YAYASAN BRATA BHAKTI JAWA-TIMUR
UNIVERSITAS BHAYANGKARA SURABAYA
LEMBAGA PENELITIAN DAN PENGABDIAN KEPADA MASYARAKAT
(LPPM)
Jalan Ahmad Yani 114 Surabaya, Telp. 031-8285602, 8291055, Fax. 031-8285601

SURAT KETERANGAN

Nomor : Sket/ 67/II/2023/LPPM/UBHARA

Yang bertanda tangan dibawah ini :

Nama	:	Drs. Heru Irianto, M.Si
NIP	:	9000028
NIDN	:	0714056102
Jabatan	:	Kepala Lembaga Penelitian dan Pengabdian Kepada Masyarakat (LPPM) Universitas bhayangkara Surabaya

Dengan ini menerangkan bahwa dosen prodi Teknik elektro Universitas Bhayangkara Surabaya atas nama **Dr. Ir. Saidah, MT** benar telah melakukan kegiatan :

1. Menulis artikel yang telah di publish pada Seminar Internasional, ICGC-RCICT 2010, berjudul **High Performance of Nonlinear DC Motor Speed Control using Backpropagation Neural Network**, sebagai Penulis ketua dan koresponden, Maret 2010.
2. Telah melakukan korespondensi melalui email dan OJS dalam proses review dan penerbitan jurnal tersebut. Bukti korespondensi email dan bukti pendukung adalah benar sudah dilakukan oleh yang bersangkutan serta sudah dilampirkan bersama surat ini.

Demikian surat keterangan ini dibuat untuk dapat dipergunakan sebagaimana mestinya.

Surabaya, 31 Januari 2023
Kepala LPPM

Drs. Heru Irianto, M.Si.

REGISTER CONFIRMATION OF ICGC RCICT 2010

Register Confirmation of ICGC RCICT 2010

Dari: icgc-rcict-2010@te.ugm.ac.id

Kepada: sdhbaisa61@yahoo.com

Tanggal: Minggu, 10 Januari 2010 21.45 WIB

We have received your paper, Each paper will undergo a review process by the Technical Program Committee.
Your paper : High Performance of Nonlinier DC Motor Speed Control using Backpropagation Neural Network
Notification will be sent to your email January 16, 2010
Thanks for your participation

Best Regards :
Commite of ICGC-RCICT 2010
Department of Electical Engineering Gadjah Mada University
http://icgc-rcict-2010.te.ugm.ac.id/

REGISTER CONFIRMATION OF ICGC RCICT 2010

Notifications of ICGC RCICT 2010 - Corrections

Dari: icgc-rcict-2010@te.ugm.ac.id

Kepada: sdhbaisa61@yahoo.com

Tanggal: Senin, 1 Februari 2010 09.02 WIB

Dear Author,

We write this email to correct about the conference date in the previous notification. The notification scheduled on May 2-3, 2009, but the correct scheduled is March 2-3, 2010.

CONFERENCE INFORMATION

The conference is scheduled to be held on March 2-3, 2010, in Jogjakarta Plaza Hotel, Jl. Affandi, Gejayan, Complex Colombo Jogjakarta 55281 Indonesia. It is organized by Department of Electrical Engineering and Information Technology, Faculty of Engineering, Gadjah Mada University, and supported by AUN/SEED-Net and ASEAN Foundation.

We apologize for this inconvenience.

Sincerely,

Risanuri Hidayat
Committee of ICGC 2010

JADWAL PEMAKALAH

 ISSN: 2086-4868

PROCEEDINGS OF

THE FIRST INTERNATIONAL CONFERENCE ON GREEN COMPUTING

AND

THE SECOND AUN/SEED-NET REGIONAL CONFERENCE ON ICT

Yogyakarta, 2 – 3 March 2010

DEPARTMENT OF
ELECTRICAL ENGINEERING AND INFORMATION TECHNOLOGY
FACULTY OF ENGINEERING
GADJAH MADA UNIVERSITY

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Foreword

With the number of human population is getting higher and higher, the ability of our environment to support human life is gaining its importance. Sustainable development, or development that meets the needs of the present without sacrificing the future, has since then been adopted by many countries and institutions at all levels.

In supporting sustainable development, the field of information and communication technology (ICT) has coined the term “green ICT” or “green computing”, which describes the study and practice to use computing resources efficiently. As a contemporary issue, green computing becomes an important concern for big industries, small companies, and even government institutions since their success criteria are no longer based on a single measure.

Unfortunately, green computing has not been widely understood, yet practiced effectively. Not many technological options have been explored, and still it is mainly viewed from technological and engineering perspectives only. The challenges are thus twofold: exploring technological advances to achieve better ICT utilization, and how technology products/solutions can be applied effectively to meet the specified success criteria. These challenges are even more relevant to developing countries, since they are less exposed to scientific frontiers and have shorter tradition and less experiences of ICT utilization. On the other hand, these countries bear heavier burdens due to digital divide phenomenon which may block the road to the fulfillment of Millenium Development Goals in 2015. Therefore it is considered important to pave roads towards green computing, especially its application in developing countries. Many aspects have to be explored, considered, and discussed in an interdisciplinary manner, and this becomes the purpose of this conference.

The First International Conference on Green Computing (ICGC 2010) is an event organized by the Department of Electrical Engineering and Information Technology, Faculty of Engineering, Gadjah Mada University. This year, ICGC 2010 is held in conjunction with the AUN/SEED-Net’s Regional Conference on ICT 2010 (RC-ICT 2010). AUN/SEED-Net is a network of engineering education higher institutions in ASEAN countries. The event also commemorates the 64 years of Faculty of Engineering, Gadjah Mada University, as well as celebrates the inauguration of the new name of Department of Electrical Engineering and Information Technology.

It is expected that ICGC 2010 and RC-ICT 2010 can serve as a forum for sharing knowledge and experiences in the ICT field under the ASEAN spirit. Hosting 82 papers from Thailand, Vietnam, Laos, Cambodia, Myanmar, Malaysia, Philippines, India, Japan, and Indonesia, including speakers from government and industry, the conference is expected to yield fruitful outcomes for the benefit of all participating researchers, institutions, and countries.

Finally, as the Chairman of the Organizing Committee, I would like to express my deep appreciation to ASEAN Foundation, JICA, AUN/SEED-Net, King Mongkut’s Institute of Technology Ladkrabang, for invaluable support and assistance. My big thanks also go to all members of the Organizing Committee who have devoted their time and energy for the success of the event.

For all participants, I wish you an enjoyable conference in this colourful city of Yogyakarta.

Dr. Lukito Edi Nugroho
Chairman of the Organizing Committee

SCHEDULE

[Note: Yogyakarta time leads the UCT (Formerly GMT) by seven hours]

Conference Day ONE: Tuesday, 2 March 2010

08.00 – 08.30:	Registration
08.30 – 09.15:	Opening Ceremony 1. Chairman of the Organizing Committee 2. Rector of UGM 3. ASEAN Foundation Executive Director 4. AUN/SEED-Net Executive Director
09.15 – 09.30	Photo Session
09.30 – 10.00	Morning Coffee Break
	PLENARY SESSION: SPECIAL LECTURE (at Room A)
	Moderator: Sarjiya
10.00 – 10.30	Ministry of Communication and Informatics, Republic of Indonesia…
10.30 – 11.00	**Mr. Aris Dinamika** PT Schneider Indonesia *Energy Efficiency: A Mandatory Driver for a Changing World*
11.00 – 11.30	**Prof. Singo Yoshizawa** Graduate School of Information and Science Technology, Hokkaido University, Sapporo, Japan *Experimental Platform in 5-GHz Band Wireless Communication Using an 80-MHz Bandwidth MIMO-OFDM System*
11.30 – 12.00	**Prof. Shinji Hara** Department of Information Physics and Computing, The University of Tokyo, Japan *Hierarchical Consensus for Large Scale Networked Dynamical Systems*
12.00 – 13.15	**Lunch**
13.15 – 16.10	**PARALLEL SESSION (Room A, B, C, D):** Listed in the following pages
18.30	**Conference Dinner**

Conference Day TWO: Wednesday, 3 March 2010

	PLENARY SESSION: SPECIAL LECTURE (at Room A)
	Moderator: Suharyanto
08.30 – 09.00:	**Prof. Kazuhiko HAMAMOTO** Dept. of Information Media Technology, School of Information and Telecommunication Eng., Tokai University, Tokyo, Japan *Virtual Reality and Augmented Reality and their Applications to Medical Diagnosis and Green Computing*
09.00 – 09.30:	**Prof. Yoshiteru Ishida** Department of Knowledge-Based Information Engineering, Toyohashi University of Technology, Aichi, Japan *Ubiquitous Sensor Networks for Monitoring the Environment: Adaptive Sensing Based on Profiles*
09.30 – 10.00	**Prof. Hiroshi Shigeno** Graduate School of Science and Technology, Keio University, Kanagawa, Japan *Filter Multicast: A Communication Support for Dynamic Vehicle Platoon Management*
10.00 – 10.30	**Morning Coffee Break**
10.30 – 15.40	**PARALLEL SESSION (at Room A, B, C, D):** listed in the following pages
12.10 – 13.10	**Lunch**
13.10 – 15.10	**PARALLEL SESSION** (cont.)
15.10 – 15.30	**Afternoon Coffee Break**
15.30 – 17.00	**AUN/SEED-Net Members:** Discussion (Room A)

PARALLEL SESSION (Room A, B, C, D)

Allocated duration per paper : 20 minutes (max.)
- GREEN lamp : 10 minutes (max.) presentation
- YELLOW lamp : 10 minutes (max.) discussion
- RED lamp : END of allocated duration

Conference Day ONE: Tuesday, 2 March 2010

Room: A
Committee on duty: Bagas Nawolo Seto

Time	Code	(First) Author	Paper Title
		Moderator A11: Annanda Thavymony RATH **Co-Moderator :** F. Danang Wijaya (Committee)	
13.15-13.35	*IND #1*	*P.U. Bhalchandra*	*Epitomizing Green Computing*
13.35-15.55	JPN #1	Thida Zin Myint	Range-Free Localization Algorithm Using Distance Deviation …
15.55-14.15	JPN #2	Sach Thanh LE	Stereo-Based Ground Plane Estimation: A Reliable Approach for …
14.15-14.35	CAM #1	Chanthea Khun	Analysis of Single-Phase Passive and Active EMI Filter Performance …
14.35-14.55	CAM #2	Vuthchhay Eng	Dynamic Modeling and Control of a SEPIC Converter in …
14.55-15.10		**Afternoon Coffee Break**	
		Moderator A12: Chanthea Khun / Vuthchhay Eng **Co-Moderator :** Husni Rois Ali (Committee)	
15.10-15.30	CAM #3	A.T. RATH	Prototype of Sound-based News on Demand Application in…
15.30-15.50	MYA #1	Khin Mar Soe	Sustainable Development of ICT for Rural Areas in Myanmar
15.50-16.10	MYA #2	Soe Soe Khaing	Green in ICT Utilization for Sustainable Development of Myanmar

Room: B
Committee on duty: Arief Hartawan Putro

Time	Code	(First) Author	Paper Title
		Moderator B11: S. W. Harun/ Kamal Z. Zamli **Co-Moderator :** Enas Dhuhri Kusuma (Committee)	
13.15-13.35	*ISTA*	*Gatot Santoso*	*Design and Implementation of M-Learning for Increasing Flexibility …*
13.35-15.55	SIN #1	Nhan H. Truong	Fair End-to-end Bandwidth Allocation (FEBA) Algorithms …
15.55-14.15	SIN #2	Binh P. Nguyen	Cross Directional Rectangle Search for Fast Block-Matching Motion …
14.15-14.35	SIN #3	Trang T.T. Do	A High-Accuracy and High-Speed 2-D 8x8 Discrete Cosine …
14.35-14.55	MAS #1	F.R. M. Adikan	Flat Fibre technology: towards a truly flexible, distributed optical …
14.55-15.10		**Afternoon Coffee Break**	
		Moderator B12: F.R. Mahamd Adikan **Co-Moderator :** Igi Ardiyanto(Committee)	
15.10-15.30	MAS #2	S. W. Harun	Compact Bismuth-based Erbium-doped Fiber Amplifier With …
15.30-15.50	MAS #3	Kamal Z. Zamli	Adopting Variable Strength Interaction Testing: Some Practical Issues
15.50-16.10	*MAS #4*	Moh. A. Ramlan	Optimum Operation of Pump at Water Treatment Plant for Achieving ….

Room: C
Committee on duty: Fajar Subekti Wirawan

Time	Code	(First) Author	Paper Title
		Moderator C11: Khoi Phan-Dinh /Son Hong Ngo/ Tran Ngoc Thinh **Co-Moderator :** Lesnanto (Committee)	
13.15-13.35	INA #1	Achmad Imam K.	Experiences in Implementing General-Purpose Applications on CUDA
13.35-15.55	PHI #1	Rose Ann Sale	KineSpell2 A Full VAK Approach in Learning Spelling
15.55-14.15	PHI #2	Cesar A. Llorente	Event Driven Reconfigurable Architecture for Real-time Multiple …
14.15-14.35	VIE #1	Nguyen T.T.Tu	A Proposal of Internet-based Monitoring and Control Systems Using ….
14.35-14.55	VIE #2	Phong Tuan Ngo	Providing Qualified Intensional Answers Using Fuzzy Concept Hierarchies
14.55-15.10		**Afternoon Coffee Break**	
		Moderator C12: Nguyen Thi Thanh/Tu Phong Tuan Ngo **Co-Moderator :** Ridi Ferdiana (Committee)	
15.10-15.30	VIE #3	Son Hong Ngo	Credibility checking-based scheduling schemes for desktop grid …
15.30-15.50	VIE #4	Khoi Phan-Dinh	New Method to Implement Intelligent Street Lighting System in Vietnam
15.50-16.10	VIE #5	Tran Ngoc Thinh	High-throughput Pattern Matching Engine for Network Intrusion …

Certificate of presentation is available after completing your presentation.

Room: D, day ONE
Committee on duty: Azhar Sukma Alam

Time	Code	(First) Author	Paper Title
		Moderator D11: Sopon Pumeechanya /Pornchai Korpraserttaworn/ Keokanlaya Sihalath **Co-Moderator :** Avrin Nur Widyastuti (Committee)	
13.15-13.35	LAO #1	Khamphong K.	3D Reconstruction from X-ray Fluoroscopy using Exponential …
13.35-15.55	THA #1	Simon J. Q. Lam	Error Concealment in H.264 Spatial Scalable Video using Improved …
15.55-14.15	THA #2	D. LAKANCHANH	Evaluation of Blind Modulation Detection in Adaptive OFDM Systems
14.15-14.35	THA #3	Nayot K.	An Algorithm for Q-Factor Evaluation A Case Study on 40 Gbps …
14.35-14.55	THA #4	Napat R.	On-line Verification Algorithm for Flexible Interval Representation …
14.55-15.10		**Afternoon Coffee Break**	
		Moderator D12: Simon J. Q. Lam/ D. LAKANCHANH/ Napat R. **Co-Moderator :** Eny Sukani Rahayu (Committee)	
15.10-15.30	THA #5	Sopon P.	Active Contour Using Local Region Based Force with Adaptive …
15.30-15.50	THA #6	Pornchai K.	Running Network Intrusion Detection System on a Recycled Personal …
15.50-16.10	THA #7	K. Sihalath	Directional Filtered Fingerprint Images: An Investigation and …

PARALLEL SESSION (Room A, B, C, D)
Conference Day TWO: Wednesday, 3 March 2010

Room: A
Committee on duty: Ahmad Muqurobin H.T. Moderator Assistant: Iqbal Mustika

Time	Code	(First) Author	Paper Title
		Moderator A21: Handaru Jati	
10.30-10.50	Pale #2	Rendra G.	An Integrated Model of Collaborative Learning in Higher Education
10.50-11.10	Sura #1	A. S. Rachman	Energy-Efficient Protocol of Wireless Sensor Network using …
11.10-11.30	Sura #2	S. Tahcfulloh	Performance Evaluation of Adaptive Coded Modulation and …
11.30-11.50	UNY #1	Ratna Wardani	Providing User Quality of Service Specification for Communities with …
11.50-12.10	Sura #3	Gunawan	Efficiency Comparison on Eclat, FP-Tree, and Top-Down Algorithms …
12.10-13.10		**Lunch**	
		Moderator A22: Ratna Wardani	
13.10-13.30	Sura #4	Gunawan	Collocation Detection for Indonesian
13.30-13.50	Sema #2	Ida Widihastuti	Image Processing Intelligent System Iris Eye Real-Time Compound …
13.50-14.10	UNY #3	Handaru Jati	Analysis of Green Computing Strategy in University: Analytic …
14.10-14.30	UNY #4	Handaru Jati	Website Quality Evaluation Comparison: An Empirical Study in Asia
14.30-14.50	AAU #1	Arwin Datumaya	Knowledge Sharing in Knowledge-Growing-based Systems
14.50-15.10	AAU #2	Rakhmat Hidayat	Savings Time Execution Prima Numbers Generator Using Bit-Array …
15.10-15.30		**Afternoon Coffee Break**	

Certificate of presentation is available after completing your presentation.

Room: B, day TWO
Committee on duty: Arief Herusetyo Wicaksono Moderator Assistant: Tiko Raharianto

Time	Code	(First) Author	Paper Title
		Moderator A21: Fatchul Arifin	
10.30-10.50	Bali #1	I K G Darma P.	SMS Based Technology For Data School Collecting In Bali
10.50-11.10	Madu #1	Rima Tri W.	Smile Stages Recognition in Orthodontic Rehabilitation Using …
11.10-11.30	Sura #5	Patria Julianto	Optimization of Size and Location of Capacitor Banks on Distribution …
11.30-11.50	Sura #6	Thiang	Position Control of Manipulator's Links Using Artificial Neural …
11.50-12.10	TETI #12	Udayanto Dwi A.	Design of Power Plant Boiler Temperature Monitoring Application …
12.10-13.10		**Lunch**	
		Moderator A22: Udayanto Dwi Atmojo	
13.10-13.30	UNY #2	Fatchul Arifin	ElectroLarynx, Esopahgus, and Normal Speech Classification using …
13.30-13.50	Sala #1	Irwan Sembiring	Data Authentication in Network Forensic Using MD5 and CRC32 Method
13.50-14.10	TETI #21	Herdjunanto S.	Green Analysis : a System Approach A Case Study: Sensor Fault …
14.10-14.30	TETI #22	Herdjunanto S.	Computation Time Reduction as a Strategy to Reduce Energy in …
14.30-14.50	TETI #31	Wahyuni	Information Technology Infrastructure Flexibility and …
14.50-15.10	TETI #32	Avrin N. W.	Analysis of Solar Cell Traffic Light System in Kota Yogyakarta
15.10-15.30		**Afternoon Coffee Break**	

Room: C, day TWO

Committee on duty: Ircham Ardani, Moderator Assistant: Andreas W. Octavian

Time	Code	(First) Author	Paper Title
		Moderator A21: Vita Lystianingrum	
10.30-10.50	Jaka #1	Hadian S. Utama	Design and Implementation of Solar Tracker in Solar Energy …
10.50-11.10	Jaka #2	Yulianus	The Assesment of Quality of Service (QoS) in IP/MPLS Network
11.10-11.30	Sura #8	Andy Noortjahja	Filtering of normal, and laryngectomiced patient voices using …
11.30-11.50	Sura #9	Ingrid Nurtanio	Compression and Reconstruction of Digital Dental Image on Fuzzy …
11.50-12.10	Maka #1	Mingsep S.	The Internet Protocol Design Framework To Real Time …
12.10-13.10		**Lunch**	
		Moderator A22: Mingsep Sampebua	
13.10-13.30	Sura #7	Vita L.	Maximum Power Point Tracker Using Buck-Boost Converter as …
13.30-13.50	Sema #1	Sari Wijayanti	Application of Decision Support System to Determine the Level of …
13.50-14.10	TETI #26	P. Insap Santosa	Gesture-based Mouse Cursor Movement Using Template-Matching: …
14.10-14.30	TETI #27	Widyawan	Low-Powered Wireless Sensor Network for Indoor Localization
14.30-14.50	TETI #28	Enas Dhuhri K.	Developing Multi-applicationed smart card system with ITSO standard
14.50-15.10	TETI #29	Enas Dhuhri K.	Image Processing Using ARM9-based Embedded System Case Study: ..
15.10-15.30		**Afternoon Coffee Break**	

Room: D, day TWO

Committee on duty: Fajar Budi Suryawan Moderator Assistant: Teguh Afandi

Time	Code	(First) Author	Paper Title
		Moderator: Budhy Setiawan	
10.30-10.50	Pale #1	Deris Stiawan	Reliability Measurement of Internet Services
10.50-11.10	Sura #10	Lilik Anifah	Simulation of Desicion Support System for Pricing Grid Enterprise in …
11.10-11.30	Sura #12	Mardlijah	Design and Performance Analysis of Speed Controller in Induction …
11.30-11.50	Sura #13	Saidah	High Performance of Nonlinear DC Motor Speed Control using ...
11.50-12.10	Papu #1	Maurits A. Paath	The Evaluation of Non-fundamental Frequency Apparent Power and …
12.10-13.10		**Lunch**	
		Moderator: Maurits A. Paath	
13.10-13.30	Sura #11	Budhy Setiawan	Backpropagation Neural Network based Reference Control Modeling …
13.30-13.50	TETI #11	Sri Arttini D.P.	Adaptive LMS Noise Cancellation of Wideband Vehicle's Noise Signals
13.50-14.10	TETI #24	M. Isnaeni B.S.	PLC-based Power Factor Regulator
14.10-14.30	TETI #23	Risanuri Hidayat	Embedded Webserver Applications for Industrial Process Monitoring
14.30-14.50	TETI #25	Astria N Irfansyah	Implementation of Low Cost Modbus Protocol-Enabled Embedded …
14.50-15.10	TETI #30	Budi Setiyanto	QAM Mapper-Demapper for an Adaptive Modulation OFDM: from …
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CERTIFICATE

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