Advanced Program

ICACSIS 2016

2016 International Conference on Advanced Computer Science and Information Systems

October 15-16 th, 2016 Malang, East Java







DIREKTORAT RISET & PENGABDIAN MASYARAKAT





CONFERENCE INFORMATION

Dates October 15th (Saturday) – October 16th (Sunday) 2016

Organizer Faculty of Computer Science, Universitas Indonesia

Faculty of Computer Science, Brawijaya University

Venue Gedung Widyaloka, Universitas Brawijaya

Jl. Veteran, Sumbersari, Kec. Lowokwaru,

Kota Malang, Jawa Timur,

Indonesia 65145

Phone : +62-21-7863547

Fax : +62-21-7863548

Official Language English

Secretariat Faculty of Computer Science, Universitas Indonesia

Kampus UI Depok

Depok, 16424

Indonesia

T: +62 21786 3419 ext. 3225

F: +62 21 786 3415

E: icacsis@cs.ui.ac.id

W: http://www.cs.ui.ac.id

Conference Website http://icacsis.cs.ui.ac.id

COMMITTEES

Honorary Chairs:

- Jain, Fellow IEEE, Michigan State University, US
- T. Fukuda, Fellow IEEE, Nagoya-Meijo University, JP
- M. Anis, Universitas Indonesia, ID
- M. Adriani, Universitas Indonesia, ID
- Sutrisno, Universitas Brawijaya, ID
- W. F. Mahmudy, Universitas Brawijaya, ID

General Chairs:

- D. I. Sensuse, Universitas Indonesia, ID
- H. Tolle, Universitas Brawijaya, ID
- Y. G. Sucahyo, Universitas Indonesia, ID

Program Chairs:

- H. B. Santoso, Universitas Indonesia, ID
- T. A. Kurniawan , Universitas Brawijaya, ID
- W. Jatmiko, Universitas Indonesia, ID

Section Chairs:

S. Dharmanto, IEEE Indonesia Section, ID

Financial Chairs:

- H. R. Sanabila, Universitas Indonesia, ID
- Marji, Universitas Brawijaya, ID

Publication Chairs:

A. Wibisono, Universitas Indonesia, ID

Program Committees:

- A. Azurat, Universitas Indonesia, ID
- A. Basuki, Universitas Brawijaya, ID
- A. Buono, Institut Pertanian Bogor, ID
- A. Kristijantoro, Institut Teknologi Bandung, ID
- A. Murni, Universitas Indonesia, ID
- A. N. Hidyanto, Universitas Indonesia, ID
- A. Purwarianti, Institut Teknologi Bandung, ID
- A. Tiu, Australian National University, AU
- A. Srivihok, Kasetsart University, TH
- A. Z. Arifin, Institut Teknologi Sepuluh Nopember, ID
- B. Anggorojati, Universitas Indonesia, ID.
- B. H. Widjaja, Universitas Indonesia, ID
- B. Hardian, Universitas Indonesia, ID
- B. Purwandari, Universitas Indonesia, ID

- B. Subagdja, Nanyang Technological University, SG
- E. Gaura, Coventry University, UK
- E. K. Budiarjo, Universitas Indonesia, ID
- E. Seo, Sungkyunkwan University, KR
- F. Ramdani, Universitas Brawijaya, ID
- F. Utaminingrum, Universitas Brawijaya, ID
- H. Kurniawati, University of Queensland, AU
- H. Suhartanto, Universitas Indonesia, ID
- I. Budi, Universitas Indonesia, ID
- I. Wasito, Universitas Indonesia, ID
- L. Y. Stefanus, Universitas Indonesia, ID
- Marimin, Institut Pertanian Bogor, ID
- M. I. Fanany, Universitas Indonesia, ID
- M. Kyas, Reiykjavik University, IS
- M. Nakajima, Nagoya University, JP
- M. T. Suarez, De La Salle Univeristy, PH
- O. Lawanto, Utah State University, US
- P. Hitzler, Wright State Unversity, US
- P. Mursanto, Universitas Indonesia, ID
- R. M. Salleh, Universiti Tun Hussein Onn Malaysia, MY
- S. Bressan, National University of Singapore, SG
- S. Nomura, Nagaoka University of Technology, JP
- S. Sharif, Universiti Utara Malaysia, MY
- S. Yazid, Universitas Indonesia, ID
- T. Gunawan, International Islamic University Malaysia, MY
- T. Hardjono, Massachusetts Institute of Technology, US
- W. C. Wibowo, Universitas Indonesia, ID
- W. F. Mahmudy, Universitas Brawijaya, ID
- W. Prasetya, Universiteit Utrecht, ND
- W. S. Nugroho, Universitas Indonesia, ID
- W. Sediono, International Islamic University Malaysia, MY
- Y. G. Sucahyo, Universitas Indonesia, ID
- X. Li, The University of Queensland, AU
- Y. K. Isal, Universitas Indonesia, ID
- Z.A. Hasibuan, Universitas Indonesia, ID
- Z. Zyada, Universiti Teknologi Malaysia, MY

Local Organizing Chair:

H. Nurwarsito, Universitas Brawijaya, ID

Local Organizing Committee:

- Bhawiyuga, Universitas Brawijaya, ID
- Aprinaldi, Universitas Indonesia, ID
- D. Marhaendro, Universitas Indonesia, ID
- E. R. Widasari, Universitas Brawijaya, ID
- E. S. Pramukantoro, Universitas Brawijaya, ID
- F. Pradana, Universitas Brawijaya, ID
- F. Ramdhani, Universitas Brawijaya, ID
- F. Utaminingrum, Universitas Brawijaya, ID
- G. E. Setyawan, Universitas Brawijaya, ID

- H. A. Wisesa, Universitas Indonesia, ID
- H. Fitriyah, Universitas Brawijaya, ID
- M. A. Fauzi, Universitas Brawijaya, ID
- M. A. Ma'sum, Universitas Indonesia, ID
- M. Soleh, Universitas Indonesia, ID
- M. Roby, Universitas Indonesia, ID
- R. Primananda, Universitas Brawijaya, ID
- S. C. Purbarani, Universitas Indonesia, ID

VENUE MAP

Gedung Widyaloka, Brawijaya University

Jl. Veteran, Sumbersari, Kec. Lowokwaru,

Kota Malang, Jawa Timur,

Indonesia 6514





Google Maps Link https://goo.gl/maps/iGRCgR8qXtk

GALA DINNER MAP

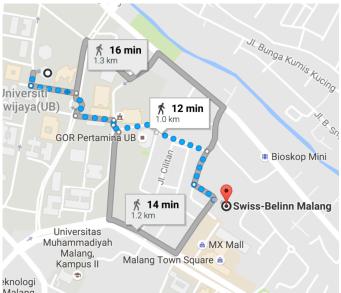
Swiss-Bellinn Malang

Jalan Veteran No.8A,

Penanggungan, Klojen, Kota Malang,

Jawa Timur, Indonesia 65145



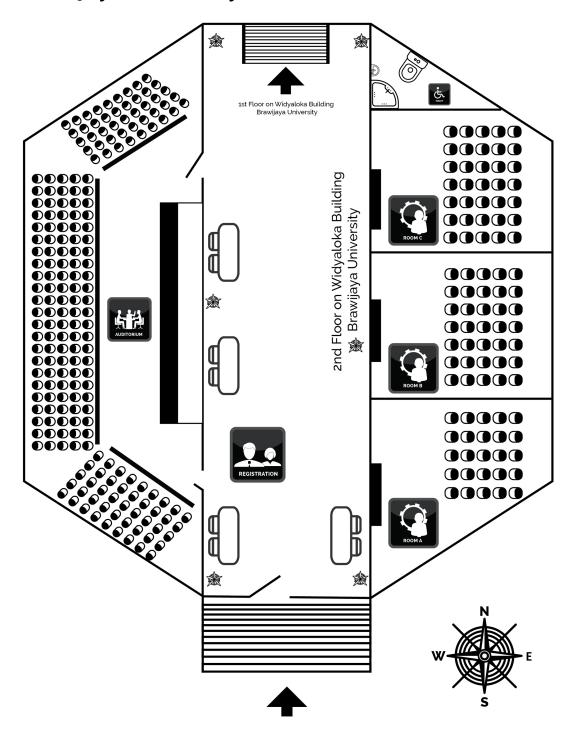




Google Maps Link https://goo.gl/maps/rxE9JKvopnA2

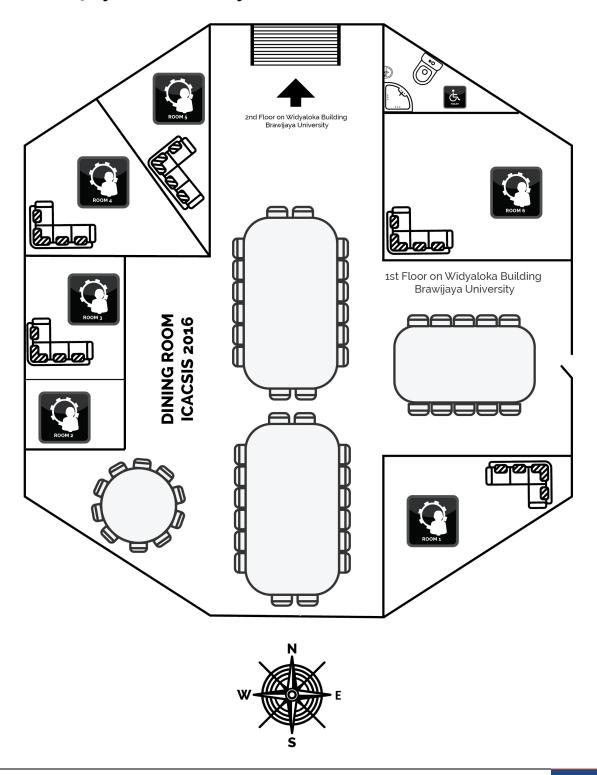
Venue Map

Widyaloka Building Maps Brawijaya University



Venue Map

Widyaloka Building Maps Brawijaya University



REGISTRATION

Registration Fee

Accepted Paper USD 500 (International)

IDR 4.000.000 (Domestic)

Additional Page USD 10 (per page)

Participant USD 150 (International)

IDR 1.000.000 (Domestic)

Payment Method

All payment for the administration fee and additional events should be transferred to the bank account below:

Recipient Bank :BNI

Account Name :UNIVERSITAS-INDONESIA-Fasilkom Non BP

Account Number :127 3000 444

Swift Code :BNI NIDJA 127 3000 444

PROGRAM SCHEDULE

Time	Event	Event Details	Rooms
07.30-08.30		Registration	
08.30-08.35		Opening speech from the General Chair of ICACSIS 2016, Dana Indra Sensuse , Ph.D.	
08.35-08.40		Opening speech from the Dean of Faculty of Computer Science Universitas Indonesia (Mirna Adriani, Ph.D)	
08.40-08.45	Opening Ceremony	Welcome speech from the Dean of Faculty of Computer Science Universitas Brawijaya(Wayan Firdaus Mahmudy , S.Si, M.T, Ph.D.)	Auditorium, Widyaloka Building, Universitas Brawijaya
08.45-08.50	_	Opening Speech from the Vice Rector Universitas Indonesia (Prof Dr.rer.nat Rosari Saleh)	
08.50-09.35	Plenary Speech I	Prof. Jim Foster from Keio University	
09.35-09.40		Ceremonial gift, from the Dean of Faculty of Computer Science Universitas Indonesia to Prof. Jim Foster	
09.40-09.45		ICACSIS Photo Session	
09.45-10.00		Coffee Break	
10.00-11.30	Parallel Session I: Three Parallel Sessions	Dr. Budi Wiweko, Ph.D (45 minutes) from Universitas Indonesia, ID	Auditorium, Room A, Room B, Room C
11.30-13.00		Lunch	
13.00-14.30	Parallel Session II: Three Parallel Sessions	Prof. Dr. Kohei Arai (45 minutes) from Saga University, JP	Auditorium, Room A, Room B, Room C
14.30-14.45	Coffee Break		
14.45-15.30	Plenary Speech II	Dr. Ye-nun Huang	Auditorium, Widyaloka Building,
5 15.55	, constant	from Research Center for Information Technology Innovation,	Universitas Brawijaya

		Academia Sinica, Taiwan	
15.30-17.00	Parallel Session III	Four Parallel Sessions	Auditorium, Room A, Room B, Room C
18.30-20.30	Gala Dinner	ICACSIS 2016 Gala Dinner	Ballroom Swiss-Bellinn Hotel Malang

Sunday, Octob	Sunday, October 16th, 2016-CONFERENCE			
Time	Event	Event Details	Rooms	
07.30-08.00		Registration		
08.00-09.30	Parallel Session IV: Three Parallel Sessions	Prof. Han You-Jeong, Ph.D (45 minutes) from Pusan National University, KR	Auditorium, Room A, Room B, Room C	
09.30-09.45		Coffee Break	_	
09.45-10.30	Plenary Speech III	Prof. Ramjee Prasad from Aalborg University, DN	Auditorium, Widyaloka Building, Universitas Brawijaya	
10.30-12.00	Parallel Session V: Three Parallel Sessions	Stéphan Bressan, Ph.D (45 minutes) from National University of Singapore, SG	Auditorium, Room A, Room B, Room C	
12.00-13.00		Lunch		
13.00-14.30	Parallel Session VI: Three Parallel Sessions	Jan Pidanic, Ph.D (45 minutes) from Univerzita Pardubice, CZ	Auditorium, Room A, Room B, Room C	
14.30-15.15		Coffee Break		
15.15-16.45	Parallel Session VII:	Four Parallel Sessions	Auditorium, Room A, Room B, Room C	
16.45-17.15	Closing Ceremony (Awards Announcement and Photo Session)	Awards Announcement from the Program Chair of ICACSIS 2016, Dr. Eng. Wisnu Jatmiko, S.T., M.Kom.	Auditorium, Widyaloka Building, Universitas Brawijaya	

KEYNOTE SPEAKER

- Ramjee Prasad, Founder Director, Center for TeleInFrastruktur (CTIF), Aalborg University, DK
- Jim Foster, Keio University, JP
- Huang Ye-Nun, Research Center for Information Technology Innovation, Academia Sinica, TW

INVITED SPEAKER

- Kohei Arai, Saga University, JP
- Stéphan Bressan, National University of Singapore, SG
- Han You-Jeong, Pusan National University, KR
- Jan Pidanic, University of Padubrice, CZ
- Budi Wiweko, Universitas Indonesia, ID

"Plenary Speaker"

TPP and The Future of The Digital Economy in The Asia Pacific Region

Jim Foster

Executive Director, Asia Pacific Institute for a Digital Economy (APIDE)

Abstract

The implications of the Trans Pacific Partnership (TPP) Agreement for promoting innovation and growth in the Digital Economy of the Asia-Pacific Region are examined. The Treaty is the first multilateral agreement to specifically take up economic and trade issues related to the Internet and includes ground-breaking provisions with respect to online privacy, cybersecurity, promotion of cross-border data flows and competition policy. These are being closely examined by non-parties to the agreement, such as Indonesia, China and India and could evolve into a defacto framework for the regional Digital Economy. TPP may not be sufficient to deal with challenges to greater regional cooperation on issues such as the still growing "digital divide" and persistent security tensions in the region, but its success could evidence the utility of relying on trade-based mechansims to address isssues associatd with regional Internet governance within a well-established and understood multilateral framework.

Profile



Professor Foster is the Director at the Keio International Center for the Internet and Society. He is a former Vice President of the American Chamber of Commerce in Japan (ACCJ) and a founder of the ACCJ Internet Economy Task Force.

Professor Jim Foster received his Bachelors degree from the University of Notre Dame in 1971. He received his Ph.D. degree in 1980 from the University of Washington, Seattle. He worked as the US the Director of Corporate Affairs for Microsoft Corporation in Tokyo.

His subject of interests includes intersection of technology and policy with a particular focus on how regulatory frameworks impact on innovation and growth. Professor Foster is also active on global Internet governance issues,

especially as they related to privacy, security and competition policy concerns.

"Plenary Speaker"

Knowledge Home

Ramjee Prasad

Founder Director, Center for TeleInFrastruktur (CTIF), Aalborg University, Denmark

Abstract

A novel concept, termed as Knowledge Home, is introduced in this paper. The Knowledge Home encompasses a virtual Home with the ability of identifying different human senses and feelings and transmitting them through wireless communication technology. Modern communication technologies are helping humankind to achieve a high level of quality of life. Earlier, Human Bond Communication (HBC) was introduced to the community as a new concept of transmitting five humankind senses. This paper proposes to combine the achieved Knowledge from the HBC transmission with the ability of transmission of different human feelings and make a Knowledge Home. The Knowledge Home is a virtual center, where people can communicate with their five senses namely, optic (seeing), auditory (hearing), olfactory (smelling), gustatory (tasting) and tactile (touching) and should be able to transmit their feelings such as optimism, love, submission, awe, disappointment, remorse, contempt and aggression. The output of the Knowledge Home is to have a safe, reliable, pleasant, and conversant environment to live in and to communicate. This idea could advance human kind to the dream place where one has thought of it from the first day of existence.

Profile



Ramjee Prasad is the Founder Director of the Center for TeleInFrastruktur (CTIF) at Aalborg University, Denmark that was established in 2004 and Professor, Wireless Information Multimedia Communication Chair.

Ramjee Prasad is the Founder Chairman of the Global ICT Standardisation Forum for India (GISFI: www.gisfi.org) established in 2009. GISFI has the purpose of increasing of the collaboration between European, Indian, Japanese, North-American and other worldwide standardization activities in the area of Information and Communication Technology (ICT) and related application areas.

He was the Founder Chairman of the HERMES Partnership – a network of leading independent European research centres established in 1997, of which

he is now the Honorary Chair. He is a Fellow of the Institute of Electrical and Electronic Engineers (IEEE), USA, the Institution of Electronics and Telecommunications Engineers (IETE), India, the Institution of Engineering and Technology (IET), UK, Wireless World Research Forum (WWRF) and a member of the Netherlands Electronics and Radio Society (NERG), and the Danish Engineering Society (IDA).

He is the recipient of Ridderkorset af Dannebrogordenen (Knight of the Dannebrog) in 2010 from the Danish Queen for the internationalization of top-class telecommunication research and education. He has published more than 30 books, 1000 plus journals and conferences publications, more than 15 patents, over 100 PhD Graduates and larger number of Masters (over 250). Several of his students are today worldwide telecommunication leaders themselves.

"Plenary Speaker"

Overview of Taiwan Information Security Center and its Research on Privacy

Yennun Huang

Research Center for Information Technology Innovation, Academia Sinica, Taiwan

Abstract

The Taiwan Information Security Center (TWISC) was initiated as a research program in April 2005 and funded by the Ministry of Science and Technology for the past few years. TWISC pulls together experts in information security from various universities and research institutes in Taiwan with an aim to boost research and development activities in information security, promote public awareness, and foster partnership among government, academia, and the private sector. Its research topics cover data/software/hardware/network security and security management. TWISC has become the hub of security research in Taiwan and have been making significant impact through publishing and creating of toolkits. Recently privacy also becomes one of the main focuses of TWISC. The research team at CITI, Academia has been working on a toolkit to enable privacy-preserved release of open data. Preliminary research result will be presented in this paper.

Profile



Dr. Huang is a Distinguished Research Fellow in Academia Sinica and an IEEE Fellow (for his contributions on fault tolerance and fault prevention Techniques). Dr. Huang received BS in EE from National Taiwan University and his PhD in Computer Science from University of Maryland. He Joined AT&T Bell Labs as a researcher in 1989. His SwiFT system was named one of the ten major technology breakthroughs in Bell Laboratories in 1992. He became a Distinguished Member of Technical Staff of Bell Labs in 1996, and started the Dependable Computing Research Department in AT&T in 1999. In 2004 he became the Executive Director of Dependable Distributed Computing and Communication Research Department to lead research on Digital Content Management and IPTV programs. In 2007, Dr. Huang returned to Taiwan to

serve as the Executive Vice President of Institute for Information Industry (III), a government funded R&D organization with more than 1800 employees. Dr. Huang joined Research Center for Information Technology Innovation (CITI) of Academia Sinica in 2011 as the CEO of Security Research Center in Academia Sinica. Between February 2011 and August 2015, he was appointed by Taiwan government as the Deputy Executive Secretary in the Office of Science and Technology of Executive Yuan, helping Minister of Science and Technology on the Information and Communication Technology (ICT) policy and R&D funding allocation (about 3 billion US dollars per year), and supervising a number of nationwide projects on Internet of Things (IoT), smart city, cloud computing and its applications, and open big data.

Overview The Development of Tele Health and Mobile Health Application in Indonesia

Budi Wiweko

Faculty of Medicine, Universitas Indonesia, Indonesia

Abstract

Telemedicine is one of interaction model between physician and patients in the era of globalization. All of the countries in the world are now in position of aggressive establishment of telemedicine especially huge country such Indonesia. In Indonesia, there's a great disparity of healthcare coverage. According to survey in 2013, almost 94.1% of households is located more than 5 km from the nearest healthcare facility. In contrast, Indonesia has one of the better broadband penetration in South East Asia. It is projected that 66% of Indonesian population will be reached by broadband access in 2017. This create a perfect opportunity for telehealth services to enable greater coverage for healthcare services for patients in Indonesia. Implementation of telehealth in Indonesia has begun with tele-ECG and tele-radiology program initiated by Harapan Kita and Dr. Cipto Mangunkusumo General Hospital. The development of telehealth has changed a new paradigm on interaction between patients and doctors. Patients doesn't need to go to the hospital for asking the treatment for their diseases. Now patients gain easily a lot of health information through advancement of information, communication and technology everywhere, anywhere and whatever they want according to their needs. The concept of consumer health informatics should bring health information closer into patients than health provider's perspectives. Many mobile health applications which is one of technology fulfilled this enquires was developed in Indonesia. This development of telemedicine and mobile health has raising a lot of issues on medical ethics, confidentiality, and medico-legal that should be regulated by government. In the future, the government should establish a good standard of care among the patients and setting standard for health-care workers readiness in preparing the development of telemedicine and mobile health application in Indonesia.

Profile



Budi Wiweko, MD, OG (REI), PhD is a Research Manager of Faculty of Medicine Universitas Indonesia and also a Supporting Manager for Yasmin IVF Clinic —Jakarta. After graduated as a specialist in Obstetrics and Gynecology from Universitas Indonesia in 2005, he spent his time as a research fellow on ovarian tissue vitrification and in vitro culture of follicles at Hyogo College of Medicine Japan. He continued his research on basic laboratory on ART and had some clinical IVF training in Osaka, Barcelona, Thailand and Vietnam. He defensed his PhD thesis on "Pre-antral follicle vitrification" in Faculty of Medicine Universitas Indonesia in 2014.

He did a lot of contribution in developing IVF field in Indonesia since he is one of the founder of Indonesian Association for In Vitro Fertilization (IA-IVF) which was founded in 2009. Instead of giving services, he is also a coordinator of trainer for Subspecialty in Reproductive Endocrinology and Infertility Fellowship which is underwent in Teaching Hospital Universitas Indonesia.

Mobility Adaptive Beacon Broadcasting For Vehicular Cooperative Safety Critical Applications

Han You-Jeong

Pusan National University, Republic of Korea

Abstract

In recent years, many researchers from academia, automotive industry, and the government agency have extensively studied vehicular cooperative safety-critical applications as a key enabler for future smart car. Beacon broadcasting is an essential mechanism to improve the awareness of driving environments by broadcasting vehicle kinematics information to its neighbor vehicles at a regular rate. Although there are several state-of-the-art approaches to beacon broadcasting scheme, the current designs do not fulfill the awareness requirements of many emerging ITS applications, including the autonomous emergency braking (AEB) and the cooperative adaptive cruise control (CACC). Taking into account this limitation, in this talk, a new approach, exploiting the kinematics of the sending vehicle, is introduced to enable a neighbor vehicle to localize the sending vehicle within a fixed threshold, given that the former receives at least one of the K latest beacons of the latter. It is shown that the proposed approach achieves an excellent tracking performance, while it attains a comparable access-layer performance with the state-of-the-art beacon broadcasting schemes .

Profile



Professor Han You-Jeong is an Associate Professor in the Department of Electrical Engineering, Pusan National University, Korea from Sept. 2014 to Present. He was an Associate Professor in Institute of Logistics Information Technology, Pusan National University, Korea and an Assistant Professor, Institute of Logistics Information Technology, Pusan National University, Korea, Sept from Sept. 2012 to Aug. 2014 and 2008 to August 2012 respectively.

In 2008, he was a Post-doctoral Researcher, Digital Technology Center, University of Minnesota, USA and worked with Prof. Eytan Modiano during his sabbatical stay in University of Minnesota. Professor Han was an Associate Researcher in the Institute of New Media and Communications, Seoul National University, Korea, in 2007. He was

also a Senior Engineer in the Telecommunication Network R&D Center, Samsung Electronics, Korea, from March 2005 to July 2007.

Professor Han received his Ph.D. in Electrical Engineering and Computer Science from Seoul National University, Korea, in February 2005. Professor Han received his M.S. in Electrical Engineering and Computer Science from Seoul National University, Korea and B.S. in Electrical Engineering from Seoul National University, Korea in 2000 and 1998 respectively.

His research interests includes Protocol Design and Implementation for Vehicular Networks, Modeling and Performance Evaluation of Wireless Mesh Networks, and Design, Optimization, and Dimensioning of Wavelength-Routed WDM Networks.

DVB-T Signal Analysis on Passive Coherent Location System in Single Frequency Network

Jan Pidanic

Faculty of Electrical Engineering and Informatics, University of Pardubice

Abstract

The paper describes a problematic about analysis of the Cross Ambiguity Function of a DVB-T signal in the Passive Coherent Location system. The analysis includes effects of the different parameters of the DVB-T signal on the Cross Ambiguity Function. The analyzed parameters are guard interval, effects of the different pilot carriers, etc.

Profile



Ing. Jan Pidanic, Ph.D recieved his Ing degree from the University of Perdubice in the field of electrical transport infrastructure. In 2005, he received his PhD from the same institution. In 2007, Jan Pidanic is an assistant in the Faculty of Electrical Engineering and Informatics. His Specialization includes: digital processing systems, radar systems, passive coherent location, and ultra wide broadband.

Wearable Computing with Computer Input Just by Sight for Health Care

Kohei Arai

Saga University, Japan

Abstract

Wearable computing with computer input just by sight for health care is proposed. Wearable computing with Input-Output Devices based on Eye-Based Human Computer Interaction: EBHCI which allows location based web services including navigation, location/attitude/health condition monitoring is proposed. Through implementation of the proposed wearable computing system, all the functionality is confirmed. It is also found that the system does work well. It can be used easily and also is not expensive. Experimental results for EBHCI show excellent performance in terms of key-in accuracy as well as input speed. It is accessible to internet, obviously, and has search engine capability. Also, one of the applications of health care, physical and psychological status monitoring is discussed.

Profile



He was with The Institute for Industrial Science and Technology of the University of Tokyo from April 1974 to December 1978 and also was with National Space Development Agency of Japan from January 1979 to March 1990. During from 1985 to 1987, he was with Canada Centre for Remote Sensing as a Post Doctral Fellow of National Science and Engineering Research Council of Canada. He moved to Saga University as a professor in Department of Information Science in April 1990. He was councilar for the Aeronoutics and space related technology committee of the Ministry of Science and Technology during from 1998 to 2000. He was councilar of the Saga University for 2002 and 2003. Also he was executive councilar for the Remote Sensing Sciety of Japan for 2003 to 2005. He is now Adjunct Prof. of

the University of Arizona, USA since 1998. He is vice chair person of Commission A of ICSU/COSPAR since 2006. He is also editor in chief of International Journal of Advanced Computer Science and Applications since 2013 as well as Editor-in-Chief of IJISA.

Trajectory Simulation in Communities of Commuters

Stéphan Bressan

National University of Singapore, Singapore

Abstract

Urban planning, development and management authorities and stakeholders need to understand and analyse the mobility of patterns of urban dwellers in order to manage sociological, economic and environmental issues. Simulation is indispensable a tool for authorities and stakeholders to better design, operate and control the mobility infrastructures of smart cities. We propose an approach for the simulation of trajectories in communities of commuters. We identify communities of public transport commuters from historical automated fare collection card data using spatial latent Dirichlet allocation. We further aggregate the historical automated fare collection card data to create statistical models of visits and movements of commuters in each community. We use the three models to simulate trajectories of synthetic individual commuters. We empirically evaluate how the synthetically generated trajectories are typical of their community of commuters and realistic.

Profile



Stéphane Bressan is Associate Professor in the Computer Science department of the School of Computing (SoC) of the National University of Singapore (NUS). He is the coordinator of the Electronic Commerce Laboratory at SoC. The global information society is both an opportunity and a threat for cultural diversity. The choice of direction starts right in the hands and brains of professionals and researchers designing tools and techniques that enable interchange yet preserve diversity. My research in the domain of the integration and management of disparate information , i.e. the integration and management of multi-modal and multimedia information from distributed, heterogeneous, and autonomous sources, is motivated by this paradox. My approach is grounded into database research for it emphasizes key ideas such as declarativeness of langages, conceptual approach to design, adaptiveness of processing and optimization of

programs and queries in the challenging hypothesis of large numbers of users and large collections of data.In details my contributions are in domains such as mediation systems, the integration and management of XML and semistructred data, peer to peer systems, but also geographical information systems and natural language processing and information retrieval (for the Indonesian language).I am a co-author of the XOO7 benchmark. I am co- architect and a co-developer of the ECRC Chimera Deductive and Object Oriented Database Management System. I am architect and developer of MIT's COIN context interchange prototype.

TECHNICAL PROGRAM ICACSIS 2016

Opening Ceremony	Oct 10 (Sat)
Venue: Auditorium, 2 nd Floor	08.30-08.50

Opening remarks by Dana Indera Sensuse, Ph.D.

Plenary Speech I	Oct 15 (Sat)
Venue: Auditorium, 2 nd Floor	08.50-09.45

TPP and The Future of The Digital Economy in The Asia Pacific Region

Plenary Speech by Prof. Jim Foster

Keio University, Japan

Parallel Session I	
Invited Speech	Oct 15 (Sat)
Venue: Auditorium, 2 nd Floor	10.00-11.30

Overview The Development of Tele Health and Mobile Health Application in Indonesia

Dr. Budi Wiweko, Ph.D.

Universitas Indonesia, Indonesia.

Parallel Session I	
Machine Learning and Computer Vision	Oct 15 (Sat)
Venue: Room A, 2 nd Floor	10.00-11.30

- (442) Efficient Texture Image Retrieval of Improved Completed Robust Local Binary Pattern Arrie Kurniawardhani, Agus Eko Minarno, Fitri Bimantoro
- (444) Spatio-Temporal Analysis for Moving Object Detection Under Complex Environment Adi Suheryadi, Hertog Nugroho
- (451) Convolutional Neural Network using Microcanonical Annealing Algorithm
 Vina Ayumi, L.M Rasdi Rere, Mohamad Ivan Fanany
- (464) A Paddy Growth Stage Classification using LANDSAT 8 with Multiple Regularization Learning Ines Heidiani Ikasari, Vina Ayumi, Mohamad Ivan Fanany, Sidik Mulyono
- (467) Design of Keyboard Input Control for Mobile Application using Head Movement Control (HEMOCS)

Herman Tolle, Mahardeka Tri Ananta, Komang Candra Brata, Hanifah Muslimah Az-Zahrah

Parallel Session I	
Machine Learning and Computer Vision	Oct 15 (Sat)
Venue: Room B, 2 nd Floor	10.00-11.30

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

Sumarsih Condroayu Purbarani

(325) Hiding Secret Data by using Modulo Function in Quad Difference Expansion

Yogi Kurniawan, Lidya Amalia Rahmania, Tohari Ahmad⁷ Waskitho Wibisono, Royyana M. Ijtihadie

(488) Road Detection Analysis Based on Corner Adjacent Features

MD Enjat Munajat, Dwi Hendratmo Widyantoro, Rinaldi Munir

(297) Multimodal Deep Boltzmann Machines for Feature Selection on Gene Expression Data

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

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

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

Parallel Sessions I	
E-Government and E-Business	Oct 15 (Sat)
Venue: Room C, 2 nd Floor	10.00-11.30

(312) Challenges in Agile Software Development: A Systematic Literature Review

Widia Resti Fitriani, Puji Rahayu, Dana Indra Sensuse

(329) 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

(331) 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

(341) Intention to Use Smart City System Based on Social Cognitive Theory

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

(390) 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

Parallel Sessions II	
Invited Speech	Oct 15 (Sat)
Venue: Auditorium, 2 nd Floor	13.00-14.30

Wearable Computing with Computer Input Just by Sight for Health Care

Prof. Dr. Kohei Arai.

Saga University, Japan

Parallel Sessions II	
Computer Networks and High Performance Computing	Oct 15 (Sat)
Venue: Room A, 2 nd Floor	13.00-14.30

(393) Pervasive Device and Service Discovery Protocol In XBee Sensor Network

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

(443) Factors Analysis that Affecting the User Acceptance towards IPv6 Transition

Medi Kartika, Yudho Giri Sucahyo

(470) 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

(506) Vehicle Traffic Monitoring Using Single Camera and Embedded Systems

Rindra Wiska

(416) Design of Remote Control for Smart Home Using Interaction Design Method

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

Parallel Sessions II	
Machine Learning and Computer Vision	Oct 15 (Sat)
Venue: Room B, 2 nd Floor	13.00-14.30

(480) Accurate Visual Tracking by Combining Bayesian and Evolutionary Optimization Framework Grafika Jati

(481) Multi-Sperm Tracking Using Hungarian Kalman Filter on Low Frame Rate Video Grafika Jati

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

Tosan Wiar Ramdhani, Betty Purwandari, Yova Ruldeviyani

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

Trisna Trisna, Marimin, Yandra Arkeman

(486) Structured Support Vector Machine Learning of Conditional Random Fields

Aprinaldi Aprinaldi

Parallel Sessions II	
E-Government and E-Business	Oct 15 (Sat)
Venue: Room C, 2 nd Floor	13.00-14.30

- (394) Indonesian Certification of Competency Profession : A Proposed Conceptual e-Portfolio Model
 Betty Purwandari, Indra Budi, Dana Indra Sensuse, Puji Rahayu
- (407) Formulating E-Business Strategy for Branchless Banking: A Case of A Bank in Indonesia Yuan Hanif Syaniardi, Muhammad Rifki Shihab
- (429) Supporting and Inhibiting Factors of E-Commerce Adoption: Exploring the Sellers' Side in Indonesia

Muslim, Puspa Indahati Sandhyaduhita

- (431) Supporting Factors of Sellers' Reputation in e-Marketplace: A Case of Indonesia Niea Kurnia Fajar, Puspa Indahati Sandhyaduhita
- (432) Impact of Express Delivery Service Quality towards Repurchase Intention by B2C and C2C: A Case of Indonesia

Yoga Nurdani, Puspa Indahati Sandhyaduhita

	Plenary Speech II	Oct 15 (Sat)
V	/enue: Auditorium, 2 nd Floor	14.45-15.30

Overview of Taiwan Information Security Center and its Research on Privacy

Dr. Ye-nun Huang

Research Center for Information Technology Innovation, Academia Sinica, Taiwan

Parallel Ses	sions III	
Computer N	letworks and High Performance Computing	Oct 15 (Sat)
Venue: Aud	itorium, 2 nd Floor	15.30-17.00

(251) On the Parallel Implementation of Goldberg's Maximum Flow Algorithm in Extended Mixed Network

Nguyen Dinh Lau, Tran Quoc Chien

(271) Collision Algorithms for Breaking Megrelishvili Protocol: Theory and Numerical Experiments Muhammad Arzaki, Bambang Ari Wahyudi

- (344) Federated Document Search Using Hybrid Peer-to-peer Network for Plagiarism Detection Widyanto Bagus Priambodo, Gladhi Guarddin
- (347) 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

(366) Elliptic Curve Cryptography based Key Management for the M2M Local Cloud Platform Bayu Anggorojati

Parallel Sessions III	
Digital Library and Distance Learning	Oct 15 (Sat)
Venue: Room A, 2 nd Floor	15.30-17.00

(392) 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

- (395) The Knowledge Market Online Learning (K-MALL) Architecture for Higher Education
 Didi Rustam, Theo van der Weide
- (408) Automatic Detection of Learning Styles in Learning Management System by Using Literature-Based Method and Support Vector Machine

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

(426) An Indonesian Adaptation of the System Usability Scale (SUS)

Zahra Sharfina, Harry Budi Santoso

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

Eko Sakti Pramukantoro, Moch Ali Fauzi

Parallel Sessions III	
Machine Learning and Computer Vision	Oct 15 (Sat)
Venue: Room B, 2 nd Floor	15.30-17.00

- (365) Term Weighting Based Class Indexes Using Space Density for Al-Qur'an Ranking Kurnia Wati, A'la Syauqi
- (370) Handling Illumination Variation in Face Recognition using Multiscale Retinex

Alexander Agung Santoso Gunawan, Hendry Setiadi

(349) 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

(415) Learning similarity functions for binary strings via genetic programming

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

(439) 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

Parallel Sessions III	
Reliable Software Engineering	Oct 15 (Sat)
Venue: Room C, 2 nd Floor	15.30-17.00

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

Ardian Hosen, Ika Alfina

(345) Incremental Product Configuration in Software Product Line Engineering

Triando, Radu Bogdan Muschevici, Ade Azurat

(381) Automatic Model Translation to UML from Software Product Lines Model using UML Profile Rizki Muhammad, Maya Retno Ayu Setyautami

(295) A Case Study: Adoption of Agile in Thailand

Aziz Nanthaamornphong, Rattana Wetprasit

(298) A Water Flow Algorithm based Optimization Model for Road Traffic Engineering

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

Parallel Session IV	
Invited Speech	Oct 17 (Sun)
Venue: Auditorium, 2 nd Floor	08.00-09.30

Mobility Adaptive Beacon Broadcasting For Vehicular Cooperative Safety Critical Applications

Prof. Han Yu-Jeong, Ph.D

Pusan National University, South Korea

Parallel Session IV	
Information Retrieval	Oct 17 (Sun)
Venue: Room A, 2 nd Floor	08.00-09.30

(233) Comparison of Naive Bayes Smoothing Methods for Twitter Sentiment Analysis

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

(248) Single-Output Recurrent Neural Networks for Sentence Binary Classification

Alfan Farizki Wicaksono, Mirna Adriani

(262) Implementation of Regularized Markov Clustering Algorithm on Protein Interaction Networks of Schizophrenia

Rizky Ginanjar, Alhadi Bustamam, Hengki Tasman

Parallel Session IV	
Machine Learning and Computer Vision	Oct 17 (Sun)
Venue: Room B, 2 nd Floor	08.00-09.30

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

Ida Wahyuni, Fitri Utaminingrum

(242) Combining Normal Sparse into Discriminative Deep Belief Networks

Faisal Khalid, Mohamad Ivan Fanany

(252) Extend Relation Identification in Scientific Papers

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

(353) Handwritten Character Recognition using Hierarchical Graph Matching

Abdulloh Al Mubarok, Hertog Nugroho

(267) Psychomotor Game Learning Using Leap Motion Technology

Rizal Asrul Pambudi, Nana Ramadijanti, Achmad Basuki

Parallel Session IV	
Information Management	Oct 17 (Sun)
Venue: Room C, 2 nd Floor	08.00-09.30

(337) 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

(340) 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

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

Muhammad Jusuf Gantini Reta, Achmad Hidayanto, Puspa Sandhyaduhita

(398) Customer social experience as antecedents of social commerce: Insights from Kaskus

Dahru Dzahaban, Muhammad Rifki Shihab

(412) Dynamic Nearest Neighbours for Generating Spatial Weight Matrix

Mutiara Mawarni, Imam Machdi

Plenary Speech III	Oct 17 (Sun)
Venue: Auditorium, 2nd Floor	09.45-10.30

Knowledge Home

Prof. Ramjee Prasad, Ph.D

Founder Director, Center for TeleInFrastruktur (CTIF), Aalborg University, Denmark

Parallel Session V	
Invited Speech	Oct 17 (Sun)
Venue: Auditorium, 2nd Floor	10.30 -12.00

Trajectory Simulation in Communities of Commuters

Stéphan Bressan, Ph.D

National University of Sinagpore, Singapore

Parallel Session V	
Information Retrieval	Oct 17 (Sun)
Venue: Room A, 2nd Floor	10.30 -12.00

(447) DBpedia Entities Expansion in Automatically Building Dataset for Indonesian NER

Ika Alfina, Ruli Manurung, Mohamad Ivan Fanany

(384) Query Refinement in Recommender System Based on Product Functional Requirements

Abdurahman Baizal, Dwi H Widyantoro, Nur Ulfa Maulidevi

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

Mustika Aprilianti, Rahmad Mahendra, Indra Budi

(417) Combining Topological and Topical Features for Community Detection

Retnani Latifah, Mirna Adriani

(368) 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

Parallel Session V	
Machine Learning and Computer Vision	Oct 17 (Sun)
Venue: Room B, 2 nd Floor	10.30 -12.00

(268) Using Logistic Regression Method to Classify Tweets into the Selected Topics

Indra, Liza Wikarsa, Rinaldo Turang

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

Hadaiq Rolis Sanabila

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

Yohannes Yohannes

(290) Numerical Methods for Initialization in Fodder Composition Optimization

Vivi Nur Wijayaningrum, Fitri Utaminingrum

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

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

Parallel Session V	
Information Management	Oct 17 (Sun)
Venue: Room C, 2 nd Floor	10.30 -12.00

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

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

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

Ghaisani Kusumo Wardina, Puspa Indahati Sandhyaduhita

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

Fitria Purnama Sari, Herdiansyah Rhamadan, Muhammad Rifki Shihab

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

Mayang Anglingsari Putri, Wayan Firdaus Mahmudy

(492) Mobile-based expert system for Human Diet Planning using optimum neighbour

Marji, Dian Eka Ratnawati

Parallel Session VI	
Invited Speech	Oct 17 (Sun)
Venue: Auditorium, 2 nd Floor	13.00 -14.30

DVB-T Signal Analysis on Passive Coherent Location System in Single Frequency Network

Jan Pidanic, Ph.D

Faculty of Electrical Engineering and Informatics, University of Pardubice

Parallel Session VI	
Information Retrieval	Oct 17 (Sun)
Venue: Room A, 2 nd Floor	13.00 -14.30

(466) Using Relation Similarity on Open Information Extraction-Based Event Template Extraction Ade Romadhony, Dwi H. Widyantoro, Ayu Purwarianti

(475) 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

(517) Twitter Sentiment Analysis of Online Transportation Service Providers

Sonia Anastasia, Indra Budi

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

Agus Ambarwari, Yeni Herdiyeni, Taufik Djatna

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

Mohamad Endhy Aziz, Setiadi Yazid

Parallel Session VI	
Machine Learning and Computer Vision	Oct 17 (Sun)
Venue: Room B, 2 nd Floor	13.00 -14.30

(499) 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

- (300) A Fragile Watermarking Scheme for Content Authentication of GIF Images
 Rinaldi Munir
- (311) Local and Global Human Activity Detection For Room Energy Saving Model
 Adhi Harmoko Saputro, C. Imawan
- (314) Deep Belief Networks Using Hybrid Fingerprint Feature for Virtual Screening of Drug Design Aries Fitriawan, Ito Wasito, Arry Yanuar, Arida Ferti Syafiandini, Mukhlis Amien
- (317) Automatic Features Reduction Procedures in Palm Vein Recognition
 Prasti Eko Yunanto, Hertog Nugroho, Tjokorda Agung Budi Wirayuda

	Parallel Session VI	
	General Papers	Oct 17 (Sun)
,	Venue: Room C, 2 nd Floor	13.00 -14.30

(319) 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

(369) An Adaptive Background Estimation for Real-Time Object Localization on A Color-coded Environment

Peter Chondro, Shanq-Jang Ruan

(403) 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, Muhammad Ikhwan Hanif, I Dewa Made Subrata, Slamet Widodo

(459) Health Capability: The Representation of IoT in Health Domain among Jakartans

Tommy Prayoga, Juneman Abraham

Closing Ceremony	Oct 11 (Sun)
Venue: Auditorium, 2 nd Floor	16.45-17.15

Closing remarks by Dr. Eng. Wisnu Jatmiko

PRESENTER'S SCHEDULE

A

Abdulloh Al Mubarok Handwritten Character Recognition using Hierarchical Graph Matching					
				Room B	Room B Parallel Session IV Oct 17 (Sun) Presenter 4
	08.00-09.30				

Abdurahman Baizal				
Query Refinement in Recommender System Based on Product Functional Requirements				
Room A	Parallel Session V	Oct 17 (Sun)	Presenter 2	
	10.30-12.00			

Ade Romadhony					
Using Relation Similarity on Open Information Extraction-Based Event Template Extraction			emplate Extraction		
Room A	Room A Parallel Session VI Oct 17 (Sun) Presenter 1				
	13.00-14.30				

Adhi Harmoko Saputro					
Local and Global Human Activity Detection For Room Energy Saving Model			ving Model		
Room B Parallel Session VI Oct 17 (Sun) Presenter 3					
	13.00-14.30				

	Adi Suheryadi				
Spatio-Tempo	Spatio-Temporal Analysis for Moving Object Detection Under Complex Environment				
Room A	Parallel Session I	Oct 16 (Sat)	Presenter 2		
	10.00-11.30				

Agus Ambarwari				
Combination of Relief Feature Selection and Fuzzy K-Nearest Neighbor for Plant Species Identification				
Room A	Parallel Session VI	Oct 17 (Sun)	Presenter 4	
	13.00-14.30			

Alexander Agung Santoso Gunawan				
Handling Illumination Variation in Face Recognition using Multiscale Retinex				
Room B	Parallel Session III	Oct 16 (Sat)	Presenter 2	
	15.30-17.00			

Alfan Farizki Wicaksono					
Single-Out	Single-Output Recurrent Neural Networks for Sentence Binary Classification				
Room A	Parallel Session IV	Oct 17 (Sun)	Presenter 2		
	08.00-09.30				

	Aprinaldi Aprinaldi				
Structure	Structured Support Vector Machine Learning of Conditional Random Fields				
Room B	Parallel Session II 13.00-14.30	Oct 16 (Sat)	Presenter 5		

Ardian Hosen				
Aggregation of Open Data Information using Linked Data: Case Study Education and Job Vacancy Data in Jakarta				
Room C Parallel Session III Oct 16 (Sat) Presenter 1 15.30-17.00				

	Arida Ferti Syafiandini				
Multimodal De	Multimodal Deep Boltzmann Machines for Feature Selection on Gene Expression Data				
Room B	Parallel Session I	Oct 16 (Sat)	Presenter 4		
	10.00-11.30				

Aries Fitriawan				
Deep Belief Networks Using Hybrid Fingerprint Feature for Virtual Screening of Drug Design				
Room B	Parallel Session VI	Oct 17 (Sun)	Presenter 4	
	13.00-14.30			

Ario Sunar Baskoro				
Automatic Tungsten Inert Gas (TIG) Welding Using Machine Vision and Neural Network on Material SS304				
Room C Parallel Session VI Oct 17 (Sun) Presenter 1 13.00-14.30				

	Arrie Kurniawardhani				
Efficient Textu	Efficient Texture Image Retrieval of Improved Completed Robust Local Binary Pattern				
Room A	Parallel Session I	Oct 16 (Sat)	Presenter 1		
	10.00-11.30				

Aulia Arshad					
Sensor Node for Data Sampling and Correlation Analysis of CO2 Concentration with Air Humidity,					
	Temperature, and Light Intensity				
Room A Parallel Session II Oct 16 (Sat) Presenter 3					
	13.00-14.30				

Ayu Sahnaz Ovariyanti				
An Adaptation of the Index of Learning Style (ILS) to Indonesian Version: A Contribution to Index of Learning Style (ILS) Validity and Reliability Score				
Room A Parallel Session III Oct 16 (Sat) Presenter 1				
	15.30-17.00			

Aziz Nanthaamornphong				
A Case Study: Adoption of Agile in Thailand				
Room C	Parallel Session III 15.30-17.00	Oct 16 (Sat)	Presenter 4	

B

Bayu Anggorojati				
Elliptic Curve Cryptography based Key Management for the M2M Local Cloud Platform				
Auditorium	Auditorium Parallel Session III Oct 16 (Sat) Presenter 5			
15.30-17.00				

Betty Purwandari				
Indonesian Certification of Competency Profession : A Proposed Conceptual e-Portfolio Model				
Room C	Parallel Session II	Oct 16 (Sat)	Presenter 1	
	13.00-14.30			

D

Dahru Dzahaban				
Customer social experience as antecedents of social commerce: Insights from Kaskus				
Room C	Room C Parallel Session IV Oct 17 (Sun) Presenter 4			
	08.00-09.30			

Dewa Made Sri Arsa					
Prediction the Number of Blastomere in Time-Lapse Embryo Using Conditional Random Field (CRF) Method Based on Bag of Visual Words (BoVW)					
Room B Parallel Session III Oct 16 (Sat) Presenter 3 15.30-17.00					

Dewi Yanti Liliana				
Human Emotion Recognition Based on Active Appearance Model and Semi-supervised Fuzzy C-Means				
Room B	Parallel Session I	Oct 16 (Sat)	Presenter 5	
	10.00-11.30			

Didi Rustam				
The Knowledge Market Online Learning (K-MALL) Architecture for Higher Education				
Room A	Room A Parallel Session III Oct 16 (Sat) Presenter 2			
15.30-17.00				

Dinna Amelina				
Investigating Critical Factors of Social CRM Adoption Using TOE (Technology, Organization, and Environment) Framework and Analytical Hierarchy Process (AHP)				
Room C Parallel Session IV Oct 17 (Sun) Presenter 1				
	08.00-09.30			

Ditdit Nugeraha Utama				
A Water Flow Algorithm based Optimization Model for Road Traffic Engineering				
Room C	Room C Parallel Session III Oct 16 (Sat) Presenter 5			
	15.30-17.00			

Dion Kristadi Leksono						
Analysis Factors of IPv6 User Acceptance Against Security Aspects Based on Concept of Technology Acceptance Model (TAM) and Technology Threat Avoidance Theory (TTAT)						
Room A	Room A Parallel Session III Oct 16 (Sat) Presenter 4					
	15.30-17.00					

E

Eko Sakti Pramukantoro					
Comparative Analysis Of String Similarity And Corpus-Based Similarity For Automatic Essay Scoring					
System On E-Learning Gamification Room A Parallel Session III Oct 16 (Sat) Presenter 5					
	15.30-17.00				

Elfa Silfiana Amir					
Automatic Detection of Learning Styles in Learning Management System by Using Literature-Based Method and Support Vector Machine					
Room A	Room A Parallel Session III Oct 16 (Sat) Presenter 3 15.30-17.00				

Endang Purnama Giri				
Ischemic Stroke Identification Based on EEG using 1D Convolutional Neural Network and Batch Normalization				
Room C Parallel Session III Oct 16 (Sat) Presenter 5 15.30-17.00				

Erlang Erlangga				
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				
Room C Parallel Session I Oct 16 (Sat) Presenter 5 10.00-11.30				

F

Faisal Khalid					
Combining Normal Sparse into Discriminative Deep Belief Networks					
Room B	Room B Parallel Session IV Oct 17 (Sun) Presenter 2				
08.00-09.30					

Fitria Purnama Sari				
The Effects of Customization and Permission on Location-Based Advertising toward Consumer Behavioural Intention				
Room C Parallel Session V Oct 17 (Sun) Presenter 3 10.30-12.00				

G

Ghaisani Kusumo Wardina						
The Impact of Interdependent Self-Construal towards Intention to Participate in Social Media Photo/Video Contest Campaign						
Room C Parallel Session V Oct 17 (Sun) Presenter 2						
	10.30-12.00					

	Grafika Jati				
Accurate Visual 1	Accurate Visual Tracking by Combining Bayesian and Evolutionary Optimization Framework				
Room B	Parallel Session II	Oct 16 (Sat)	Presenter 1		
	13.00-14.30				
Accurate Visual 1	racking by Combining Bayesia	n and Evolutionary Optin	nization Framework		
Room B	Parallel Session II	Oct 16 (Sat)	Presenter 2		
	13.00-14.30				

Н

Hadaiq Rolis Sanabila					
Generative Oversampling Method (GenOMe) for Imbalanced Data on Apnea Detection using ECG Data					
Room B	Parallel Session V	Oct 17 (Sun)	Presenter 2		
	10.30-12.00				

Handrie Noprisson				
Antecedent Factors of Consumer Attitudes toward SMS, E-mail and Social Media for Advertising in Indonesia				
Room C Parallel Session I Oct 16 (Sat) Presenter 2 10.00-11.30				

Herman Tolle						
Design of Keyboard Input Control for Mobile Application using Head Movement Control (HEMOCS)						
Room A	Room A Parallel Session II Oct 16 (Sat) Presenter 5					
	13.00-14.30					

Hurriyatul Fitriyah						
Design of	Design of Remote Control for Smart Home Using Interaction Design Method					
Room C	Room C Parallel Session V Oct 17 (Sun) Presenter 3					
	10.30-12.00					

Ida Wahyuni

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

Tsukamoto FIS with GA

Room B Parallel Session IV Oct 17 (Sun) Presenter 1

08.00-09.30

Ika Alfina					
DBpedia En	DBpedia Entities Expansion in Automatically Building Dataset for Indonesian NER				
Room A	Parallel Session V	Oct 17 (Sun)	Presenter 1		
	10.30-12.00				

	Ilham Kusuma				
Fetal Head Segm	Fetal Head Segmentation Based On Gaussian Elliptical Path and Nature based Optimization				
Room B	Parallel Session VI	Oct 17 (Sun)	Presenter 1		
	13.00-14.30				

Indra					
Using Log	Using Logistic Regression Method to Classify Tweets into the Selected Topics				
Room B	Parallel Session V	Oct 17 (Sun)	Presenter 1		
	10.30-12.00				

Ines Heidiani Ikasari						
A Paddy Growth Stage Classification using LANDSAT 8 with Multiple Regularization Learning						
Room A	Parallel Session I	Oct 16 (Sat)	Presenter 4			
	10.00-11.30					

J

Jamilah Jamilah					
Analysis on Effects of Brand Community on Brand Loyalty in the Social Media: A Case Study of An Online Transportation (UBER)					
Room C Parallel Session IV Oct 17 (Sun) Presenter 2					
	08.00-09.30				

K

	Kurnia Wati					
Term Weig	Term Weighting Based Class Indexes Using Space Density for Al-Qur'an Ranking					
Room B	Room B Parallel Session III Oct 16 (Sat) Presenter 1					
	15.30-17.00					

M

Marji Marji					
Mobile-bas	Mobile-based expert system for Human Diet Planning using optimum neighbour				
Room C	Parallel Session V	Oct 17 (Sun)	Presenter 5		
	10.30-12.00				

Mayang Anglingsari Putri				
Optimization Of Analytic Hierarchy Process Using Genetic Algorithm For Selecting Tutoring Agencies In Kampung Inggris Pare				
Room C Parallel Session V Oct 17 (Sun) Presenter 4 10.30-12.00				

MD. Azza Firdaus Yatim				
A Corpus-Based Lexi	A Corpus-Based Lexicon Building in Indonesian Political Context Through Indonesian Online News Media			
Room A Parallel Session VI Oct 17 (Sun) Presenter 2 13.00-14.30				

MD Enjat Munajat				
Road Detection Analysis Based on Corner Adjacent Features				
Room B Parallel Session I Oct 16 (Sat) Presenter 3				
	10.00-11.30			

	Medi Kartika				
Factors A	Factors Analysis that Affecting the User Acceptance towards IPv6 Transition				
Room A	Parallel Session II	Oct 16 (Sat)	Presenter 2		
	13.00-14.30				

Mohamad Endhy Aziz				
Certificate Policy Analysis and Formulation of the Government Public Key Infrastructure using SSM				
Room A	Parallel Session VI 13.00-14.30	Oct 17 (Sun)	Presenter 1	

Muhammad Arzaki				
Collision Algorithr	Collision Algorithms for Breaking Megrelishvili Protocol: Theory and Numerical Experiments			
Auditorium	Parallel Session III	Oct 16 (Sat)	Presenter 2	
	15.30-17.00			

Muhammad Jusuf Gantini Reta					
Inhibiting Factors Of Service Level Agreement (Sla) Adoption In Government To Citizen (G2c) Services: A Case Of Indonesia					
Room C	Room C Parallel Session IV Oct 17 (Sun) Presenter 3				
	08.00-09.30				

Muhammad Syahid Pebriadi							
Learnir	Learning similarity functions for binary strings via genetic programming						
Room B	Parallel Session III	Oct 16 (Sat)	Presenter 4				
	15.30-17.00		(,				

Muslim				
Supporting and Inhibiting Factors of E-Commerce Adoption: Exploring the Sellers' Side in Indonesia				
Room C	Parallel Session II	Oct 16 (Sat)	Presenter 3	
	13.00-14.30			

Mutiara Mawarni				
Dynamic Nearest Neighbours for Generating Spatial Weight Matrix				
Room C	Parallel Session IV	Oct 17 (Sun)	Presenter 5	
	08.00-09.30			

Mustika Aprilianti				
Implementation of Weighted Parallel Hybrid Recommender Systems for e-Commerce in Indonesia				
Room A	Parallel Session V	Oct 17 (Sun)	Presenter 3	
	10.30-12.00			

N

Niea Kurnia Fajar					
Supporting	Supporting Factors of Sellers' Reputation in e-Marketplace: A Case of Indonesia				
Room C	Parallel Session II	Oct 16 (Sat)	Presenter 4		
	13.00-14.30				

Nguyen Dinh Lau					
On the Parallel Implementation of Goldberg's Maximum Flow Algorithm in Extended Mixed Network					
Auditorium	Parallel Session III	Oct 16 (Sat)	Presenter 1		
	15.30-17.00				

P

	Pandhu Hutomo Adhitya				
•	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				
Room A					

Peter Chondro				
An Adaptive Background Estimation for Real-Time Object Localization on A Color-coded Environment				
Room C	Parallel Session VI	Oct 17 (Sun)	Presenter 2	
	13.00-14.30			

Prasti Eko Yunanto				
Automatic Features Reduction Procedures in Palm Vein Recognition				
Room B	Parallel Session VI	Oct 17 (Sun)	Presenter 5	
	13.00-14.30			

R

Radite Praeko Agus Setiawan					
Development of A Laser-based Localization System in An Outdoor Setting - Design and Performance Evaluation of Transmitter and Receiver Component					
Room C Parallel Session VI Oct 17 (Sun) Presenter 3					
	13.00-14.30				

Rahmi Johanes					
What	What Features of Online Review Affects Readers' Intention to Travel?				
Room C	Parallel Session V	Oct 17 (Sun)	Presenter 1		
	10.30-12.00				

Retnani Latifah				
Combining Topological and Topical Features for Community Detection				
Room A	Parallel Session V	Oct 17 (Sun)	Presenter 4	
	10.30-12.00			

Rif'at Ahdi Ramadhani				
Comparison of Naive Bayes Smoothing Methods for Twitter Sentiment Analysis				
Room A	Parallel Session IV	Oct 17 (Sun)	Presenter 1	
	08.00-09.30			

Rinaldi Munir				
A Fragile	A Fragile Watermarking Scheme for Content Authentication of GIF Images			
Room B	Parallel Session VI	Oct 17 (Sun)	Presenter 2	
13.00-14.30				

Rindra Wiska				
Vehicle Traffic Monitoring Using Single Camera and Embedded Systems				
Room A Parallel Session II Oct 16 (Sat) Presenter 4				
13.00-14.30				

Rizal Asrul Pambudi						
Psychomotor Game Learning Using Leap Motion Technology						
Room B	Parallel Session IV	Oct 17 (Sun)	Presenter 5			
	08.00-09.30					

Rizki Muhammad						
Automatic Model Translation to UML from Software Product Lines Model using UML Profile						
Room C	Parallel Session V	Oct 17 (Sun)	Presenter 5			
	10.30-12.00					

Rizky Ginanjar				
Implementation of Regularized Markov Clustering Algorithm on Protein Interaction Networks of Schizophrenia				
Room A Parallel Session IV Oct 17 (Sun) Presenter 4				
	08.00-09.30			

S

Sabriansyah Rizqika Akbar					
Pervasive Device and Service Discovery Protocol In XBee Sensor Network					
Room A	Room A Parallel Session II Oct 16 (Sat) Presenter 1				
13.00-14.30					

Sonia Anastasia				
Twitter Sentiment Analysis of Online Transportation Service Providers				
Room A	Parallel Session VI	Oct 17 (Sun)	Presenter 3	
	13.00-14.30			

Sumarsih Condroayu Purbarani				
Adaptive Genetic Algorithm for Reliable Training Population in Plant Breeding Genomic Selection				
Room B	Parallel Session I	Oct 16 (Sat)	Presenter 1	
10.00-11.30				

T

Tommy Prayoga					
Health Cap	Health Capability: The Representation of IoT in Health Domain among Jakartans				
Room C	Room C Parallel Session VI Oct 17 (Sun) Presenter 4				
	13.00-14.30				

Tosan Wiar Ramdhani					
The Use of Data Mining Classification Technique to Fill in Structural Positions in Bogor Local Government					
Room B Parallel Session II Oct 16 (Sat) Presenter 3 13.00-14.30					

Triando				
Incremental Product Configuration in Software Product Line Engineering				
Room C	Parallel Session III	Oct 16 (Sat)	Presenter 2	
	15.30-17.00			

Trisna Trisna				
Solving Fuzzy Multi-objective Optimization Using Non-dominated Sorting Genetic Algorithm II				
Room B	Parallel Session II	Oct 16 (Sat)	Presenter 4	
13.00-14.30				

V

Vina Ayumi				
Convolutional Neural Network using Microcanonical Annealing Algorithm				
Room A	Parallel Session I	Oct 16 (Sat)	Presenter 3	
	10.00-11.30			

Vivi Nur Wijayaningrum					
Numerical Methods for Initialization in Fodder Composition Optimization					
Room B	Room B Parallel Session V Oct 17 (Sun) Presenter 4				
	10.30-12.00				



	Widia Resti Fitriani				
Challenge	Challenges in Agile Software Development: A Systematic Literature Review				
Room C	Parallel Session I	Oct 16 (Sat)	Presenter 1		
	10.00-11.30				
Assessing Knowled	Assessing Knowledge Management Implementation Readiness in Faculty of Computer Science,				
	University of	Indonesia			
Room C	Parallel Session I	Oct 16 (Sat)	Presenter 3		
	10.00-11.30				
Intent	Intention to Use Smart City System Based on Social Cognitive Theory				
Room C	Parallel Session I	Oct 16 (Sat)	Presenter 4		
	10.00-11.30				

	Widyanto Bagus Priambodo				
Federated Docur	Federated Document Search Using Hybrid Peer-to-peer Network for Plagiarism Detection				
Auditorium	Auditorium Parallel Session III Oct 16 (Sat) Presenter 3 15.30-17.00				



Yogi Kurniawan					
Hiding Secret Data by using Modulo Function in Quad Difference Expansion					
Room B	Room B Parallel Session I Oct 16 (Sat) Presenter 2				
	10.00-11.30				

Yoga Nurdani				
Impact of Express Delivery Service Quality towards Repurchase Intention by B2C and C2C: A Case of Indonesia				
Room C Parallel Session II Oct 16 (Sat) Presenter 5 13.00-14.30				

Yohannes Yohannes					
Multimodal Decomposable Models by Superpixel Segmentation and Point-in-Time Detection CRF for Cheating Detection					
Room B Parallel Session V Oct 17 (Sun) Presenter 3 10.30-12.00					

Yuita Arum Sari					
Enhancing Tomato Clustering Evaluation using Color Correction with Improved Linear Regression in Preprocessing Phase					
Room B Parallel Session V Oct 17 (Sun) Presenter 5 10.30-12.00					

Yuan Hanif Syaniardi						
Formulating E-Business Strategy for Branchless Banking: A Case of A Bank in Indonesia						
Room C	Parallel Session II	Oct 16 (Sat)	Presenter 2			
	13.00-14.30					

Yuliant Sibaroni						
Extend Relation Identification in Scientific Papers						
Room B	Parallel Session IV 08.00-09.30	Oct 17 (Sun)	Presenter 3			

Z

Zahra Sharfina						
An Indonesian Adaptation of the System Usability Scale (SUS)						
Room A	Parallel Session III	Oct 16 (Sat)	Presenter 4			
	15.30-17.00					

