



CONFERENCE PROGRAM

**International Conference of
Information and Communication Technology**

ICOICT 2013

Bandung, 20 – 22 March 2013

The Trans Luxury Hotel

**“Smart System
for the Convergence of Technology and Services”**

Organized by Institut Teknologi Telkom

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Message from ICOICT Organizing Chair

Welcome to the inaugural conference of ICOICT 2013 in Bandung, Indonesia. This inaugural conference has brought together nearly 300 academics, researchers, reviewers, practitioners and presenters from 15 countries. This year ICOICT is hosting the presentation of 94 papers, representing around 50 per cent of full papers that were initially submitted. Half of these accepted papers are quality work from graduate and undergraduate students who have passed blind-review with tight criteria from our invited and voluntary multi-national reviewers.



Through ICOICT, we believe many young researchers have been helped to develop their research work and skills through constructive face-to-face interaction with experienced academics. We find this encouraging and we will continue to develop initiatives that provide ICT young researchers with opportunities to develop their research potential and ideas. Learning from mature research and stimulating discussion with academics, practitioners, and more experienced researchers in the conference has turned ICOICT to be a melting pot of multi-generation researchers.

We congratulate the authors of papers that made it into the proceedings and to IEEE Xplore, for the job well done. We wish to express strong appreciation to our most important sponsors: Institut Teknologi Telkom, IEEE Indonesia Section, The Ministry of Information and Communication, PT. Telkom Indonesia, and PT. Telkomsel. We are also blessed to have three distinguished Guest Speakers: Prof. Dr.-Ing. Abdelhak M. Zoubir, Prof. Dr. Hikmet Sari, and Prof. Dr. Ing. Habil. Thomas Magedanz.

As always, many thanks are due to all members of ICOICT committee for their dedication for making this conference a success. Above all, thank you to all of you for coming to this conference. Our conference next year ICOICT2014 will take place in Bandung, Indonesia and we look forward to seeing all of you again on April 2014. Enjoy Bandung and have a safe journey back home.

Adiwijaya

ICOICT, Chair

Message from Advisory Chair

It has always been a pleasure to host and to welcome researchers, academics, practitioners, and students from across national borders for a shared, prestigious event like ICoICT 2013.



ICoICT has been born from shared aims to build an multi-national environment of research, providing world-class opportunity for students to have constructive face-to-face interaction with peers and experienced international academics. ICoICT also supplies a discussion platform among more senior academics and an outlet for disseminating their research work. Answering the call for global contribution, ICoICT also serves as a vehicle for developing better world with the ever-growing ICT.

Today and future world would rely on distinguished competencies from people like the ICoICT participants, bringing with them rich difference to create better options for arriving at better ICT solutions. This year ICoICT might only be a small step toward this aim. However, every great journey begins with a step, we are glad we have made the usually most challenging initial step and determined to keep forward. On behalf of Institut Teknologi Telkom and all those committed people in ICoICT committee, I thank you all for aligning your expertise and experience in this memorable first step.

Ahmad Tri Hanuranto

IT Telkom, President

Committees

International Conference on Information and Communication Technology (ICOICT) provides an open forum for researchers, engineers, policy makers, network planners, and service providers in telecommunications. Extensive exchange of information will be provided on newly emerging systems, standards, services, and variety of applications on the area of telecommunications.

- **General Chair**

Dr. Adiwijaya

- **Advisory Committee**

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Mr. M. Ary Murti, IEEE Indonesian Section

Mr. Tee Connie, MMU, Malaysia

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Mr. Yusza Redityamurti, Institut Teknologi Telkom, Indonesia

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Ms. Hasmawati, Institut Teknologi Telkom, Indonesia

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Technical Campus World Academy of Informatics and Management
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Information and Communication Engineering

Prof. Manoj Sharma, University of Technical AICTE

Prof. Manoj Sharma, BVCOE

Prof. Dr. Siti Rafidah Ab. Rashid, Universiti Teknologi MARA

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Prof. Joy long-Zong Chen, Dayeh University
Prof. Erwin Daculan, University of San Carlos EE/ECE Department
Prof. Yinjing Guo, Shandong University of Science & Technology
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Mushtaque Korai, M.Sc, Yanbu Industrial College (asisten professor)
Philip Moore, MSc, Birmingham City University
Suhaila Subahir, MSc. , Communication Universiti Teknologi MARA
Fairus Kamaruzaman, MA, Universiti Teknologi MARA
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Ranjeet Kaur Sandhu, Punjab Technical University, Jalandhar
Mashanum Osman, Universiti Teknikal Malaysia Melaka
Sridhar R, Bharathiyar University
Ying Rao, Candy Wei, The Hong Kong Polytechnic University
Yu Yuan-Chih, National Taipei University of Technology;Chinese Culture
University

Session Overview

Mar, 19 (Tuesday)

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|------------------|------------------------------------|
| 16.00 ~ 18.00 | Registration (Ballroom Front Desk) |
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Day 1 : Mar. 20 (Wednesday)

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|------------------|------------------------------------|-------------------------------------|--|
| 08.00 - 08.30 | Registration (Ballroom Front Desk) | | |
| 08.30 – 09.00 | Opening Ceremony | | |
| 09.00 - 09.40 | Keynote Speech | Prof. Dr. Thomas Magedanz (Germany) | |
| 09.40 – 10.00 | Photo Session | | |
| 10.00 – 10.30 | Coffee Break | | |
| 10.30 – 10.50 | Plenary Session | Plenary Talk 1 | Prof. Dr.-Ing. Abdelhak M. Zoubir (Germany) |
| 10.50 – 11.10 | | Plenary Talk 2 | Prof. Dr. Hikmet Sari (France) |
| 11.10 – 12.00 | | Panel Discussion | |
| 12.00 – 13.30 | Lunch | | |

| Parallel Session | | | | | |
|------------------|---|-----------------------|----------------------------------|-------------------------------|---------------------------------|
| Time | Session | Room | | | |
| | | Ballroom 3A | Ballroom 3B | Ballroom 2A | Ballroom 2B |
| 13.30 – 15.30 | Session 1 | Swarm Intelligence | Object and Character Recognition | Ubiquitous and Sensor Network | Control and Optimization System |
| | Chair | Dr. Agung Trisetyarso | Dr. Hertog Nugroho | Dr. Arifin Nugroho | Dr. Maman Abdurohman |
| 15.30 – 16.30 | Break / Preparation for Dinner | | | | |
| 16.30 – 18.30 | Bus trip to IT Telkom (the site of welcome dinner and cultural night) | | | | |
| 18.30 – 21.30 | Dinner / Welcome Party | | Committee | | |

Day 2 : Mar. 21 (Thursday)

| Parallel Session | | | | | |
|------------------|--------------|-----------------------|-----------------------|------------------------|------------------------|
| Time | Session | Room | | | |
| | | Ballroom 3A | Ballroom 3B | Ballroom 2A | Ballroom 2B |
| 09.00 – 10.00 | Session 2 | Mobile Comm. I | Future Web | Cloud Technology | Knowledge Based System |
| | Chair | Dr. Sugihartono | Dr. Agung Trisetyarso | Dr. Deni Saepudin | Dr. Jimmy Tirtawangsa |
| 10.00 – 10.30 | Coffee Break | | | | |
| Parallel Session | | | | | |
| Time | Session | Room | | | |
| | | Ballroom 3A | Ballroom 3B | Ballroom 2A | Ballroom 2B |
| 10.30 – 12.00 | Session 3 | Smart Services I | Future Network | Multimedia Application | Mobile Comm. II |
| | Chair | Dr. Jimmy Tirtawangsa | Dr. Deni Saepudin | Dr. Rendy Munadi | A. Ali Muayyadi, PhD |
| 12.00 – 13.30 | Lunch | | | | |

| Parallel Session | | | | | |
|--------------------------|------------------|----------------------|----------------------|---------------------|---------------------|
| Time | Session | Room | | | |
| | | Ballroom 3A | Ballroom 3B | Ballroom 2A | Ballroom 2B |
| 13.30 – 15.36 | Session 4 | Intelligent Systems | Smart Services II | Wireless Technology | Comm. Technology |
| | Chair | Prof. The Houw Liong | Dr. Maman Abdurohman | Dr. Heroe Wijanto | Dr. Bambang Hidayat |
| 15.36 – 16.00 | Closing Ceremony | | | | |

Keynote Session

Day 1 : March 20 (Wednesday)

Plenary Session : 09.00 – 09.40

Phoenix Ballroom I

Chair : **Dr. Arifin Nugroho**, Lecturer of
Graduate School at Institut Teknologi
Telkom, Indonesia

Keynote Speech :

Speaker : **Prof. Dr. Ing. Habil. Thomas Magedanz**
(Technical University of Berlin, Germany)

Speaker's Biography :

Prof. Magedanz is an outstanding computer science and telecommunications expert placing a strong emphasis on applied research in order to link academia and industry within an emerging global networking and services market. He received his Diploma and his Ph.D. in computer sciences from the Technical University of Berlin, Germany in 1988 and 1993, respectively. In 2002 Thomas Magedanz has been called as full university professor in the electrical engineering and computer sciences faculty at the Technische Universität Berlin,



Germany, leading the new chair for next generation networks (called Architektur der Vermittlungsknoten - AV in German), sponsored by the Fraunhofer Gesellschaft, where he is concentrating on the education of master and PhD students, performing special lectures and project courses in the field of Service Oriented Architecture (SOA) based service delivery platforms

for converged media and communications services on top of next generation networks and the future internet.

Since 2005 Prof. Magedanz is organizing the famous IMS Workshop series, which has been renamed in 2010 into FUSECO Forum, bringing together every year 200-300 international experts from more than 30 nations. Since 2009 he is organizing the international IEEE Workshop Series on Open NGN and IMS Testbeds - ONIT.

“Emerging Smart Communication Infrastructures driven by convergence of technologies and services”

Abstract :

Due to the increasing adoption of internet technologies in our daily lives, we are moving rapidly into a world of total interconnection of humans and machines. This means that after fixed mobile convergence (FMC) and voice data integration, which has coincided the evolution of telecommunication infrastructures in the last two decades, we are now witnessing the start of a much broader convergence of quite different application domains, with different value chains and used technologies.

This convergence will be enabled by the evolution of Internet technologies under the banner of the Future Internet (FI) research, comprising the Internet of Services (IoS), Internet of Things (IoT), and the Network of the Future (NoF). The most prominent application context for prototyping, piloting, and adopting FI research results are so-called „Smart Cities“, in which an integrated „smart communication infrastructure“ represents the foundation for the efficient and fast provision of smarter applications. Thus different transport and control platforms, as well as data platforms need to evolve into an integrated future internet service platform, enabling an open set of application domains by so-called common or generic enablers on top of different fixed and mobile network infrastructures.

Based on an introduction to Smart Cities and an requirements analysis of the communication requirements of different Smart City application domains, such as Smart Grids, e-Utilities, e-Logistics, e-Automotive, e-Government, e-Health, and advanced Entertainment, this talk will outline a potential reference architecture for emerging Smart Cities based on an evolution of existing fixed and mobile Next Generation Networks (NGNs) control platforms and the related standards towards the Future Internet.

Starting from Intelligent Networks (IN) representing still today a key telecommunications architecture, the talk will look briefly at the 3GPP IP Multimedia Subsystem (IMS) for providing advanced human to human (H2H) multimedia communication services, the emerging 3GPP Machine Type Communications (MTC) platforms enabling optimized machine to machine (M2M) communications, and the 3GPP Evolved Packet Core (EPC) providing seamless broadband connectivity for both H2H and M2M communications across different wireless network technologies. In addition, the talk will review relevant Service Delivery Platform (SDP) concepts and related service enablers and Application Programming Interfaces (APIs) as defined by ETSI, 3GPP, GSMA and OMA for supporting H2H and M2M capabilities needed by various application domains on top of fixed and mobile networks.

The talk will give a short introduction to relevant toolkits and laboratories from Fraunhofer FOKUS and Technical University Berlin, such as the Open IMS Core (www.openimscore.org), OpenEPC (www.openepc.net), and the new OpenMTC (www.open-MTC.org) toolkits, as well as the FUSECO-Playground (www.fuseco-playground.org) enabling comprehensive prototyping in the context of smart city infrastructures and applications. Finally, the European FI PPP Project FIWARE (<http://www.fi-ware.eu>), as well as the DAAD UNIFI project (www.daad-unifi.org) will be given as examples for the successful use of these toolkits for prototyping future smart communication platforms in international R&D collaborations.

Plenary Session

Day 1 : March 20 (Wednesday)

Plenary Session : 10.30 – 10.50

Phoenix Ballroom I

Chair : **Prof. Dr. Andriyan B. Suksmono**,
Bandung Institute of Technology

Plenary Speech 1 :

Speaker : **Prof. Dr.-Ing. Abdelhak M. Zoubir**
(Technische Universität Darmstadt, Germany)

Speaker's Biography :

Abdelhak M. Zoubir is a Fellow of the IEEE and IEEE Distinguished Lecturer (Class 2010-2011).

He received his Dr.-Ing. from Ruhr-Universität Bochum, Germany in 1992. He was with Queensland University of Technology, Australia from 1992-1998 where he was Associate Professor. In 1999, he joined Curtin University of Technology, Australia as a Professor of Telecommunications and was Interim Head of the School of Electrical & Computer Engineering from 2001 until 2003. In 2003 he moved to Technische Universität Darmstadt, Germany as Professor of Signal Processing and Head of the Signal Processing Group.

His research interest lies in statistical methods for signal processing with emphasis on bootstrap techniques, robust detection and estimation and array processing applied to telecommunications, radar, sonar, car engine monitoring and biomedicine. He published over 300 journal and conference papers on these areas.



Professor Zoubir was Technical Chair of the 11th IEEE Workshop on Statistical Signal Processing (SSP 2001), General Co-Chair of the 3rd IEEE International Symposium on Signal Processing & Information Technology (ISSPIT 2003) and of the 5th IEEE Workshop on Sensor Array and Multi-channel Signal Processing (SAM 2008). He is the General Co-Chair of the 14th IEEE International Workshop on Signal Processing Advances for Wireless Communications (SPAWC 2013), to be held in Darmstadt, Germany and of the 21st European Signal Processing Conference (EUSIPCO 2013), to be held in Marrakech, Morocco. He is the Technical Co-Chair of ICASSP-14 to be held in Florence, Italy.

DrZoubir was an Associate Editor of the IEEE Transactions on Signal Processing (1999-2005), a Member of the Senior Editorial Board of the IEEE Journal on Selected Topics in Signal Processing (2009-2011) and he currently serves on the Editorial Boards of the EURASIP journals Signal Processing and the Journal on Advances in Signal Processing (JASP). He is the Editor-In-Chief of the IEEE Signal Processing Magazine (2012-2014). DrZoubir was the Chair of the IEEE SPS Technical Committee Signal Processing Theory and Methods (SPTM) (2010-2011) and a Member of the IEEE SPS Technical Committee Sensor Array and Multi-channel Signal Processing (SAM) (2007-2012). He also serves on the Board of Directors of the European Association of Signal Processing (EURASIP). He was the Guest Co-Editor of 3 special issues on topics in statistical signal processing, one of which is on the bootstrap that appeared in the IEEE Signal Processing Magazine SI 24(4) in 2007.

Recent Advances on the Bootstrap for Signal Processing

Abstract :

The use of more accurate models in signal processing applications such as communications, radar, sonar, biomedical engineering, speech and image processing and machine learning has become a fundamental requirement. With an improved accuracy, the models have become more complex and inferential

statistical signal processing has become intractable. The signal processing practitioner requires a simple but accurate method for assessing errors of estimates and answering inferential questions.

Asymptotic approximations are useful only when enough data is available, which is not always possible due to time constraints, the nature of the signal or the measurement setting. In place of the formulae and tables of parametric and non-parametric procedures based on complicated mathematics and asymptotic approximations, tools such as the bootstrap are powerful for solving complex engineering problems. It is the method of an engineer's choice for solving inferential signal processing problems, such as signal detection, confidence limits estimation and model selection, to mention a few.

In this talk, we first give a brief overview of the basic principle underlying the bootstrap methodology. We then discuss bootstrap techniques for independent data, followed by bootstrap techniques for dependent data. Bootstrap methods for signal detection and model selection are presented along with frequency domain bootstrap methods for spectral analysis. Real-data examples are also given.

Day 1 : March 20 (Wednesday)

Plenary Session : 10.50 – 11.10

Phoenix Ballroom I

Chair : **Prof. Dr. Andriyan B. Suksmono**,
Bandung Institute of Technology

Keynote Speech 2 :

Speaker : **Prof. Dr. Hikmet Sari**
(Department of Telecommunications, SUPÉLEC, France)

Speaker's Biography :

Hikmet Sari received his Engineering Degree and Ph.D. from the ENST, Paris, France, and the post-doctoral Habilitation degree from the University of Paris XI.

From 1980 to 2002, he held various research and management positions at the Philips Research Laboratories, SAT, Alcatel, Pacific Broadband Communications, and Juniper Networks. He is currently Professor and Head of the Telecommunications Department of SUPÉLEC and also Chief Scientist of Sequans Communications.



His distinctions include the IEEE Fellow Grade (1995), the André Blondel Medal (also in 1995), the Edwin H. Armstrong Award in 2003, the Harold Sobol Award in 2012, as well as election to Academia Europaea (the Academy of Europe) and to the Science Academy of Turkey in 2012. Dr. Sari has served as an Editor of the IEEE Transactions on Communications (1987 – 1981), a Guest Editor of the European Transactions on Telecommunications (1993) and of the IEEE JSAC (1999), and an Associate Editor of the IEEE Communications Letters (1999 – 2002). He served as a Distinguished Lecturer of the IEEE Communications Society in 2001 – 2006, as a member of the IEEE Fellow Evaluation Committee in 2002 – 2007, and as a member of the Awards Committee in 2005 – 2007.

He was Chair of the Communication Theory Symposium of ICC 2002, Technical Program Chair of ICC 2004, Vice General Chair of ICC 2006, General Chair of PIMRC 2010, and General Chair of WCNC 2012. He also chaired the Globecom and ICC Technical Content (GITC) Committee in 2010 – 2011. Currently, he is a Member of the Globecom and ICC Management and Strategy (GIMS) Committee, and is serving as Executive Chair of WCNC 2014 and as Executive Co-Chair of ICC 2016.

Multiple Access and Power Efficiency in Wireless Communications

Abstract :

In this talk, we address the critical issues related to nonlinear amplifier problems in wireless communications and the developments in multiple access techniques to face these issues and increase power efficiency. First of all, we review the Orthogonal Frequency-Division Multiplexing (OFDM) vs. Single-Carrier Transmission with Frequency-Domain Equalization (SC-FDE) issue, which first came up in Digital Audio and Video Broadcasting and continued later in wireless communications. Then, we discuss the birth and the principle of Orthogonal Frequency-Division Multiple Access (OFDMA) and of Single-Carrier Frequency-Division Multiple Access (SC-FDMA) and compare these multiple access techniques in a cellular environment using the Long-Term Evolution (LTE) standard and assuming a linear channel. Finally, we give a comprehensive presentation of the effect of nonlinear power amplifiers on the transmitted signal and the methods used to compensate for the resulting distortion. A comparison is then made between OFDMA and SC-FDMA using nonlinear power amplifiers. Our analysis indicates that OFDMA performs better on linear channels, particularly with high-level signal constellations, but that SC-FDMA reduces high-power amplifier back-off by 1.5 – 2.0 dB. The final conclusion is that it is better to use OFDMA for users close to the base station in order to increase cell capacity, and in contrast it is better to use SC-FDMA for users near the cell edge to increase the cell range.

Technical Session

Day 1 : March 20 (Wednesday)

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| Time 13:30 - 16.00 | |
| Session 1 : Swarm Intelligence Chair : Dr. Agung Trisetyarso | Room : Ballroom 3A |
| 01 – 3A – 01 1569708693 | A Comparative Study of Particle Swarm Optimization and Cuckoo Search Techniques Through Problem-Specific Distance Function <hr/> Md Adnan |
| 01 – 3A – 02 1569713097 | gCLUPS : Graph Clustering Based on Pairwise Similarity <hr/> IntanNurmaYulita |
| 01 – 3A – 03 1569713361 | A Study of Sliding Window Update Rate for Hand Movement Identification From EEG Signal Based on Wavelet Packet Decomposition <hr/> Nabila Sabatini |
| 01 – 3A – 04 1569713523 | Document Clustering Using Bees Algorithm <hr/> Nihal M. AbdelHamid |
| 01 – 3A – 05 1569703803 | Fractal Dimension Approach for Clustering of DNA Sequences Based on Internucleotide Distance <hr/> MujionoSadikin |

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| 01 – 3A – 06 1569701181 | Hybrid Ontology Based e - Learning Expert System for Children with Autism <hr/> KarthikaVenkatesan |
| 01 – 3A – 07 1569692583 | A Hybrid Strategy for Improving PSO and Its Application for Self-Tuning PID Controller on Position Control of Ultrasonic Motor <hr/> DjoewahirAlrijadjis |
| 01 – 3A – 08 1569713217 | A Rainfall Forecasting Using Fuzzy System Based on Genetic Algorithm <hr/> FhiraNhita |

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| Time 13:30 - 16.00 | |
| Session 1 : Object and Character Recognition Chair : Dr. Hertog Nugroho | Room : Ballroom 3B |
| 01 – 3B – 01 1569712691 | Analysis of Features Selection for P2P Traffic Detection Using Support Vector Machine <hr/> HaithamJamil |
| 01 – 3B – 02 1569709143 | Arabic Character Segmentation Using Projection-Based Approach with Profile's Amplitude Filter <hr/> Mahmoud Mousa |

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| 01 – 3B – 03 1569713551 | Combining Pixel Projection, OCR, and Scale Calculation to Perform Graph Feature Extraction <hr/> WahyuPratomo <hr/> |
| 01 – 3B – 04 1569713597 | Comparison Between Fingerprint and Winnowing Algorithm to Detect Plagiarism Fraud on Bahasa Indonesia Documents <hr/> Agung Toto Wibowo <hr/> |
| 01 – 3B – 05 1569713603 | Fire Color Detection Using Color Look Up and Histogram Analysis <hr/> FebryantiSthevanie <hr/> |
| 01 – 3B – 06 1569702393 | Object Recognition and Detection by Shape and Color Pattern Recognition Utilizing Artificial Neural Networks <hr/> LaureneGaile L Francisco <hr/> |
| 01 – 3B – 07 1569712343 | Requirements Analysis of Android Application Using Activity Theory: A Case Study <hr/> NikAzlinaNik Ahmad <hr/> |

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| Time 13:30 - 16.00 | |
| Session 1 : Ubiquitos and Sensor Network Chair : Dr. Arifin Nugroho | Room : Ballroom 2A |
| 01 – 2A – 01 1569713879 | Collaborative Spectrum Sensing Using Sequential Detections: Soft Decision Vs. Hard Decision <hr/> FikySuratman |
| 01 – 2A – 02 1569713573 | Comparison and Performance Analysis of AntNet and Distance Vector Routing Protocol in Telecommunication Networks Case Study XYZ Company <hr/> AbdusySyarif |
| 01 – 2A – 03 1569707173 | DDoS Attack Detection Method and Mitigation Using Pattern of the Flow <hr/> Ahmad Sanmorino |
| 01 – 2A – 04 1569713327 | Extending Lifetime of Heterogenous Wireless Sensor Network Using Relay Node Selection <hr/> Norah Tuah |
| 01 – 2A – 05 1569713663 | Implementation of Networked Control Systems Using Programmable Controller Based Ethernet Network <hr/> ArisRamadhan |
| 01 – 2A – 06 | Performance Comparison of LMS and RLS Adaptive Array on |

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| 1569713793 | High Speed Train Delivered From High Altitude Platforms |
| | Irma Zakia |
| 01 – 2A – 07 1569708391 | Quality-Supporting Duration for Dual-Hop Vehicle-to-Vehicle Cooperative Communications |
| | Yunsung Choi |
| 01 – 2A – 08 1569715121 | Collaborative Spectrum Sensing Using Sequential Detections: Soft Decision Vs. Hard Decision |
| | IsmudiatiHandayani |

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| Time 13:30 - 16.00 | |
| Session 1 : Control and Optimization System | Room : Ballroom 2B |
| Chair : Dr. Maman Abdurohman | |
| 01 – 2B – 01 1569708497 | Sparse Data for Document Clustering |
| | Ionia Veritawati |
| 01 – 2B – 02 1569713537 | Computer Controlled Digital Microscope with Photomicrograph Enhancement |
| | AgampodiDuminduNayanajith Silva |
| 01 – 2B – 03 1569708659 | High Speed Filtering for Mutual Privacy Protection in SNS Using Multistage Bloom Filter |
| | Yasuhito Utsunomiya |

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| 01 – 2B – 04 1569693473 | <p>Ideas on Improving the Business-IT Alignment in BPM Enabled by SOA</p> <hr/> <p>MatejHertis</p> <hr/> |
| 01 – 2B – 05 1569713585 | <p>Implementation of Analytic Network Process (ANP) and Analytic Hierarchy Process (AHP) Method to Determine Priorities of Roads to Be Repaired At Bogor City Department of Public Works</p> <hr/> <p>RizaAgustiansyah</p> <hr/> |
| 01 – 2B – 06 1569712711 | <p>Log-Value Estimation of Random Variable Following Generalized Gamma Distribution in Wireless Communications</p> <hr/> <p>YungLan Tseng</p> <hr/> |
| 01 – 2B – 07 1569702285 | <p>Modeling and Simulation of Shipboard Power System for Maximum Likelihood Estimation of Fault Locations</p> <hr/> <p>Sanjoy Das</p> <hr/> |
| 01 – 2B – 08 1569709709 | <p>The Analysis and Implementation of Degree Centrality in Weighted Graph in Social Network Analysis</p> <hr/> <p>ZudhaRachman</p> <hr/> |

Day 2 : March 21 (Thursday)

| | |
|--|--|
| Time 09:00 - 10.00 | |
| Session 2 : Mobile Communication II | Room Ballroom 3A |
| Chair : Dr. Sugihartono | |
| 02 – 3A – 01 1569702377 | Channel Estimation for LTE Downlink in High Altitude Platforms (HAPs) Systems <hr/> Muhammad Reza Kahar Aziz |
| 02 – 3A – 02 1569708897 | Optimal Access Point Switching with Per-Link Threshold Under Nonhomogeneous Bandwidth Allocation <hr/> Dae-KyoJeong |
| 02 – 3A – 03 1569710025 | Simulation and Analysis of Interference Avoidance Using Fractional Frequency Reuse (FFR) Method in LTE Femtocell <hr/> UkeUsman |
| 02 – 3A – 04 1569700833 | Identification of Interferers in Het-Net in LTE-A Systems Based on FeLIC with Cell Range Expansion <hr/> Fanny Fauzi |

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|---|---|
| Time 09:00 - 10.00 | |
| Session 2 : Future Web Chair : Dr. Agung Trisetiyarso | Room Ballroom 3B |
| 02 – 3B – 01 1569713481 | Open Multiprocessing Aided Overlapped Motion Compensated Temporal Interpolation <hr/> MadihaSher |
| 02 – 3B – 02 1569700909 | TMT Quantization Table Generation Based on Psychovisual Threshold for Image Compression <hr/> FerdaErnawan |
| 02 – 3B – 03 1569708671 | Websites Usability Instrument Validation Using Think-Aloud Method <hr/> Muhammad Aliif |
| 02 – 3B – 04 1569713341 | ACTIFIST Adaptive Architecture for Integrated Information System <hr/> KusumaAyuLaksitowening |

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|--|---|
| Time 09:00 - 10.00 | |
| Session 2 : Cloud Technology Chair : Dr. Deni Saepudin | Room : Ballroom 2A |
| 02 – 2A – 01 1569713581 | Community Exchange: Social Software to Support Group Discussion <hr/> RomizaMd Nor |
| 02 – 2A – 02 1569708653 | Enhancing Educational Services Using Cloud Technology <hr/> Baginda Nan Cenka |
| 02 – 2A – 03 1569713601 | Information Retrieval Experiment on Subjective Words Query Expansion <hr/> MaleeratSodanil |

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|---|---|
| Time 09:00 - 10.00 | |
| Session 2 : Knowledge Based System Chair : Dr. Jimmy Tirtawangasa | Room Ballroom 2B |
| 02 – 2B – 01 1569708779 | Online Shopping Recommender System Using Hybrid Method <hr/> Ade Romadhony |

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| 02 – 2B – 02 1569708617 | Requirement of Knowledge Centre Based on Web Analysis |
| | IlyAmirahHassannuddin |
| 02 – 2B – 03 1569705015 | Mining Food Industry's Multidimensional Data to Produce Association Rules Using Apriori Algorithm as a Basis of Business Strategy |
| | FeriSulianta |

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|--|---|
| Time 10:30 - 12.00 | |
| Session 3 : Smart Services I | Room : Ballroom 3A |
| Chair : Dr. Jimmy Tirtawangasa | |
| 03 – 3A – 01 1569698465 | A Baidu Maps API-based Mobile Tour Recommendation System on Android Platform |
| | HaoranXie |
| 03 – 3A – 02 1569697933 | A Bibliometric Analysis on Scientific Production of Geographical Information System (GIS) in Web of Science |
| | Ahmad NadzriMohamad |
| 03 – 3A – 03 1569713649 | A Blind Spectrum Sensing Method for DTV Signal Detection |
| | AgusSubekti |

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| 03 – 3A – 04 1569700351 | Metamorphic Animation of 3D Fern-like Fractal Images Based on A Family of Transitional 3D IFS Code Approach |
| | TedjoDarmanto |
| 03 – 3A – 05 1569704875 | Smart Home System Using Android Application |
| | RidzaRamlee |

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|--|---|
| Time 10:30 - 12.00 | |
| Session 3 : Future Network | Room Ballroom 3B |
| Chair : Dr. DeniSaepudin | |
| 03 – 3B – 01 1569708699 | OLAP Best Solution for Multidimensional Grocery Business Model |
| | AngreineKewo |
| 03 – 3B – 02 1569707725 | Throughput Estimation Model for Uniformly Distributed Femto Base Station Networks |
| | YungLan Tseng |
| 03 – 3B – 03 1569713279 | Performance Analysis of the Autonomous System Confederation for Border Gateway Protocol |
| | FazmahArifYulianto |

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| 03 – 3B – 04 1569713255 | Storage Area Network Based-on Internet Small Computer Standard Interface Optimization Using Internet Protocol Multipathing |
| | TodyWibowo |
| 03 – 3B – 05 1569711875 | Perturbation Theory Based on Darboux Transformation on One-Dimensional Dirac Equation in Quantum Computation |
| | AgungTrisetyarso |

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| Time 10:30 - 12.00 | |
| Session 3 : Multimedia Application | Room : Ballroom 2A |
| Chair : Dr. Rendy Munadi | |
| 03 – 2A – 01 1569713583 | Development Methods for Hybrid Motion Detection (Frame Difference-Automatic Threshold) |
| | Rita Rismala |
| 03 – 2A – 02 1569708239 | Performance Evaluation of Stack-Protocols, Encapsulation Methods and Video Codecs for Live Video Streaming |
| | Afaqlqbal |
| 03 – 2A – 03 1569708275 | Preservation of GobakSodor Traditional Games Using Augmented Reality Computer Game Simulation |
| | AbasSetiawan |

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| 03 – 2A – 04 1569708325 | Realistic Facial Animation on Speech Synchronization for Indonesian Language <hr/> MelliaLiyanthy |
| 03 – 2A – 05 1569713397 | Real-Time Hand-Tracking on Video Image Based on Palm Geometry <hr/> R Dayawati |

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| Time 10:30 - 12.00 | |
| Session 3 : Mobile Communication I Chair : A. Ali Muayyadi, PhD | Room Ballroom 2B |
| 03 – 2B – 01 1569712379 | RIRM - Fault Tolerant Execution Incorporating ROC for Multitier Transactional Applications <hr/> Suma |
| 03 – 2B – 02 1569707641 | Scalable Link State Routing in Inter-Domain Traffic Engineering <hr/> Zhang Jian |
| 03 – 2B – 03 1569713453 | Signal Strength-based Adjacency Matrix and Its Eigenvalue in Mobile Robotic Networks <hr/> BayuErfianto |

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| 03 – 2B – 04 1569701505 | Performance Evaluation of R-S Coded Cooperative Diversity in Flat Fading Channel: Pairwise Error Probability (PEP) |
| | OluseyeAdeleke |
| 03 – 2B – 05 1569713409 | Implementation of Feature Extraction Based Hand Geometry in Biometric Identification System |
| | TjokordaAgung Budi Wirayuda |

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| Time 13:30 - 15.36 | |
| Session 4 : Intelligent Systems | Room Ballroom 3A |
| Chair : Dr. The Houw Liong | |
| 04 – 3A – 01 1569708623 | RTET - A Round Trip Engineering Tool |
| | Leckraj Nagowah |
| 04 – 3A – 02 1569708621 | A Mobile Knowledge Management Framework for Police Force |
| | Soulakshmee D. Nagowah |
| 04 – 3A – 03 1569701011 | A Novel Improved Neighbor Discovery Method for an Intelligent-AODV in Mobile Ad Hoc Networks |
| | EhsanMostajeran |

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| 04 – 3A – 04 1569713239 | Analysis and Evaluation Optimization Dynamic Source Routing (DSR) Protocol in Mobile Adhoc Network Based on Ant Algorithm |
| | Istikmal |
| 04 – 3A – 05 1569707863 | The State-of-the-Art Intelligent Navigational System for Monitoring in Mobile Autonomous Robot |
| | MurtazaHussain |
| 04 – 3A – 06 1569710799 | Dynamic Process Migration Framework |
| | Amin Ziaei |
| 04 – 3A – 07 1569701309 | Fuzzy Logic for Bandwidth Allocator Applies on IP Multimedia Traffic |
| | Fanny Fauzi |

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|-------------------------------------|---|
| Time 13:30 - 15.36 | |
| Session 4 : Smart Seviles II | Room Ballroom 3B |
| Chair : Dr. Maman Abdurohman | |
| 04 – 3B – 01 1569713563 | BPKIMI's Information System Strategic Planning Toward Excellent Public Services |
| | KemasWiharja |

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| 04 – 3B – 02 1569709151 | <p>Critical Success Factor for E-learning Implementation in InstitutTeknologi Telkom Bandung Using Structural Equation Modeling</p> <hr/> <p>NurLaily</p> |
| 04 – 3B – 03 1569713719 | <p>Marketing Mix Strategy in Increasing Marketing Performance in Indonesia Telecommunication Services Companies</p> <hr/> <p>EndangChumaidiyah</p> |
| 04 – 3B – 04 1569709733 | <p>Microblogging Sentiment Analysis with Lexical Based and Machine Learning Approaches</p> <hr/> <p>Warih Maharani</p> |
| 04 – 3B – 05 1569694647 | <p>Preliminary Research on E-Government Development Overview: An Assessment on e-Government Capabilities in Indonesia</p> <hr/> <p>Rizal BroerBahaweres</p> |
| 04 – 3B – 06 1569697235 | <p>Techno-Economic and Regulation Impact Analysis of Mobile Number Portability Implementation</p> <hr/> <p>MochFahru Rizal</p> |

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| Time 13:30 - 15.36 | |
| Session 4 : Wireless Technology Chair : Dr. Heroe Wijanto | Room : Ballroom 2A |
| 04 – 2A – 01 1569706465 | Design and Implementation of Moving Object Tracker for UAV/Rocket Ground Station <hr/> JokoSuryana |
| 04 – 2A – 02 1569706473 | Design and Realization of Flat Mobile VSAT Antenna for Ku/Ka-band Satellite Communications with Auto-beam Steering Capability <hr/> JokoSuryana |
| 04 – 2A – 03 1569713303 | Design and Realization of Two Array Triangle Patch of Microstrip Antenna with Gold Plat At Frequency 2400-2450 Mhz for Hexagonal Nanosatellite <hr/> WahyuSaputra |
| 04 – 2A – 04 1569708691 | Design of Microstrip Antenna for LTE (Long Term Evolution) 700 MHz Applications <hr/> DonySugianto |
| 04 – 2A – 05 1569714837 | Ultra Wideband Planar Triangular Patch Antenna with Slit Ridged Ground Plane <hr/> RenggaWasesa |

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| 04 – 2A – 06 1569708475 | UWB Bowtie 2 x 2 Array Antenna for UWB Mobile Communication System |
| | RidzaRamlee |
| 04 – 2A – 07 1569708685 | A Coplanar Waveguide (CPW) Wideband Octagonal Microstrip Antenna |
| | TommiHariyadi |

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| Time 13:30 - 15.36 | |
| Session 4 : Communication Technology | Room Ballroom 2B |
| Chair : Dr. Bambang Hidayat | |
| 04 – 2B – 01 1569713525 | Dark and Bright Soliton in Fiber Optics |
| | Subekti Ari Santoso |
| 04 – 2B – 03 1569694509 | Development of Underwater Acoustic Communication Model: Opportunities and Challenges |
| | Tri Budi Santoso |
| 04 – 2B – 04 1569708781 | RF MEMS Capacitor for Microwave Applications |
| | Ruddy Chatim |

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| 04 – 2B – 05 1569713501 | Temperature Effects on Parallel Cascaded Silica Based Microring Resonator <hr/> FakhrurroziAmran <hr/> |
| 04 – 2B – 06 1569698013 | Using Selective Partial Update - Selective Regressor Affine Projection Algorithms for Adaptive Equalization in Underwater Acoustic Communications <hr/> MasoumehSoflaei <hr/> |
| 04 – 2B – 07 1569708477 | UWB Chebyshev Band Pass Filter for UWB Communication <hr/> RidzaRamlee <hr/> |

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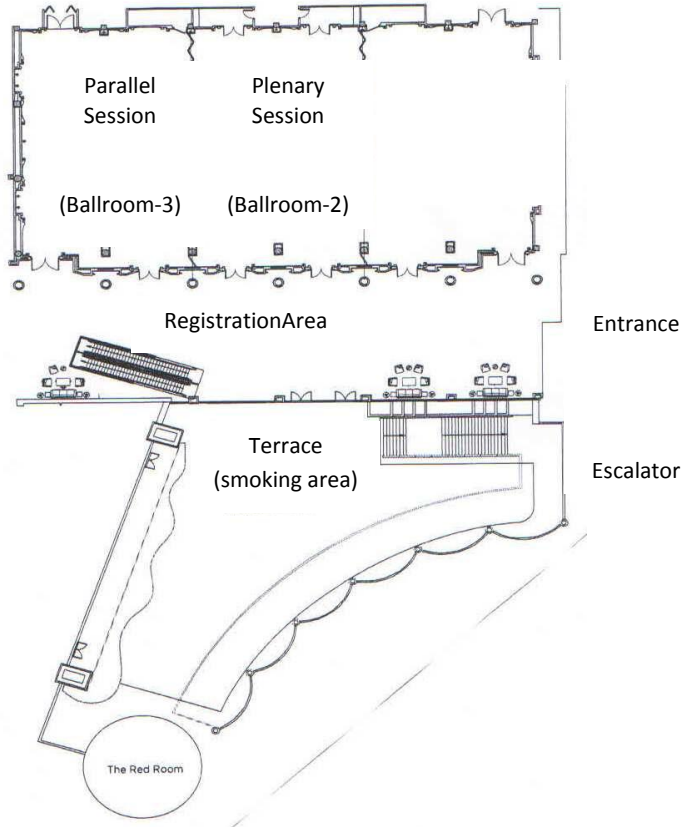
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Grand Ballroom, Trans Luxury 2nd Floor



Available at M Floor (Mezzanine) are:

- Moslem Praying Room (*Musholla*)
- Passageway connecting Ibis Hotel and Trans Luxury

MEMO