

C-19

**LEMBAR
HASIL PENILAIAN SEJAWAT SEBIDANG ATAU PEER REVIEW
KARYA ILMIAH : PROSIDING**

Judul Karya Ilmiah : Expert System Campus Enviroment Indexing in Wireless Sensor Network
 Jumlah Penulis : 4 Orang
 Status Pengusul : Penulis Utama
 Identitas Prosiding : a. Judul Prosiding : 2nd International Conference on Information Technology, Computer and Electrical Engineering (ICITACEE) 2015
 b. ISBN/ISSN : 978-1-4799-9863-0, Hal : 187-190
 c. Thn Terbit, Tempat Pelaks. : October 16, 2015 - October 18, 2015
 d. Penerbit/Organiser : Departement of Electrical Engineering, Diponegoro University
 e. Alamat Repository/Web : <https://www.scimagojr.com/journalsearch.php?q=21100462847&tip=sid&clean=0>
<http://icitacee.undip.ac.id/index.php/icitacee/2015>
 Alamat Artikel : <http://icceexplore.ieee.org/abstract/document/7437795/>
 f. Terindeks di (jika ada) : <https://www.scopus.com/record/display.uri?eid=2-s2.0-84969745165&origin=resultslist&sort=plf-f&src=s&sid=5bcc0f4db3dcf49e37bebc7b6f78cca5&so t=autdocs&sdt=autdocs&sl=18&s=AU-ID%2855005274100%29&relpos=11&citeCnt=2&searchTerm=>

Kategori Publikasi Makalah : Prosiding Forum Ilmiah Internasional
 (beri ✓ pada kategori yang tepat) Prosiding Forum Ilmiah Nasional

Hasil Penilaian Peer Review :

Komponen Yang Dinilai	Nilai Maksimal Prosiding		Nilai Akhir Yang Diperoleh
	Internasional <input type="checkbox"/>	Nasional <input type="checkbox"/>	
a. Kelengkapan unsur isi prosiding (10%)	3,0		3
b. Ruang lingkup dan kedalaman pembahasan (30%)	9,0		8
c. Kecukupan dan kemutakhiran data/informasi dan metodologi (30%)	9,0		9
d. Kelengkapan unsur dan kualitas terbitan/prosiding(30%)	9,0		8
Total = (100%)	30,0		28
$27,5 \times 0,6 = 16,5$			

Catatan Penilaian Paper oleh Reviewer :

1. Kesesuaian dan kelengkapan unsur isi paper: semua unsur paper seperti abstrak, penulisan, metode & kesimpulan sudah tersedia dan singkat
2. Ruang lingkup dan kedalaman pembahasan: materi yang ditulis dan paper ini di bahas relatif mendalam & relatif singkat
3. Kecukupan dan kemutakhiran data/informasi dan metodologi: data informasi yang digunakan cukup mutakhir. Metodologi yang digunakan sdh terstruktur dg baik
4. Kelengkapan unsur dan kualitas terbitan: secara umum terbitan memiliki kualitas yang bagus, hanya sejumlah tabel & gambar relatif masih belum jelas

Semarang,
Reviewer

Dr. Iwan Setiawan, ST, MT
 NIP. 197309262000121001
 Unit Kerja : Teknik Elektro FT UNDIP

**LEMBAR
HASIL PENILAIAN SEJAWAT SEBIDANG ATAU PEER REVIEW
KARYA ILMIAH : PROSIDING**

Judul Karya Ilmiah : Expert System Campus Environment Indexing in Wireless Sensor Network
 Jumlah Penulis : 4 Orang
 Status Pengusul : Penulis Utama
 Identitas Prosiding : a. Judul Prosiding : 2nd International Conference on Information Technology, Computer and Electrical Engineering (ICITACEE) 2015
 b. ISBN/ISSN : 978-1-4799-9863-0, Hal : 187-190
 c. Thn Terbit, Tempat Pelaks. : October 16, 2015 - October 18, 2015
 d. Penerbit/Organiser : Departement of Electrical Engineering, Diponegoro University
 e. Alamat Repository/Web : <https://www.scimagojr.com/journalsearch.php?q=21100462847&tip=sid&clean=0>
<http://icitacee.undip.ac.id/index.php/icitacee/2015>
 Alamat Artikel : <http://ieeexplore.ieee.org/abstract/document/7437795/>
 f. Terindeks di (jika ada) : <https://www.scopus.com/record/display.uri?cid=2-s2.0-84969745165&origin=resultslist&sort=plf-f&src=s&sid=5bec0f4db3dcf49e37bec7b6f78cca5&so-t=autdocs&sdt=autdocs&sl=18&s=AU-ID%2855005274100%29&relpos=11&citeCnt=2&searchTerm=>

Kategori Publikasi Makalah : Prosiding Forum Ilmiah Internasional
 (beri ✓ pada kategori yang tepat) Prosiding Forum Ilmiah Nasional

Hasil Penilaian Peer Review :

Komponen Yang Dinilai	Nilai Maksimal Prosiding		Nilai Akhir Yang Diperoleh
	Internasional <input type="checkbox"/>	Nasional <input type="checkbox"/>	
a. Kelengkapan unsur isi prosiding (10%)	3,0		3
b. Ruang lingkup dan kedalaman pembahasan (30%)	9,0		8
c. Kecukupan dan kemutakhiran data/informasi dan metodologi (30%)	9,0		8
d. Kelengkapan unsur dan kualitas terbitan/prosiding(30%)	9,0		A
Total = (100%)	30,0		<u>27</u>
$27,5 \times 0,6 = 16,5$			

Catatan Penilaian Paper oleh Reviewer :

- a) Kecesuaian dan kelengkapan unsur isi paper:
 paper mewart. padahalwa, dan ten, metologi dan kegunaan.
- b) Ruang lingkup dan kedalaman pembahasan:
 ruang lingkup pembahasan kurang mendalam, tidak terikat pembahasan secara mendalam.
- c) Kecukupan dan kemutakhiran data/informasi dan metodologi:
 informasi di kutub besar, referensi yg long dan 5 th tidak ada referensi dari 7 referensi yg ada.
- d) Kelengkapan unsur dan kualitas terbitan:
 mltm terbitan cetak: di sajikan pt. kemier internasional ter- mltm cetak, namun pada paggijanya terdapat referensi yg tidak terbit (7) dan terbit ada pt. pembahasan (cetakan).
- Semarang,
Reviewer 2

Dr. Wahyudi, S.T., M.T.
 NIP. 196906121994031001
 Unit Kerja : Teknik Elektro FT UNDIP

**LEMBAR
HASIL PENILAIAN SEJAWAT SEBIDANG ATAU PEER REVIEW
KARYA ILMIAH : PROSIDING**

Judul Karya Ilmiah : Expert System Campus Enviroment Indexing in Wireless Sensor Network
 Jumlah Penulis : 4 Orang
 Status Pengusul : Penulis Utama
 Identitas Prosiding : a. Judul Prosiding : 2nd International Conference on Information Technology, Computer and Electrical Engineering (ICITACEE) 2015
 b. ISBN/ISSN : 978-1-4799-9863-0, Hal : 187-190
 c. Thn Terbit, Tempat Pelaks. : October 16, 2015 - October 18, 2015
 d. Penerbit/Organiser : Departement of Electrical Engineering, Diponegoro University
 e. Alamat Repository/Web : <https://www.scimagojr.com/journalsearch.php?q=21100462847&tip=sid&clean=0>
<http://icitacee.undip.ac.id/index.php/icitacee/2015>
 Alamat Artikel : <http://icccxplora.iccc.org/abstract/document/7437795/>
 f. Terindeks di (jika ada) : <https://www.scopus.com/record/display.uri?eid=2-s2.0-84969745165&origin=resultslist&sort=plf-f&src=s&sid=5bec0f4db3dcf49e37bec7b6f78cca5&st=autdocs&sdt=autdocs&sl=18&s=AU-ID%2855005274100%29&relpos=11&citeCnt=2&searchTerm=>

Kategori Publikasi Makalah : Prosiding Forum Ilmiah Internasional
 (beri ✓ pada kategori yang tepat) Prosiding Forum Ilmiah Nasional

Hasil Penilaian Peer Review :

Komponen Yang Dinilai	Nilai Reviewer		Nilai Rata-rata
	Reviewer I	Reviewer II	
a. Kelengkapan unsur isi prosiding (10%)	3	3	3
b. Ruang lingkup dan kedalaman pembahasan (30%)	8	8	8
c. Kecukupan dan kemutahiran data/informasi dan metodologi (30%)	9	8	8,5
d. Kelengkapan unsur dan kualitas terbitan/prosiding(30%)	8	8	8
Total = (100%)	28	27	27,5

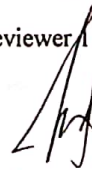
Reviewer 2 ,



Dr. Wahyudi, S.T., M.T.
 NIP. 196906121994031001
 Unit Kerja : Teknik Elektro FT UNDIP

Semarang,

Reviewer 1



Dr. Iwan Setiawan, ST, MT
 NIP. 197309262000121001
 Unit Kerja : Teknik Elektro FT UNDIP

Document details

< Back to results | < Previous 12 of 17

Export Download Print E-mail Save to PDF Add to List More... >

View at Publisher

ICITACEE 2015 - 2nd International Conference on Information Technology, Computer, and Electrical Engineering: Green Technology Strengthening in Information Technology, Electrical and Computer Engineering Implementation, Proceedings

21 March 2016, Article number 7437795, Pages 183-186

2nd International Conference on Information Technology, Computer, and Electrical Engineering, ICITACEE 2015; Semarang; Indonesia; 16 October 2015 through 18 October 2015; Category numberCFP1589Z-PRT; Code 121061

Expert system for campus environment indexing in wireless sensor network (Conference Paper)

Sumardi^a ✉, Nurhayati, O.D.^b, Prasetyo, Muh.N.^b, Widiyanto, E.D.^b ✉

^aDepartment of Electrical Engineering, Diponegoro University, Semarang, Indonesia

^bDepartment of Computer Engineering, Diponegoro University, Semarang, Indonesia

Abstract

View references (7)

Wireless sensor network can deliver environment data in campus area as CO, NO₂, HC, particulate matter, temperature, humidity, and luminous intensity to provide accurate realtime data. This realtime environment data is used for environment indexing accurately, and then can be developed in an expert system. This expert system collects input data from the sensor. This expert system will help giving the accurate input for campus authority to state and evaluate campus developing policy continuously. This expert system uses forward chaining method, PHP programming language and MySQL database. © 2015 IEEE.

SciVal Topic Prominence ⓘ

Topic: Expert systems | Requirements engineering | forward chaining

Prominence percentile: 40.430 ⓘ

Author keywords

campus environment environment index expert system forward chaining wireless sensor network

Indexed keywords

Engineering controlled terms: Expert systems Indexing (of information) Nitrogen compounds

Engineering uncontrolled terms: campus environment Environment data Environment index forward chaining Luminous intensity Particulate Matter Real-time data Real-time environment

Engineering main heading: Wireless sensor networks

Metrics ⓘ View all metrics >

2 Citations in Scopus
75th percentile

0.83 Field-Weighted
Citation Impact



PlumX Metrics

Usage, Captures, Mentions, Social Media and Citations beyond Scopus.

Cited by 2 documents

Wireless sensor network design for landslide warning system in IoT architecture

Sofwan, A. , Sumardi , Ridho, M. (2018) *Proceedings - 2017 4th International Conference on Information Technology, Computer, and Electrical Engineering, ICITACEE 2017*

Mobile-based expert reliant system of application determining the adequacy of cows for Islamic qurban ritual using method of forward chaining

Purnamasari, E. , Almisri, K. , Permana, I. (2017) *Journal of Theoretical and Applied Information Technology*

View all 2 citing documents

Inform me when this document is cited in Scopus:

Set citation alert >

Set citation feed >

Related documents

Thermal plants optimization using fuzzy logic controller

Manjang, S. , Akil, Y.S. (2006) *2006 1st IEEE Conference on Industrial Electronics and Applications*

An expert system for diagnosing dysgraphia

Kurniawan, D.A. , Sihwi, S.W. , Gunarhadi

ISBN: 978-147999861-6

Source Type: Conference Proceeding

Original language: English

DOI: 10.1109/ICITACEE.2015.7437795

Document Type: Conference Paper

Volume Editors: Eridani D., Isnanto R.R., Widiyanto E.D., Facta M.

Sponsors:

Publisher: Institute of Electrical and Electronics Engineers Inc.

All | [Export](#) [Print](#) [E-mail](#) [Save to PDF](#) [Create bibliography](#)

- 1 Lukman, R., Krajnc, D., Glavič, P.
University ranking using research, educational and environmental indicators

(2010) *Journal of Cleaner Production*, 18 (7), pp. 619-628. Cited 85 times.
doi: 10.1016/j.jclepro.2009.09.015

[View at Publisher](#)

- 2 Sari, R.F.
Methodology and evaluation of green and sustainable campus indicators for world
(2012) *Proceeding of the International Ranking Expert Group-6 (IREG-6)*

- 3 Hazelkom, E.
World-class Universities or World-class Systems? Rankings and Higher Education
(2011) *UNESCO Forum on Rankings and Accountability in Higher Education*

- 4 Arhami, M.
(2005) *Konsep Dasar Sistem Pakar*. Cited 10 times.
Yogyakarta: Andi

- 5 Kusumadewi, S.
(2003) *Artificial Intelligence (Teknik Dan Aplikasinya)*. Cited 29 times.
Yogyakarta: GRAHA ILMU

- 6 Irawan, A.
(2014) *Berita-iptek*
[Online]. 28 Januari [Diakses 5 April 2015]
<http://berita-iptek.com/jaringan-sensor-nirkabel-dan-tren-aplikasinya-di-2014>

- 7 Perhitungan Dan Pelaporan Serta Informasi
(1997) *Keputusan Kepala Bapedal*, (107).
Tahun

(2018) *Proceedings - 2017 2nd International Conferences on Information Technology, Information Systems and Electrical Engineering, ICITISEE 2017*

Expert system applications for early diagnosis teeth and oral disease in children

Maharani, S. , Dengen, N. , Saputra, G.Y.
(2016) *ICITACEE 2015 - 2nd International Conference on Information Technology, Computer, and Electrical Engineering: Green Technology Strengthening in Information Technology, Electrical and Computer Engineering Implementation, Proceedings*

[View all related documents based on references](#)

[Find more related documents in Scopus based on:](#)

[Authors >](#) [Keywords >](#)

© Copyright 2016 Elsevier B.V., All rights reserved.

[< Back to results](#) | [< Previous](#) 12 of 17

[^ Top of page](#)

About Scopus

[What is Scopus](#)
[Content coverage](#)
[Scopus blog](#)
[Scopus API](#)
[Privacy matters](#)

Language

[日本語に切り替える](#)
[切换到简体中文](#)
[切换到繁體中文](#)
[Русский язык](#)

Customer Service

[Help](#)
[Contact us](#)



2015
ICITACEE
THE 2nd INTERNATIONAL CONFERENCE ON INFORMATION
TECHNOLOGY, COMPUTER, AND ELECTRICAL ENGINEERING

October 16 - 18th, 2015

PROCEEDINGS

“ **GREEN TECHNOLOGY** STRENGTHENING in INFORMATION TECHNOLOGY,
ELECTRICAL, AND **COMPUTER ENGINEERING** IMPLEMENTATION ”



IEEE

Proceedings

2015 2nd International Conference on Information Technology, Computer, and Electrical Engineering (ICITACEE)

Copyright and Reprint Permission: 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 reprint or republication permission, email to IEEE Copyrights Manager at pubs-permissions@ieee.org. All rights reserved.

Copyright ©2015 by IEEE.

Publisher :

Department of Computer Engineering
Diponegoro University

ISBN : 978-1-4799-9861-6 (PRINT, Part Number : CFP1589Z-PRT)

ISBN : 978-1-4799-9860-9 (DVD Part Number : CFP1589Z-DVD)

ISBN : 978-1-4799-9863-0 (XPLORE COMPLIANT, Part Number : CFP1589Z-ART)

Additional copies may be ordered to:
Department of Computer Engineering
Diponegoro University,
Jl. Prof. H. Soedarto, S.H., Tembalang
Semarang, Indonesia 50275

Foreword from General Chair of ICITACEE 2015 Universitas Diponegoro, Semarang – Indonesia

Dear Colleagues,

On behalf of Technical Committee and Organizing Committee of ICITACEE 2015, I am honored to welcome you to **The 2nd International Conference on Information Technology, Computer, and Electrical Engineering (ICITACEE 2015)**. The conference is planned to be conducted annually. This conference program is organized by Computer Engineering Department, together with Electrical Engineering Department, Faculty of Engineering, Diponegoro University, Semarang. The main theme of the conference is “Green Technology Strengthening in Information Technology, Electrical and Computer Engineering Implementation”.

The conference aims to provide a forum for researchers, academicians, professionals, and industries to expose and exchange innovative ideas, methods, and experience in information technology, computer engineering, as well as in electrical engineering, and their applications, related with the aspects of green technology. This conference also provides forum for researchers, scientists, and engineers to exchange ideas and their current achievements.

In this year we have received more than 120 paper submissions from various universities, research centers, and as well as from industries from many countries. However, after in-depth review, the Technical Committee accepted 80s high quality papers to be selected and presented in this conference. The accepted papers are categorized into five groups, there are: Information Technology and System, Signal and Circuit, Power and Control Engineering, General Papers, and Interdisciplinary Papers related to Green Technology. All accepted and presented papers will be submitted for uploading to the IEEE Xplore digital library.

We thank all authors and all parties which cannot be mentioned here who have contributed and participated in presenting their works at this conference. Thank you for IEEE Indonesia Section for supporting this conference. We also gratefully acknowledge the important review supports provided by members of Conference Committee from Indonesia or abroad. Their efforts were crucial to the success of the conference. We are also so blessed by the presence of 3 (three) invited Keynote Speakers from different institutions which will address the important trends relating to green technology strengthening in information technology, electrical and computer engineering implementation.

Finally, we wish you all can enjoy two days discussion through this conference and could spend to enjoy the beauty of Semarang City in one day City Tour that will be held after closing ceremony. We hope to meet you again in the next conference, the 3rd International Conference on Information Technology, Computer, and Electrical Engineering (ICITACEE 2016).



Dr. R. Rizal Isnanto

General Chair of ICITACEE 2015

Foreword from Dean of Engineering Faculty Universitas Diponegoro, Semarang – Indonesia

The 2nd International Conference on Information Technology, Computer, and Electrical Engineering 2015 (ICITACEE 2015) is now held again as a part of 57th Faculty of Engineering Dies Natalis and 58th Diponegoro University Dies Natalis agenda.

The aims of the conference are to obtain and to extend the knowledge of the recent issues, opinions, bright ideas about the development of a comprehensive green technology. ICITACEE 2015 invites the scholars and encourages the researchers to submit high quality manuscripts and papers to this conference. It is also to share extensively and exchange of ideas, thoughts and discussions on all aspect of information technology, information systems, power systems, signal processing, electronics, micro-electronics, biomedical engineering, and communication systems as well as other field that corresponds, such as intelligent systems, intelligent transportation applications, health care applications, and environmental protection to facilitate the formation of networks among participants of the conference for improving the quality and benefits of the research.

It is a great pleasure to welcome all the participants of this conference in Semarang. I also would like to welcome several members from Technology University of Malaysia (UTM), Diponegoro University, Bandung Institute of Technology, Gadjah Mada University, and so on.

I do hope that this conference to be a valuable forum for engineers and scientists to share their precious researches and this event will give significant contributions to the development of Information Technology, Computer, and Electrical Engineering and it will raise the awareness of scientific community members in bringing better life.

I hope that the conference will be stimulating and memorable for you. So, enjoy your time in Semarang.



Ir. M. Agung Wibowo, MM, MSc, PhD
Dean of Faculty of Engineering
Diponegoro University, Semarang-Indonesia

Foreword from Chief of Computer Engineering Department Universitas Diponegoro, Semarang – Indonesia

Welcome to all the participants in the International Conference on Information Technology, Computer, and Electrical Engineering (ICITACEE 2015) at Semarang. I would like to welcome keynote speakers from Universiti Teknologi Malaysia, Institute of Technology Bandung, and Gajah mada University. This is the third conference held together by Computer Engineering Department and Electrical Engineering Department of Engineering Faculty, Universitas Diponegoro.

I would like to appreciate the vast work in this conference as a collaborative effort among Computer Engineering Department, Electrical Engineering Department, Universitas Diponegoro, IEEE Student Branch of Universitas Diponegoro and IEEE Indonesia Section.

I do hope that this conference will be a prestige forum to communicate and sharing the findings and precious researches among experts in field of computer, information technology and electrical engineering.

I would like to express my deep appreciation to Organizing Committee members, staffs, and students of Computer Engineering and Electrical Engineering Department of Universitas Diponegoro for their effort and support. I wish that this event will give contribution to global development of Computer and Electrical Engineering.



Ir. Kodrat Iman Santoso, M.T.
Chief of Computer Engineering Department – Engineering Faculty
Universitas Diponegoro, Semarang – Indonesia

Foreword from IEEE Indonesia Section Chair

Dear colleagues, Professors, researchers, ICT professionals, ladies and gentlemen, good morning.

On behalf of IEEE Indonesia section, I would like to express my sincere gratitude and welcome you to the 2nd International Conference on Information Technology, Computer, and Electrical Engineering (ICITACEE 2015). The conference is an annual event, organized in collaboration between Computer Engineering Department and Electrical Engineering Department, Diponegoro University. In this year, the conference is organized by Computer Engineering Department, Diponegoro University, Semarang Indonesia.

ICITACEE 2015 with the theme Green Technology Strengthening in Information Technology, Electrical and Computer Engineering Implementation, has been approved and technically co-sponsored by IEEE Indonesia Section, with the conference No. #36226. The previous conferences in 2014 were also technically co-sponsored by the IEEE and successfully held in Semarang on 07 Nov 2014. The ICITACEE 2014 publication has been indexed by IEEE Xplore® Digital Library and Scopus.

As we may aware, IEEE is one of the largest professional associations in the world. Having been founded over 130 years ago, nowadays it brings together over 432,000 active members in more than 160 countries. This is the world's largest technical professional society, dedicated to fostering technological innovation and excellence for the benefit of humanity. IEEE provides more than 3.5 million digital libraries and currently has organized about 1,300 annual conferences, worldwide.

IEEE Indonesia section, which is a part of IEEE global, has already been established for 28 years. It currently has about 1,395 active members, with activities in 6 society chapters, namely Computer Society Chapter, Communications Society Chapter, Circuits and Systems Chapter, Engineering in Medicine and Biology Chapter, Solid State Circuits Society Chapter, and Power and Energy Chapter. Moreover, IEEE Indonesia section also has 4 joint chapters, namely Joint chapter of Microwave Theory / Antennas & Propagation, Joint chapter of Aerospace & Electronics Systems Society / Geoscience & Remote Sensing Society, Joint chapter of Control System Society / Robotics & Automation Society, and Join Chapter of Education Society / Electron Devices Society / Power Electronics Society / Signal Processing Society.

IEEE Indonesia Section has 25 student branches in several universities in Java, Sumatera, Bali and Sulawesi islands and three Affinity Groups, namely Women in Engineering, SIGHT in Telemedicine, and SIGHT in Humanitarian Technology.

IEEE Indonesia section has organized several activities almost weekly. Its activities are related to Technical, Education, and Social Activities, such as ICT Training, Workshop, International Seminar, Focus Group discussion, and Distinguish Lecturer Tour (DLT) activities all around Indonesia. The main discussed topics are related to the technology for humanity, such as Internet of Things (IoT), Artificial Intelligent, Robotic technology, Biomedicine Technology, Antenna and Microwave, Circuit and Device, Renewable Energy, etc. Recently, IEEE Indonesia section organized two days 5G training; with the trainer is the one of the worldwide recognized professor in the field of Wireless Communication. We believed that it was the first 5G training activities in the Asia Pacific region.

In terms of collaboration, IEEE Indonesia section has a good and mutual relationship with ICT organizations, Industries, Universities as well as the government in Indonesia. IEEE Indonesia also participated in the preparation of forming a new regulation related to the ICT in Indonesia.

Through this opportunity, I would also like to highlight that Indonesia is an emerging country, one of the fastest growing countries in South East Asia and Pacific. Based on International Data Corporation, Indonesia has become the largest spender on ICT in South East Asia and is ranked 19th by spending globally. This is

related to the Indonesia Economic Masterplan to 2025 (MP3EI) that Indonesia has ambitious plans and strategies to accelerate the economic development through ICT infrastructures.

As a critical hub to the Sub-Districts and Villages, the Palapa Ring Development Project connects 34 provinces and 440 cities/districts, stitching a circumference of 36,000 km fiber optics cable. The National Backbone Network, the Palapa Ring, will be completed with the last implementation in the submarine cable in the most eastern part, Papua Province. The National Network capacity and speed would be much improved with its completion. A network failure or disconnection in the Ring would be compensated by rerouting traffic through the other side.

However, the challenge is how to make these plans come into fruition and provide greater access to ICT beyond Jakarta and the Island. Palapa Ring connects Provinces and all Districts, as a critical hub to the Sub-Districts and Villages. The capacity is practically unlimited (Tbps), cheaper access and better guarantee of continuity.

The Palapa Ring could easily provide Network Transit for Asia and Pacific Region, between the Indian and Pacific Oceans and the three (3) Continents (Asia-Australia-Americas). It would be easy to access our neighboring ASEAN countries, Singapore, Brunei Darussalam, Malaysia, Philippines, and Thailand.

The ICITACEE 2015 conference provides a forum for researchers, academicians, professionals, and students from various engineering fields and with cross-disciplinary working or interested in the development and design of information technology, computer system, and electrical engineering to interact and disseminate the latest issues and researches. It also offers opportunity to enjoy the heritage and the beauty of Semarang.

I do hope in the near future the event will be continued and strengthened, so the result will give more benefit and positive impact to the Indonesian people. Technology drives innovation, people can do more, do better. Technology drives higher quality of life, people can live better.

In this occasion, I would also like to say welcome to Semarang, one of the famous destinations in Indonesia. Semarang serves beautiful heritages, mountain and scenery with warm and friendly people, a vibrant culture and lifestyle.

Finally, we do hope all of you will have enjoyable and valuable experience. During this 3 days conference, you may share your best knowledge in your area of research and professional activities.

Thank you.

Semarang, 16 October 2015.

IEEE Indonesia Section Chair

**2015 2nd International Conference on Information Technology,
Computer, and Electrical Engineering (ICITACEE)**

Conference Committee

General Chair : R. Rizal Isnanto (Universitas Diponegoro)
Co-Chair : Mochammad Facta (Universitas Diponegoro)
Secretary : Dania Eridani

Organizing Committee:

Munawar Agus Riyadi
Adian Fatchur Rochim
Rinta Kridalukmana
Oky Dwi Nurhayati
Kurniawan Teguh Martono
Eko Didik Widiyanto
Ike Pertiwi Windasari
Adnan Fauzi
Andi Widiasmoro
Okta Purnamasari
Melati Mawas Titi

Steering Committee:

Hiroshi Ochi (Kyushu Institute of Technology, Jepang)
Hiroshi Furukawa (Kyushu University, Jepang)
Kuncoro Wastuwibowo (IEEE Indonesia Section)
Trio Adiono (IEEE Solid State Circuits Indonesian Chapter)
Heri Mauridhie (Sepuluh Nopember Institute of Technology)
Razali Ismail (University Teknologi Malaysia)
Taufik (California Polytechnic State, USA)

Technical Program Committee:

Wahyul Amien Syafei (Diponegoro University, Indonesia)
R. Rizal Isnanto (Diponegoro University, Indonesia)
Mochammad Facta (Diponegoro University, Indonesia)
Oky Dwi Nurhayati (Diponegoro University, Indonesia)
Munawar Agus Riyadi (Diponegoro University, Indonesia)
Aris Triwiyatno (Diponegoro University, Indonesia)
Hermawan (Diponegoro University, Indonesia)
Sidiq Syamsul Hidayat (Semarang State Polytechnics, Indonesia)
Trio Adiono (Bandung Institute of Technology, Indonesia)
Heri Mauridhie (Sepuluh Nopember Institute of Technology, Indonesia)
Masayuki Kurosaki (Kyushu University, Jepang)
Adhi Susanto (Gadjah Mada University, Indonesia)
Supari (Semarang University, Indonesia)

Slamet Riyadi (Soegijapranoto Catholic University, Indonesia)
M. Hadin (Sultan Agung Islamic University, Indonesia)
Razali Ismail (University Teknologi Malaysia)
Taufik (California Polytechnic State, USA)
Hendra Setiawan (Indonesia Islam University, Indonesia)

**2015 2nd International Conference on Information Technology,
Computer, and Electrical Engineering (ICITACEE)**

Conference Program

Friday, 16th October 2015

07.30 – 08.00	Registration			
08.00 – 08.45	Opening Ceremony			
	Photo Session			
08.45 – 09.00	Coffee Break			
09.00 – 09.50	Invited Speaker 1: Novel Device Architectures and Carbon Based Materials for Future Nanoelectronics <i>Razali Ismail, Universiti Teknologi Malaysia</i>			
09.50 – 10.40	Invited Speaker 2: Distributed Consensus Control of Robot Swarm with Obstacle and Collision Avoidance <i>Bambang Riyanto Trilaksono, Institut Teknologi Bandung</i>			
10.40 – 11.30	Invited Speaker 3: Context-Awareness: Connecting Computing with Its Environment <i>Lukito Edi Nugroho, Universitas Gadjah Mada</i>			
11.30 – 13.30	LUNCH BREAK			
13.30 – 15.00	Parallel Session			
	ROOM A	ROOM B	ROOM C	ROOM D
15.00 – 15.15	Coffee Break			
15.15 – 17.30	Parallel Session			
	ROOM A	ROOM B	ROOM C	ROOM D
17.30 – 18.30	BREAK			
18.30 – 20.00	Gala Diner			

Saturday, 17th October 2015

08.00 – 10.15	Parallel Session			
	ROOM A	ROOM B		
10.15 – 10.30	BREAK			

Sunday, 18th October 2015

08.00 - ...	Cultural program (city tours) (* with additional arrangements)			
-------------	---	--	--	--

Parallel Session Day 1

Friday, 16th October 2015

Room A (Hall, 5th Floor)	
Parallel Session 1 (13.30 – 15.00)	
1	Multiplying Cipher Images on Visual Cryptography with ElGamal Algorithm <i>Alexander Edi Suranta Kacaribu, Ratnadewi Ratnadewi</i>
2	Vowel Pronunciation in Indonesian Language Recognition Using the Lips Angle Measurement and Lips Area <i>Ratnadewi Ratnadewi, Adhi Fajar Sakti Wahyudi, Anisa Fardhani Prasetyaningtyas</i>
3	Optimization of Photovoltaic Farm Under Partial Shading Effects Using Artificial Intelligent Based Matrix Switch Controller <i>Antonius Rajagukguk, Dedet Candra Riawan, Mochamad Ashari</i>
4	Feature Extraction and Classification for Detection Malaria Parasites in Thin Blood Smear <i>Hesti Khuzaimah Nurul Yusufiyah, Hanung Adi Nugroho, Teguh Baratha Adji, Anan Nugroho</i>
5	An Epileptic Signal Preictal Ictal Using PCA, K-Means, K Nearest Neighbors <i>Siswandari Noertjahjani, Risanuri Hidayat, Samekto Wibowo, Adhi Susanto</i>
6	Exploring the Perception of Indonesian Students on Mendeley Reference Management Software in Academic Writing <i>Muhammad Basri, Andi Anto Patak</i>
Parallel Session 2 (15.15 – 17.30)	
1	Time Series Forecasting Using Exponential Smoothing (To Predict the Number of Visitor of the Website of Sebelas Maret University) <i>Rini Anggrainingsih, Gilang Romadhon Aprianto, Sari Widya Sihwi</i>
2	Model of Human Resources for Health Information Systems <i>Bens Pardamean, Timor Utama, Diah Rostanti Fadilah</i>
3	Sentinel Web: Implementation of Laravel Framework in Web Based Temperature and Humidity Monitoring System <i>Lathifah Alfat, Aris Triwiyatno, R. Rizal Isnanto</i>
4	Electromyography (EMG) Signal Compression using Sinusoidal Segmental Model <i>Florentinus Budi Setiawan, Siswanto Siswanto</i>
5	A Mobile Diabetes Educational System for Fasting Type-2 Diabetics in Saudi Arabia <i>Mohammed Alotaibi</i>
6	Fuzzy MADM for Major Selection At Senior High School <i>Fata Nidaul Khasanah, Adhistya Erna Permanasari</i>
7	CANREG 5 Networks for Indonesia <i>Bens Pardamean, Teddy Suparyanto, Diah Rostanti Fadilah</i>
8	Impact of Service-Oriented Architecture Adoption in Information System <i>Erick Fernando, Derist Touriano, Rico Rico</i>
9	Crosscutting Concerns Refactoring in Agent Framework <i>Maman Somantri, Lukito Edi Nugroho, Widywan Widyawan, Ahmad Ashari</i>

Room B (Hall, 5th Floor)	
Parallel Session 1 (13.30 – 15.00)	
1	Two Phase Flow Imaging Using Infra Red Tomography <i>Sallehuddin Ibrahim, Muhammad Abu Bakar Sidik, Mohd Amri Md Yunus</i>
2	Design of Self Balancing Pitch Control in Fixed Wing Unmanned Aerial Vehicle with Fuzzy Logic Controller <i>Aris Triwiyatno, Wahyul Amien Syafei, Teguh Prakoso, Budi Setiyono, Aristya Panggi Wijaya</i>
3	Intensity Average Value of Image Segmentation for Infrared Image of Environmental Condition <i>S.R. Sulistiyanti, M. Komarudin, L. Hakim, A. Yudamson</i>
4	FPGA-Based System for Countinous Monitoring of Three Human's Body Vital Signs <i>Aminuddin Rizal, Munawar Agus Riyadi, Darjat Darjat</i>
5	Robust Control Design for a Spindle of Lathe Machine <i>Moh Khairudin</i>
6	Smart Controller Design of Air to Fuel Ratio (AFR) and Brake Control System on Gasoline Engine <i>Aris Triwiyatno, Enda Wista Sinuraya, Joga Dharma Setiawan, Suroto Munahar</i>
Parallel Session 2 (15.15 – 17.30)	
1	Design of Prepaid Energy Meter Based on PROTEUS <i>Heribertus Himawan, Catur Supriyanto, Adrin Thamrin</i>
2	The Development of Track Record Application for Conservation Activity and Wildlife in Indonesia <i>Arie Vatesia, Jonathan Sadler, Rendra Regen Rais</i>
3	A High Speed Low Power Reading Scheme in DRAMs Using Resonant Tunneling Diode <i>Ahmed Lutfi Elgreatly, Ahmed Ahmed Shaaban, El Sayed M. El-Rabie</i>
4	Control System of Train Speed Based on Fuzzy Logic Controller <i>Reza Dwi Utomo, Sumardi Sumardi, Eko Didik Widiyanto</i>
5	Comparison Methods of Noise Elimination for Pregnancy Image Processing <i>Moh Khairudin, D. Rahmawati</i>
6	Maximum Power Point Tracking Simulation for a Photovoltaic System <i>Susatyo Handoko, Tejo Sukmadi</i>
7	Design of Multisensor IMU for Land Vehicle <i>Wahyudi Wahyudi, Ngatelan Ngatelan</i>

Room C (Hall, 4th Floor)	
Parallel Session 1 (13.30 – 15.00)	
1	Energy Detector Threshold Under White Gaussian Noise Channel in Cognitive Radio System <i>Nasrullah Armi, Chaeriah Bin Ali Wael, Muhammad Arshad, Dadin Mahmudin, Pamungkas Daud</i>
2	Modeling and Simulation of OFDM Scheme for Radio Over Fiber (RoF) <i>Fauza Khair, Fakhriy Hario P, I Wayan Mustika, Budi Setiyanto, Sevia Mahdaliza Idrus</i>
3	Spectrum Sensing Performance in Cognitive Radio System <i>Nasrullah Armi, Chaeriah Bin Ali Wael, Muhammad Arshad</i>
4	Performance of AOMDV Routing Protocol Under Rushing and Flooding Attacks is Manet <i>Sukiswo Sukiswo, Muhamad Rifqi Rifquddin</i>
5	SDN Based Data Center Designs Using Cisco ACI Architectures <i>Atif Khan</i>
6	Multi-Objective Cuckoo Search Algorithm for Task Scheduling in the Cloud Environments <i>Farnaz Sharifi Milani, Nima Jafari Navimipour</i>
Parallel Session 2 (15.15 – 17.30)	
1	Investigation and Comparison of Expert Cloud and E-learning Systems <i>Nima Jafari Nanimipour, Batool Zareie</i>
2	Property Investigation of Nanofiber Polyaniline as Active Material for Biosensor <i>Ngurah Ayu Ketut Umiati, Mochammad Facta, Kuwat Triyana, Kamsul Abraha</i>
3	Basic Study of Multiple Symbol Differential Detection for SC-FDMA System <i>Ziyan Jia, Qiuye Li, Lin Shen</i>
4	Performance Analysis of Transceiver 4 x 4 Space Time Block Coded MIMO-OFDM System <i>Subuh Pramono, Tommi Hariyadi, Budi Basuki Subagio</i>
5	Measurement System of Temperature, Humidity and Air Pressure Over 433 MHz Radio Frequency. an Application on Quadroter <i>Budi Setiyono, Sumardi Sumardi, Rafdito Harisuryo</i>
6	Managing Bandwidth Resource for Vehicular Ad-hoc Networks <i>Sami S. Alwakeel, Agung B. Prasetijo</i>
7	Adaptive Blind Equalization for Differential SC-FDMA System <i>Ziyan Jia, Ming Wu, Lianfeng Shen</i>

Room D (Hall, 4th Floor)	
Parallel Session 1 (13.30 – 15.00)	
1	Morphological Analysis of Epoxy Resin After Electrical Tracking <i>Juningtijastuti Juningtijastuti, Abdul Syakur</i>
2	Reduction of Harmonic with LLCL Filter on Residential Loads 450 VA and 900 VA in Central Java, Indonesia <i>Sapto Nisworo, Hamzah Berahim, Suharyanto Suharyanto, Tumiran Tumiran</i>
3	A Three-phase Power Flow Analysis for Electrical Power Distribution System with Low Voltage Profile <i>Lukmanul Hakim, Muhamad Wahidi, Umi Murdika, Federico Milano, Junji Kubokawa, Naoto Yorino</i>
4	Design of Photovoltaic Powered Converter to Provide AC Controlled Voltage Source <i>Slamet Riyadi</i>
5	Smart Monitoring of Electrical Quantities Based on Single Board Computer BCM2835 <i>Gigih Forda Nama, Dikpride Despa, Muhamad Komarudin, Mardiana Mardiana, Ady Kurniawan</i>
6	Assessment of TRV Parameters and Overvoltages in Three-Phase Ungrounded Faults <i>Alejandro Marmolejo, Mirko Palazzo</i>
Parallel Session 2 (15.15 – 17.30)	
1	Ontology-based Context Aware for Ubiquitous Home Care for Elderly People <i>Kurnianingsih Kurnianingsih, Lukito Edi Nugroho, Widyawan Widyawan, Lutfan Lazuardi, Khamla Non-alinsavath</i>
2	Impact of High Penetration of Photovoltaic Generation on Voltage Fluctuation of Transmission and Distribution Systems <i>Jimmy Trio Putra, Sarjiya Sarjiya, M. Isnaeni BS</i>
3	Study on Surface Resistance of Epoxy Resin Filled Silicon Rubber and Silica Due to Electrical Tracking <i>Abdul Syakur, Tumiran Tumiran, Hamzah Berahim, Rochmadi Rochmadi</i>
4	Blackout Risk Assessment for IEEE 30 BUS System <i>Muhammad Usman Cheema, Muhammad Usman Aslam, Adnan Bashir, Maria Komal, Naila Kousar Rao</i>
5	Involving Generator Capability Curves in Optimal Power Flow <i>Hermagasantos Zein, Yutra Sabri</i>
6	HoMeTrack: RFID-based Localization for Hospital Medicine Tracking System <i>Kurnianingsih Kurnianingsih, Muhammad Anif, Helmy Helmy, Anton Satria Prabuwo</i>
7	The Comparative Study of Buck-Boost, Cuk, Sepic and Zeta Converters for Maximum Power Point Tracking Photovoltaic Using P&O Method <i>Jimmy Trio Putra, Sarjiya Sarjiya, M. Isnaeni BS</i>
8	Harmonic Current Elimination in Industrial Power Systems <i>Deria Pravitasari, Deria Pravitasari, Eka Firmansyah, T. Haryono</i>

Parallel Session Day 2

Saturday, 17th October 2015

Room A (Hall, 5th Floor)	
Parallel Session (08.00 – 10.30)	
1	Developing Agent Application Using Aspect Oriented Aglets Framework <i>Maman Somantri, Lukito Edi Nugroho, Widywan Widyawan, Ahmad Ashari</i>
2	Stroke Identification System on the Mobile Based CT Scan Image <i>Oky Dwi Nurhayati, Ike Pertiwi Windasari</i>
3	An Integrative Framework of COBIT and TOGAF for Designing IT Governance in Local Government <i>Iis Hamsir Ayu Wahab, Assaf Arief</i>
4	Popular Games, Can Any Concept of Cognitive Preschoolers Be in It? <i>Endah Sudarmilah, Adhi Susanto, Ridi Ferdiana, Neila Ramdhani</i>
5	Palmprint Recognition System Based on Principle-lines Feature Using Euclidean Distance and Neural Network <i>R. Rizal Isnanto, Ajub Ajulian Z., Eko Didik Widiyanto</i>
6	Design of Management Information Systems Research, Publications and Community Service <i>Kodrat Iman Satoto, Kurniawan Teguh Martono, R. Rizal Isnanto, Rinta Kridalukmana</i>
7	The Role of Management Information System in Data Surveillance of Maternal and Child Health <i>Kurniawan Teguh Martono, Yudhi Dharmawan</i>
8	Generic Social Network Data Crawler Using Attributed Graph <i>Rinta Kridalukmana</i>
9	Simulation of Attendance Application on Campus Based on RFID (Radio Frequency Identification) <i>Dania Eridani, Eko Didik Widiyanto</i>
10	Expert System for Campus Environment Indexing in Wireless Sensor Network <i>Sumardi Sumardi, Oky Dwi Nurhayati, Muhammad Naufal Prasetyo, Eko Didik Widiyanto</i>

Room B (Hall, 5th Floor)	
Parallel Session (08.00 – 10.30)	
1	Implementation of K-Best Method for MIMO Decoder in WLAN 802.11n <i>Wahyul Amien Syafei</i>
2	TMS: Traffic Management System in VANETs <i>Jetendra Joshi, Manash Jyoti Deka</i>
3	Air Flow Numerical Simulation on Rotor-Stator Surface of Flux Axial Permanent Magnet Generator <i>Prih Sumardjati Mulyaseputra, Sasongko Pramono Hadi, F. Danang Wijaya, Suharyanto Suharyanto</i>
4	Implementation of Photovoltaic and Simple Resonant Power Converter for High Frequency Discharge Application <i>Mochammad Facta, Hermawan Hermawan, Nngurah Ayu Ketut Umiati, Zainal Salam, Zolfakle Buntat</i>
5	Implementation of Detection Device Method on Seamless Proxy Mobile Internet Protocol Version 6 (SPMIPv6) <i>Wiwik Wiharti, Ihsan Lumasa Rimra, Rikki Vitria, Igor Novid</i>
6	Numerical Design of Dual Resonant Phased Array RF Coil for MRI 3T and 7T System <i>Basari Basari, Sri Yuliyanti, Eko Tjipto Rahardjo, Fitri Yuli Zulkifli</i>
7	Interconnection of Hydro Power Plant through 20 kV Distributed Line to Improve Electrical Power Supply in Dieng – Central Java <i>Mochammad Facta, Hermawan Hermawan</i>
8	A Comparative Analysis and Survey of Handoff for VoIP Applications in Mobile IPv6 Protocols <i>Wiwik Wiharti, Ihsan Lumasa Rimra, Efrizon Efrizon, Igor Novid</i>
9	Cooperative Fair Multichannel MAC Protocol for Cognitive Radio Ad Hoc Network <i>Aghus Sofwan, Salman A. AlQahtani</i>
10	The Depletion Influence on the Non-planar Vertical MOSFET Threshold Voltage <i>Munawar Agus Riyadi, Darjat Darjat, Teguh Prakoso, Jatmiko E. Suseno</i>

TABLE OF CONTENTS

Keynote Speakers

- 1 Novel Device Architectures and Carbon Based Materials for Future Nanoelectronics
Razali Ismail
- 2 Distributed Consensus Control of Robot Swarm with Obstacle and Collision Avoidance
Bambang Riyanto Trilaksono
- 3 Context-Awareness: Connecting Computing with Its Environment
Lukito Edi Nugroho

Information and Computer Technologies

- 8 Exploring the Perception of Indonesian Students on Mendeley Reference Management Software in Academic Writing
Muhammad Basri, Andi Anto Patak
- 17 Time Series Forecasting Using Exponential Smoothing (To Predict the Number of Visitor of the Website of Sebelas Maret University)
Rini Anggrainingsih, Gilang Romadhon Aprianto, Sari Widya Sihwi
- 23 Model of Human Resources for Health Information Systems
Bens Pardamean, Timor Utama, Diah Rostanti Fadilah
- 29 CANREG 5 Networks for Indonesia
Bens Pardamean, Teddy Suparyanto, Diah Rostanti Fadilah
- 34 Popular Games, Can Any Concept of Cognitive Preschoolers Be in It?
Endah Sudarmilah, Adhi Susanto, Ridi Ferdiana, Neila Ramdhani
- 39 An Integrative Framework of COBIT and TOGAF for Designing IT Governance in Local Government
Iis Hamsir Ayu Wahab, Assaf Arief
- 44 Fuzzy MADM for Major Selection At Senior High School
Fata Nidaul Khasanah, Adhistya Erna Permanasari
- 49 Sentinel Web: Implementation of Laravel Framework in Web Based Temperature and Humidity Monitoring System
Lathifah Alfat, Aris Triwiyatno, R. Rizal Isnanto
- 55 Impact of Service-Oriented Architecture Adoption in Information System
Erick Fernando, Derist Touriano, Rico Rico
- 59 Crosscutting Concerns Refactoring in Agent Framework
Maman Somantri, Lukito Edi Nugroho, Widywan Widyawan, Ahmad Ashari
- 66 Developing Agent Application Using Aspect Oriented Aplets Framework
Maman Somantri, Lukito Edi Nugroho, Widywan Widyawan, Ahmad Ashari
- 71 Autoregressive Integrated Moving Average Modeling in the Financial Market
Peihao LI, Chaoqun Jing, Tian Liang, Zhenglin Chen, Mingjia Liu, Li Guo
- 75 User Experience Model in the Interaction Between Children with Special Educational Needs and Learning Media
Tri Sagirani, Lukito Edi Nugroho, Paulus Insap Santosa, Amitya Kumara
- 79 Performance Analysis of Edge and Detailed Preserved Speckle Noise Reduction Filters for Breast Ultrasound Images
Dina Arifatul Khusna, Hanung Adi Nugroho, Indah Soesanti
- 84 Virtual Sensor for Time Series Prediction of Hydrogen Safety Parameter in Degussa Sintering Furnace
Dede Sutarya, Adhi Mahendra
- 90 Expert System Applications for Early Diagnosis Teeth and Oral Disease in Children
Septya Maharani, Nataniel Dengen, Galih Yudha Saputra, Dyna Marisa Khairina, Heliza Rahmania Hatta

- 95 Department Recommendations for Prospective Students Vocational High School of Information Technology with Naïve Bayes Method
Dyna Marisa Khirina, Fajar Ramadhani, Septya Maharani, Heliza Rahmania Hatta
- 100 Data Acquisition and Processing of Movement and Position for AUVs with Experiment Results
Nanang Syahrani, Hari Wahjuningrat Suparno, Henggar Budiman, Choi Jae Weon, Yuniar Riska W.P., Metha Puspa I.
- 105 Feature Extraction for Classifying Lesion's Shape of Breast Ultrasound Images Using Adaptive Median Filter
Hesti Khuzaimah Nurul Yusufiyah, Hanung Adi Nugroho, Teguh Baratha Adji, Anan Nugroho
- 110 The Role of Management Information System in Data Surveillance of Maternal and Child Health
Kurniawan Teguh Martono, Yudhi Dharmawan
- 116 Stroke Identification System on the Mobile Based CT Scan Image
Oky Dwi Nurhayati, Ike Pertiwi Windasari
- 120 Design of Management Information Systems Research, Publications and Community Service
Kodrat Iman Satoto, Kurniawan Teguh Martono, R. Rizal Isnanto, Rinta Kridalukmana
- 126 Application of Liver Disease Detection Using Iridology with Back-Propagation Neural Network
R. G. Alam Nusantara Putra Herlambang, R. Rizal Isnanto, Ajub Ajulian Z.
- 131 Geographics Information System of Islamic School in Cilacap
Isti Qomariyah Kumala Dewi, Ike Pertiwi Windasari, Kodrat Iman Satoto
- 136 Portability Characteristic Evaluation Academic Information System Assessment Module Using AIS Quality Instrument
Umi Laili Yuhana, Istiningdyah Saptarini, Siti Rochimah
- 141 Generic Social Network Data Crawler Using Attributed Graph
Rinta Kridalukmana
- 146 Statistical Methods' Application in Comprehensive Sustainability Index and Its Application in Regional Sustainability Measurement
Peihao Li, Mingjia Liu
- 152 Study on the Correlation of Web Repository Ranking to the Green Campus Ranking of Indonesian Universities
Adian Fatchur Rochim, Riri Fitri Sari
- 157 Palmprint Recognition System Based on Principle-lines Feature Using Euclidean Distance and Neural Network
R. Rizal Isnanto, Ajub Ajulian Z., Eko Didik Widiyanto
- 163 Multiplying Cipher Images on Visual Cryptography with ElGamal Algorithm
Alexander Edi Suranta Kacaribu, Ratnadewi Ratnadewi
- 167 Vowel Pronunciation in Indonesian Language Recognition Using the Lips Angle Measurement and Lips Area
Ratnadewi Ratnadewi, Adhi Fajar Sakti Wahyudi, Anisa Fardhani Prasetyaningtyas
- 173 Electromyography (EMG) Signal Compression using Sinusoidal Segmental Model
Florentinus Budi Setiawan, Siswanto Siswanto

Green Technology

- 177 A Mobile Diabetes Educational System for Fasting Type-2 Diabetics in Saudi Arabia
Mohammed Alotaibi
- 181 Review: Interoperability Model of eGovernment Services
I Wayan Ordiyasa, Lukita Edi Nugroho, Paulus Insap Santosa, Ridi Ferdiana, Wahyudi Kumorotomo
- 187 Expert System for Campus Environment Indexing in Wireless Sensor Network
Sumardi Sumardi, Oky Dwi Nurhayati, Muhammad Naufal Prasetyo, Eko Didik Widiyanto
- 191 Optimization of Photovoltaic Farm Under Partial Shading Effects Using Artificial Intelligent Based Matrix Switch Controller
Antonius Rajagukguk, Dedet Candra Riawan, Mochamad Ashari
- 197 Implementation of Photovoltaic and Simple Resonant Power Converter for High Frequency Discharge Application
Mochammad Facta, Hermawan Hermawan, Nngurah Ayu Ketut Umiati, Zainal Salam, Zolfakle Buntat

- 201 Feature Extraction and Classification for Detection Malaria Parasites in Thin Blood Smear
Hanung Adi Nugroho, Son Ali Akbar, E. Elsa Herdiana Murhandarwati
- 206 An Epileptic Signal Preictal Ictal Using PCA, K-Means, K Nearest Neighbors
Siswandari Noertjahjani, Risanuri Hidayat, Samekto Wibowo, Adhi Susanto

Electronics and Devices

- 211 Two Phase Flow Imaging Using Infra Red Tomography
Sallehuddin Ibrahim, Muhammad Abu Bakar Sidik, Mohd Amri Md Yunus
- 215 Design of Self Balancing Pitch Control in Fixed Wing Unmanned Aerial Vehicle with Fuzzy Logic Controller
Aris Triwiyatno, Wahyul Amien Syafei, Teguh Prakoso, Budi Setiyono, Aristya Panggi Wijaya
- 220 Intensity Average Value of Image Segmentation for Infrared Image of Environmental Condition
S.R. Sulistiyanti, M. Komarudin, L. Hakim, A. Yudamson
- 225 FPGA-Based System for Continous Monitoring of Three Human's Body Vital Signs
Aminuddin Rizal, Munawar Agus Riyadi, Darjat Darjat
- 231 Robust Control Design for a Spindle of Lathe Machine
Moh Khairudin
- 237 Smart Controller Design of Air to Fuel Ratio (AFR) and Brake Control System on Gasoline Engine
Aris Triwiyatno, Enda Wista Sinuraya, Joga Dharma Setiawan, Suroto Munahar
- 243 Design of Prepaid Energy Meter Based on PROTEUS
Heribertus Himawan, Catur Supriyanto, Adrin Thamrin
- 248 The Development of Track Record Application for Conservation Activity and Wildlife in Indonesia
Arie Vatesia, Jonathan Sadler, Rendra Regen Rais
- 254 A High Speed Low Power Reading Scheme in DRAMs Using Resonant Tunneling Diode
Ahmed Lutfi Elgreatly, Ahmed Ahmed Shaaban, El Sayed M. El-Rabie
- 260 Control System of Train Speed Based on Fuzzy Logic Controller
Reza Dwi Utomo, Sumardi Sumardi, Eko Didik Widiyanto
- 266 Comparison Methods of Noise Elimination for Pregnancy Image Processing
Moh Khairudin, D. Rahmawati
- 270 Maximum Power Point Tracking Simulation for a Photovoltaic System
Susatyo Handoko, Tejo Sukmadi
- 275 Design of Multisensor IMU for Land Vehicle
Wahyudi Wahyudi, Ngatelan Ngatelan
- 279 Numerical Design of Dual Resonant Phased Array RF Coil for MRI 3T and 7T System
Basari Basari, Sri Yuliyanti, Eko Tjipto Rahardjo, Fitri Yuli Zulkifli
- 283 Property Investigation of Nanofiber Polyaniline as Active Material for Biosensor
Ngurah Ayu Ketut Umiati, Mochammad Facta, Kuwat Triyana, Kamsul Abraha
- 288 The Depletion Influence on the Non-planar Vertical MOSFET Threshold Voltage
Munawar Agus Riyadi, Darjat Darjat, Teguh Prakoso, Jatmiko E. Suseno

Power Systems

- 292 Reduction of Harmonic with LLCL Filter on Residential Loads 450 VA and 900 VA in Central Java, Indonesia
Sapto Nisworo, Hamzah Berahim, Suharyanto Suharyanto, Tumiran Tumiran
- 298 A Three-phase Power Flow Analysis for Electrical Power Distribution System with Low Voltage Profile
Lukmanul Hakim, Muhamad Wahidi, Umi Murdika, Federico Milano, Junji Kubokawa, Naoto Yorino
- 304 Design of Photovoltaic Powered Converter to Provide AC Controlled Voltage Source
Slamet Riyadi
- 310 Smart Monitoring of Electrical Quantities Based on Single Board Computer BCM2835
Gigih Forda Nama, Dikpride Despa, Muhamad Komarudin, Mardiana Mardiana, Ady Kurniawan
- 316 Assessment of TRV Parameters and Overvoltages in Three-Phase Ungrounded Faults
Alejandro Marmolejo, Mirko Palazzo

- 322 The Comparative Study of Buck-Boost, Cuk, Sepic and Zeta Converters for Maximum Power Point Tracking Photovoltaic Using P-O Method
Soedibyo Soedibyo, Budi Amri, Mochamad Ashari
- 328 Impact of High Penetration of Photovoltaic Generation on Voltage Fluctuation of Transmission and Distribution Systems
Jimmy Trio Putra, Sarjiya Sarjiya, M. Isnaeni BS
- 332 Study on Surface Resistance of Epoxy Resin Filled Silicon Rubber and Silica Due to Electrical Tracking
Abdul Syakur, Tumiran Tumiran, Hamzah Berahim, Rochmadi Rochmadi
- 336 Blackout Risk Assessment for IEEE 30 BUS System
Muhammad Usman Cheema, Muhammad Usman Aslam, Adnan Bashir, Maria Komal, Naila Kousar Rao
- 342 Involving Generator Capability Curves in Optimal Power Flow
Hermagasantos Zein, Yutra Sabri
- 347 Air Flow Numerical Simulation on Rotor-Stator Surface of Flux Axial Permanent Magnet Generator
Prih Sumardjati Mulyaseputra, Sasongko Pramono Hadi, F. Danang Wijaya, Suharyanto Suharyanto
- 353 Harmonic Current Elimination in Industrial Power Systems
Deria Pravitasari, Deria Pravitasari, Eka Firmansyah, T. Haryono
- 358 Interconnection of Hydro Power Plant through 20 kV Distributed Line to Improve Electrical Power Supply in Dieng – Central Java
Mochammad Facta, Hermawan Hermawan
- 362 Morphological Analysis of Epoxy Resin After Electrical Tracking
Juningtijastuti Juningtijastuti, Abdul Syakur

Telecommunications

- 367 Energy Detector Threshold Under White Gaussian Noise Channel in Cognitive Radio System
Nasrullah Armi, Chaeriah Bin Ali Wael, Muhammad Arshad, Dadin Mahmudin, Pamungkas Daud
- 371 Modeling and Simulation of OFDM Scheme for Radio Over Fiber (RoF)
Fauza Khair, Fakhriy Hario P, I Wayan Mustika, Budi Setiyanto, Sevia Mahdaliza Idrus
- 377 Spectrum Sensing Performance in Cognitive Radio System
Nasrullah Armi, Chaeriah Bin Ali Wael, Muhammad Arshad
- 381 Performance of AOMDV Routing Protocol Under Rushing and Flooding Attacks is Manet
Sukiswo Sukiswo, Muhamad Rifqi Rifquddin
- 386 SDN Based Data Center Designs Using Cisco ACI Architectures
Atif Khan
- 392 Multi-Objective Cuckoo Search Algorithm for Task Scheduling in the Cloud Environments
Farnaz Sharifi Milani, Nima Jafari Navimipour
- 397 Investigation and Comparison of Expert Cloud and E-learning Systems
Nima Jafari Nanimipour, Batool Zareie
- 402 Cooperative Fair Multichannel MAC Protocol for Cognitive Radio Ad Hoc Network
Aghus Sofwan, Salman A. AlQahtani
- 408 Adaptive Blind Equalization for Differential SC-FDMA System
Ziyan Jia, Ming Wu, Lianfeng Shen
- 412 Implementation of K-Best Method for MIMO Decoder in WLAN 802.11n
Wahyul Amien Syafei
- 417 Basic Study of Multiple Symbol Differential Detection for SC-FDMA System
Ziyan Jia, Qiuye Li, Lin Shen
- 421 Performance Analysis of Transceiver 4 x 4 Space Time Block Coded MIMO-OFDM System
Subuh Pramono, Tommi Hariyadi, Budi Basuki Subagio
- 425 Implementation of Detection Device Method on Seamless Proxy Mobile Internet Protocol Version 6 (SP-MIPv6)
Wiwik Wiharti, Ihsan Lumasa Rimra, Rikki Vitria, Igor Novid
- 429 Managing Bandwidth Resource for Vehicular Ad-hoc Networks
Sami S. Alwakeel, Agung B. Prasetijo

- 433 Measurement System of Temperature, Humidity and Air Pressure Over 433 MHz Radio Frequency. an Application on Quadrotor
Budi Setiyono, Sumardi Sumardi, Rafdito Harisuryo
- 437 TMS: Traffic Management System in VANETs
Jetendra Joshi, Manash Jyoti Deka
- 444 HoMeTrack: RFID-based Localization for Hospital Medicine Tracking System
Kurnianingsih Kurnianingsih, Muhammad Anif, Helmy Helmy, Anton Satria Prabuwono
- 449 Ontology-based Context Aware for Ubiquitous Home Care for Elderly People
Kurnianingsih Kurnianingsih, Lukito Edi Nugroho, Widyawan Widyawan, Lutfan Lazuardi, Khamla Nonalinsavath
- 455 Simulation of Attendance Application on Campus Based on RFID (Radio Frequency Identification)
Dania Eridani, Eko Didik Widianto
- 459 A Comparative Analysis and Survey of Handoff for VoIP Applications in Mobile IPv6 Protocols
Wiwik Wiharti, Ihsan Lumasa Rimra, Efrizon Efrizon, Igor Novid



2015
ICITACEE
THE 2nd INTERNATIONAL CONFERENCE ON INFORMATION
TECHNOLOGY, COMPUTER, AND ELECTRICAL ENGINEERING

“ **GREEN TECHNOLOGY STRENGTHENING IN INFORMATION TECHNOLOGY,
ELECTRICAL, AND COMPUTER ENGINEERING IMPLEMENTATION** ”

CERTIFICATE

awarded to :

SUMARDI

AS
AUTHOR

IN THE 2nd INTERNATIONAL CONFERENCE ON INFORMATION TECHNOLOGY, COMPUTER, AND ELECTRICAL ENGINEERING
(ICITACEE 2015)

Department of Computer Engineering, Diponegoro University
Semarang, October 16th, 2015



Ir. M. Agung Wibowo, MM, MSc, PhD
Dean of Faculty Engineering, Diponegoro University



Dr. R. Rizal Isnanto, S.T, M.M., M.T.
General Chair

No. 776/UN7.P/HK/2015