Pidanic, Zdenek Nemec

123 - 128

Digital Library and Distance Learning

An Adaptation of the Index of Learning Style (ILS) to Indonesian Version: A Contribution to Index of Learning Style (ILS) Validity and Reliability Score

Ayu Sahnaz Ovariyanti, Harry Budi Santoso

129 - 134

The Knowledge Market Online Learning (K-MALL) Architecture for Higher Education

Didi Rustam, Theo van der Weide

135 - 140

Automatic Detection of Learning Styles in Learning Management System by Using Literature-Based Method and Support Vector Machine

Elfa Silfiana Amir, Malikus Sumadyo, Dana Indra Sensuse, Yudho Giri Sucahyo, Harry Budi Santoso

141 - 144

An Indonesian Adaptation of the System Usability Scale (SUS)

Zahra Sharfina, Harry Budi Santoso

Comparative Analysis Of String Similarity And Corpus-Based Similarity For Automatic Essay Scoring System On E-Learning Gamification

Eko Sakti Pramukantoro, M. Ali Fauzi

149 - 154

E-Government and E-Business

Challenges in Agile Software Development: A Systematic Literature Review

Widia Resti Fitriani, Puji Rahayu, Dana Indra Sensuse

155 - 164

Antecedent Factors of Consumer Attitudes toward SMS, E-mail and Social Media for Advertising in Indonesia

Handrie Noprisson, Nanang Husin, Nuralamsah Zulkarnaim, Puji Rahayu, Arief Ramadhan, Dana Indra Sensuse

165 - 170

Assessing Knowledge Management Implementation Readiness in Faculty of Computer Science, University of Indonesia

Widia Resti Fitriani, Akmal Gafar Putra, Dipta Tanaya, Hadiyan Nur Rochman, Elin Cahyaningsih, Dana Indra Sensuse

171 - 180

Intention to Use Smart City System Based on Social Cognitive Theory

Widia Resti Fitriani, Ikut Tri Handoyo, Puji Rahayu, Dana Indra Sensuse

181 - 188

The Evaluation of Information Technology Governance and the Prioritization of Process Improvement Using Control Objectives for Information and Related Technology Version 5: Case Study on the Ministry of Foreign Affairs

Erlang Erlangga, Yudho Giri Sucahyo, Muhammad Kasfu Hammi

189 - 194

Indonesian Certification of Competency Profession : A Proposed Conceptual e-Portfolio Model

Betty Purwandari, Indra Budi, Dana Indra Sensuse, Puji Rahayu

Formulating E-Business Strategy for Branchless Banking: A Case of A Bank in Indonesia *Yuan Hanif Syaniardi, Muhammad Rifki Shihab*

201 - 206

Supporting and Inhibiting Factors of E-Commerce Adoption: Exploring the Sellers' Side in Indonesia

Muslim, Puspa Indahati Sandhyaduhita

207 - 214

Supporting Factors of Sellers' Reputation in e-Marketplace: A Case of Indonesia

Niea Kurnia Fajar, Puspa Indahati Sandhyaduhita

215 - 220

Impact of Express Delivery Service Quality towards Repurchase Intention by B2C and C2C: A Case of Indonesia

Yoga Nurdani, Puspa Indahati Sandhyaduhita

221 - 226

Optimization Of Analytic Hierarchy Process Using Genetic Algorithm For Selecting Tutoring Agencies In Kampung Inggris Pare

Mayang Anglingsari Putri, Wayan Firdaus Mahmudy

227 - 232

Information Management

Investigating Critical Factors of Social CRM Adoption Using TOE (Technology, Organization, and Environment) Framework and Analytical Hierarchy Process (AHP)

Dinna Amelina, Achmad Nizar Hidayanto, Nur Fitriah Ayuning Budi, Puspa Indahati Sandhyaduhita, Muhammad Rifki Shihab

233 - 238

Analysis on Effects of Brand Community on Brand Loyalty in the Social Media: A Case Study of An Online Transportation (UBER)

Jamilah Jamilah, Putu Wuri Handayani

239 - 244

The Effects of Customization and Permission on Location-Based Advertising toward Consumer Behavioural Intention

Fitria Purnama Sari, Herdiansyah Rhamadan, Muhammad Rifki Shihab

Customer social experience as antecedents of social commerce: Insights from Kaskus

Dahru Dzahaban, Muhammad Rifki Shihab

251 - 256

Dynamic Nearest Neighbours for Generating Spatial Weight Matrix

Mutiara Mawarni. Imam Machdi

257 - 262

What Features of Online Review Affects Readers' Intention to Travel?

Rahmi Johanes, Achmad Nizar Hidayanto, Ave Adriana Pinem, Muhammad Rifki Shihab

263 - 270

The Impact of Interdependent Self-Construal towards Intention to Participate in Social Media Photo/Video Contest Campaign

Ghaisani Kusumo Wardina, Puspa Indahati Sandhyaduhita

271 - 276

Inhibiting Factors Of Service Level Agreement (Sla) Adoption In Government To Citizen (G2c) Services: A Case Of Indonesia

M.Y.G.G. Reta, Achmad Hidayanto, Puspa Sandhyaduhita, B.A.A. Nazief

277 - 282

Mobile-based expert system for Human Diet Planning using optimum neighbour Marji, Dian Eka Ratnawati

283 - 286

Information Retrieval

Comparison of Naive Bayes Smoothing Methods for Twitter Sentiment Analysis

Rif'at Ahdi Ramadhani, Fatma Indriani, Dodon Turianto Nugrahadi

287 - 292

Single-Output Recurrent Neural Networks for Sentence Binary Classification

Alfan Farizki Wicaksono, Mirna Adriani

Implementation of Regularized Markov Clustering Algorithm on Protein Interaction Networks of Schizophrenia

Rizky Ginanjar, Alhadi Bustamam, Hengki Tasman

297 - 302

A Comparative Analysis of Memory-based and Model-based Collaborative Filtering on the Implementation of Recommender System for Ecommerce in Indonesia : A Case Study PT X

Pandhu Hutomo Adhitya, Indra Budi, Qorib Munajat

303 - 308

Query Refinement in Recommender System Based on Product Functional Requirements

Abdurahman Baizal, Dwi H Widyantoro, Nur Ulfa Maulidevi

309 - 314

Combination of Relief Feature Selection and Fuzzy K-Nearest Neighbor for Plant Species Identification

Agus Ambarwari, Yeni Herdiyeni, Taufik Djatna

315 - 320

Implementation of Weighted Parallel Hybrid Recommender Systems for e-Commerce in Indonesia

Mustika Aprilianti , Rahmad Mahendra, Indra Budi

321 - 326

Combining Topological and Topical Features for Community Detection

Retnani Latifah, Mirna Adriani

327 - 334

DBpedia Entities Expansion in Automatically Building Dataset for Indonesian NER *Ika Alfina, Ruli Manurung, Mohamad Ivan Fanany*

335 - 340

Using Relation Similarity on Open Information Extraction-Based Event Template Extraction

Ade Romadhony, Dwi H. Widyantoro, Ayu Purwarianti

341 - 346

A Corpus-Based Lexicon Building in Indonesian Political Context Through Indonesian Online News Media

MD. Azza Firdaus Yatim, Yulistiyan Wardhana, Ahmad Kamal, Anandra A. R. Soroinda, Febryan Rachim, Muhammad Ismail Wonggo

Certificate Policy Analysis and Formulation of the Government Public Key Infrastructure using SSM

Mohamad Endhy Aziz, Setiadi Yazid

353 - 358

Twitter Sentiment Analysis of Online Transportation Service Providers

Sonia Anastasia, Indra Budi

359 - 364

Machine Learning and Computer Vision

Error Numerical Analysis for Result of Rainfall Prediction Between Tsukamoto FIS and Hybrid Tsukamoto FIS with GA

Ida Wahyuni, Fitri Utaminingrum

365 - 372

Combining Normal Sparse into Discriminative Deep Belief Networks

Faisal Khalid, Mohamad Ivan Fanany

373 - 378

Extend Relation Identification in Scientific Papers

Yuliant Sibaroni, Dwi H. Widyantoro, Masayu L. Khodra

379 - 384

Using Logistic Regression Method to Classify Tweets into the Selected Topics

Indra, Liza Wikarsa, Rinaldo Turang

385 - 390

Multimodal Decomposable Models by Superpixel Segmentation and Point-in-Time Detection CRF for Cheating Detection

Yohannes Yohannes, Vina Ayumi, Mohamad Ivan Fanany

391 - 396

Numerical Methods for Initialization in Fodder Composition Optimization

Vivi Nur Wijayaningrum, Fitri Utaminingrum

397 - 400

xviii .

Enhancing Tomato Clustering Evaluation using Color Correction with Improved Linear Regression in Preprocessing Phase

Yuita Arum Sari, Sigit Adinugroho, RV Hari Ginardi, Nanik Suciati

401 - 406

Multimodal Deep Boltzmann Machines for Feature Selection on Gene Expression Data

Arida Ferti Syafiandini, Ito Wasito, Setiadi Yazid, Aries Fitriawan, Mukhlis Amien

407 - 412

Local and Global Human Activity Detection For Room Energy Saving Model

Adhi Harmoko Saputro, C. Imawan

413 - 416

Deep Belief Networks Using Hybrid Fingerprint Feature for Virtual Screening of Drug Design

Aries Fitriawan,, Ito Wasito, Arida Ferti Syafiandini, Mukhlis Amien , Arry Yanuar

417 - 420

Automatic Features Reduction Procedures in Palm Vein Recognition

Prasti Eko Yunanto, Hertog Nugroho, Tjokorda Agung Budi Wirayuda

421 - 426

Automatic Tungsten Inert Gas (TIG) Welding Using Machine Vision and Neural Network on Material SS304

Ario Sunar Baskoro, Randy Tandian, Haikal, Andreas Edyanto, Agung Shamsuddin Saragih

427 - 432

Hiding Secret Data by using Modulo Function in Quad Difference Expansion

Yogi Kurniawan, Lidya Amalia Rahmania, Tohari Ahmad, Waskitho Wibisono, Royyana M. Ijtihadie

433 - 438

Human Emotion Recognition Based on Active Appearance Model and Semi-supervised Fuzzy C-Means

Dewi Yanti Liliana, M. Rahmat Widyanto, T. Basaruddin

Prediction the Number of Blastomere in Time-Lapse Embryo Using Conditional Random Field (CRF) Method Based on Bag of Visual Words (BoVW)

Dewa Made Sri Arsa, Ilham Kusuma , Aprinaldi, Ilham Kusuma, Anom Bowolaksono, Petrus Mursanto, Budi Wiweko, Wisnu Jatmiko

445 - 452

Handwritten Character Recognition using Hierarchical Graph Matching

Abdulloh Al Mubarok, Hertog Nugroho

453 - 458

Term Weighting Based Class Indexes Using Space Density for Al-Qur'an Ranking Kurnia Wati, A'la Syauqi

459 - 462

An Adaptive Background Estimation for Real—Time Object Localization on A Color--coded Environment

Peter Chondro, Shanq--Jang Ruan

463 - 468

Handling Illumination Variation in Face Recognition using Multiscale Retinex

Alexander Agung Santoso Gunawan, Hendry Setiadi

469 - 474

Learning similarity functions for binary strings via genetic programming

Muhammad Syahid Pebriadi, Vektor Dewanto, Wisnu Ananta Kusuma, Farit Mochamad Afendi, Rudi Heryanto

475 - 482

Ischemic Stroke Identification Based on EEG using 1D Convolutional Neural Network and Batch Normalization

Endang Purnama Giri, Mohamad Ivan Fanany, Aniati Murni Arymurthy, Sastra Kusuma Wijaya

483 - 490

Efficient Texture Image Retrieval of Improved Completed Robust Local Binary Pattern

Arrie Kurniawardhani, Agus Eko Minarno, Fitri Bimantoro

Spatio-Temporal Analysis for Moving Object Detection Under Complex Environment

Adi Suheryadi, Hertog Nugroho

497 - 504

Convolutional Neural Network using Microcanonical Annealing Algorithm

Vina Ayumi, L.M. Rasdi Rere, Mohamad Ivan Fanany, Aniati Murni Arymurthy 505 - 510

Multiple Regularizations Deep Learning for Paddy Growth Stages Classification from LANDSAT-8

Ines Heidiani Ikasari, Vina Ayumi, Mohamad Ivan Fanany, Sidik Mulyono

511 - 516

Design of Keyboard Input Control for Mobile Application using Head Movement Control (HEMOCS)

Herman Tolle, Ismiarta Aknuranda, Mahardeka Tri Ananta, Komang Candra Brata, Hanifah Muslimah Az-Zahra

517 - 522

Accurate Visual Tracking by Combining Bayesian and Evolutionary Optimization Framework

Grafika Jati, Alexander Santoso Agung Gunawan, Wisnu Jatmiko

523 - 528

Multi-Sperm Tracking Using Hungarian Kalman Filter on Low Frame Rate Video

Grafika Jati, Alexander Santoso Agung Gunawan, Silvia Werdhy Lestari, Wisnu Jatmiko

529 - 534

The Use of Data Mining Classification Technique to Fill in Structural Positions in Bogor Local Government

Tosan Wiar Ramdhani, Betty Purwandari, Yova Ruldeviyani

535 - 540

Solving Fuzzy Multi-objective Optimization Using Non-dominated Sorting Genetic Algorithm II

Trisna Trisna, Marimin, Yandra Arkeman

Structured Support Vector Machine Learning of Conditional Random Fields

Rizki Perdana Rangkuti, Aprinaldi Jasa Mantau, Vektor Dewanto, Novian Habibie, Wisnu Jatmiko

547 - 554

Adaptive Genetic Algorithm for Reliable Training Population in Plant Breeding Genomic Selection

Sumarsih Condroayu Purbarani, Ito Wasito, Ilham Kusuma

555 - 562

Fetal Head Segmentation Based On Gaussian Elliptical Path and Nature based Optimization

Ilham Kusuma, M. Anwar Ma'sum, H. S. Sanabila, H.A. Wisesa, Wisnu Jatmiko, , A.M. Arymurthy, B. Wiweko

563 - 570

Generative Oversampling Method (GenOMe) for Imbalanced Data on Apnea Detection using ECG Data

Hadaiq Rolis Sanabila, Ilham Kusuma

571 - 578

Reliable Software Engineering

Aggregation of Open Data Information using Linked Data: Case Study Education and Job Vacancy Data in Jakarta

Ardian Hosen, Ika Alfina

579 - 584

A Case Study: Adoption of Agile in Thailand

Aziz Nanthaamornphong, Rattana Wetprasit

585 - 590

A Water Flow Algorithm based Optimization Model for Road Traffic Engineering

Ditdit Nugeraha Utama, Fauzan Affan Zaki, Intan Juliani Munjeri, Nidya Utami Putri

591 - 596

Incremental Product Configuration in Software Product Line Engineering

Triando, Radu Bogdan Muschevici, Ade Azurat

Automatic Model Translation to UML from Software Product Lines Model using UML Profile

Rizki Muhammad, Maya Retno Ayu Setyautami