

Program Schedule

Monday November 6, 2017		
Time	Agenda	
08.00-08.45	Registration and Morning Coffee	
08.45-09.00	Opening Remarks by Prof. Tati L. R. Mengko <i>Chair of ICICI-BME 2017</i> and Welcoming Speech by Prof. Bambang Riyanto <i>Vice Rector of ITB (Main Hall)</i>	
09.00-09.10	Photo Session (<i>Main Hall</i>)	
09.10-09.15	AIPTBI Association Ceremony (<i>Main Hall</i>)	
09.15-10.15	Keynote Addresses (<i>Main Hall</i>)	Privacy Preservation in Big Databases <i>Wenny Rahayu (La Trobe University, Australia)</i>
10.15-11.15		Identifying People in Images by Classification of Visual Attributes <i>Christophoros Nikou (University of Ioannina, Greece)</i>
11.15-12.30	Lunch	
12.30-14.50	Parallel Session 1 & Workshop	1A: Medical and Material Sciences Paper 6, 7, 40, 107, 67, 8, 10 (<i>Room A</i>)
		1B: Modelling, Simulation, and Validation Methods Paper 50, 51, 55, 38, 41, 48, 95 (<i>Room B</i>)
		1C: Radiography and Material Sciences Paper 9, 53, 70, 94, 77, 98 (<i>Room C</i>)
		Workshop: IEEE SIGHT Humanitarian Technology Track (<i>Main Hall</i>) eHealth and Biomedical Engineering in Indonesia <i>Soegijardjo Soegijoko (IEEE SIGHT Indonesia)</i>

		<p>Design Thinking in Healthcare <i>Bryan Ranger (Massachusetts Institute of Technology, USA)</i></p>
		<p>AIPTBI Society Meeting (<i>AIPTBI Room</i>)</p>
14.50-15.30	Coffee Break and Poster Session	
15.30-17.00	<p>Workshop (cont.)</p>	<p>Workshop: IEEE SIGHT Humanitarian Technology Track (<i>Main Hall</i>)</p> <p>Tackling Social Aspects in Humanitarian & Health Technologies <i>Jamee Newland (University of Sidney, Australia)</i></p> <p>International Funding for your Research – Debunking Myths and Developing your Research Programme <i>Allya P. Koesoema and Yoke Saadia Irawan (IEEE SIGHT Indonesia Section, Biomedical Engineering Research Group, ITB, Indonesia)</i></p>

Tuesday November 7, 2017		
Time	Agenda	
08.00-08.30	Morning Coffee	
08.30-09.30	<p>Keynote Addresses <i>(Main Hall)</i></p>	<p>Determination of Growth Rate of Hepatocellular Carcinoma Xenographs in Nude Mice <i>Suchart Kothan (Chiang Mai University, Thailand)</i></p>
09.30-10.30		<p>Inorganic Scintillators for Medical Imaging Applications <i>Hong Joo Kim (Kyungpook National University, Korea)</i></p>
10.30-11.30		<p>Enhancement of Luminescence Light Yield of Ln³⁺ Doped Glass by Oxyfluoride Glass Matrix <i>Jakrapong Kaewkhao (Nakhon Pathom Rajabhat University, Thailand)</i></p>
11.30-12.30	Lunch	

12.30-14.50	Parallel Session 2 & Special Session	2A: Biomedical Image Processing and Classification Paper 71, 68, 4, 45, 59, 79 (Room A)
		2B: Biomechanics and Instrumentation Paper 63, 46, 32, 99, 91, 36 (Room B)
		2C: Signal Processing and Classification Paper 89, 80, 31, 57, 92, 65 (Room C)
		Special Session: Humanitarian Technology Paper 108, 104, 106, 69, 85, 39, 112 (Main Hall)
14.30-15.00	Coffee Break	
15.00-17.00	Parallel Session 3	3A: Image & Video Processing and Classification Paper 49, 81, 87, 23, 28, 44 (Room A)
		3B: Control and Instrumentation Paper 42, 61, 54, 62, 73, 84 (Room B)
		3C: Information Technology Paper 29, 82, 76, 30, 78, 83 (Room C)
17.00-17.15	Closing Ceremony	Closing Remarks by Prof. Mitra Djamal co-Chair of ICICI-BME 2017, Best Papers announcement, and Best Poster announcement (Main Hall)

Keynote Address

Main Hall	
Monday - November 6, 2017	
Time	Keynote Details

09.15-10.15	Privacy Preservation in Big Databases <i>Wenny Rahayu</i>
10.15-11.15	Identifying People in Images by Classification of Visual Attributes <i>Christophoros Nikou</i>
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08.30-09.30	Determination of Growth Rate of Hepatocellular Carcinoma Xenographs in Nude Mice <i>Suchart Kothan</i>
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Special Sessions

Humanitarian Technology (SS)	
Main Hall Tuesday - November 7, 2017	
Time	Paper Details
12.30-12.50	(108) mHealth for Mother and Child Health Nutrition – A Review and Proposed Design for Indonesia Focus on Early Life Nutrition in Indonesia <i>L. I. Octovia, N. R. M. Manikan, F. Witjaksono, K. Sutanto, A. P. Koesoema, S. Soegijoko, and Y. S. Irawan</i>
12.50-13.10	(104) Bio Based Autonomous Smart Home Concept <i>D.Q. Utama, Y.S. Irawan, M.N. Aulia, A. Riyani, A.P. Koesoema, and T.N. Azhar</i>
13.10-13.30	(106) Mobile Health Application for Drug Supply Chain Management: Case Study National Population and Family Planning Board <i>D.Q. Utama, Y.S. Irawan, Irma Ardiana, Titut Yuli Prihyugianto, A.P. Koesoema, and T.N. Azhar</i>
13.30-13.50	(69) Comparison of Accuracy between Smartphone-GPS and Professional-GPS for Mapping Tuberculosis Patients in Bandung City (A Preliminary Study) <i>B. Sujatmiko, N. Fitria, D. Fathania, A.D. Salindri, and B. Alisjahbana</i>

13.50-14.10	(85) Correlation of Visual Acuity Screening in Preschool Children between Personal Computer Software Jaeb Visual Acuity Screener (JVAS) and Tumbling E <i>K. Arundini, I. Sovani, and I. Irfani</i>
14.10-14.30	(39) A Review of Radars to Detect Survivors Buried Under Earthquake Rubble <i>W. Sujatmiko, R.P. Prastio, D. Danudirdjo, and A.B. Suksmono</i>
14.30-14.50	(112) The Medical Application of Sachet from Butterfly Pea Leaf Extract For People Living With Diabetes <i>M. Pandjaitan, I. Larasati, F. Santoso, and F. Ughi</i>

Parallel Sessions

Medical and Material Sciences (P1A)	
Room A Monday - November 6, 2017	
12.30-12.50	(6) Biocompatibility of Metal Alloys as Medical Devices <i>W. Siswomihardjo, M.K. Herliansyah, and N. Dinar</i>
12.50-13.10	(7) The Influence of CoCr L605 Induction to Blood Hemocompatibility Iris image analysis of patient Chronic Renal Failure (CRF) using watershed algorithm <i>S. Sunarintyas, N. Taufik, Y. Bayu, and W. Siswomihardjo</i>
13.10-13.30	(40) Clinical Trial and Preparation of Amniotic Membrane as Dura Mater Artificial <i>A.A Fauzi, T.F. Rochman, and A.W. Paramadini</i>
13.30-13.50	(107) Efficacy of Bacterial Photodynamic Inactivation with varying Angle and Time of LED Exposure <i>S. D. Astuti, W. P. Lestari, D. Ariefianto, A. Pertiwi, I. P. Buditomo, N. D. G. Drantantiyas, and E. M. Setiawatie</i>
13.50-14.10	(67) Osteoarthritis Classification Using Self Organizing Map Based Gray Level Run Length Matrices <i>L. Anifah, T. L. R. Mengko, M. H. Purnomo, and I. K. E. Purnama</i>
14.10-14.30	(8) Ion Release of Stainless Steel 316L and Cobalt Chromium L605 Intravascular Bare Metal Stent: A Review <i>B.P. Wicaksono, M.K. Herliansyah, and W. Siswomihardjo</i>

14.30-14.50	(10) Potential of Curcumin as Antiproliferative Drug for Developing Drug Eluting Stent: A Brief Review <i>M.K. Herliansyah, K.A. Ilman, A.E. Tontowi, and W. Siswomihardjo</i>
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Modelling, Simulation, and Validation Methods (P1B)
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Room B Monday - November 6, 2017

12.30-12.50	(50) Modelling and Control of Tilt-rotor Longitudinal Dynamics in Transition Phase <i>M. R. Hadytama and R. A. Sasongko</i>
12.50-13.10	(51) Air Combat Analysis using NADM Computation in WVR Case <i>P. A. P. Suseno and R. A. Sasongko</i>
13.10-13.30	(55) Modeling and Simulation of Rotor Dynamics of a Tilt-rotor Aircraft <i>R. A. Sasongko and B. Muhammad</i>
13.30-13.50	(38) Effects of Pulsatile Inlet Conditions on the Hemodynamic Conditions of Stent with Deformed Wall Simulations <i>N.K. Putra, H. Anzai, and M. Ohta</i>
13.50-14.10	(41) Modeling and Simulation of Mini Batch Distillation Column <i>R. Maulidda, P.H. Rusmin, A.S. Rohman, E.M.I. Hidayat, and D. Mahayana</i>
14.10-14.30	(48) Fuzzy Logic Controller Design and Implementation for Delayed and Nonlinear Time Variant Batch Distillation Column <i>I. Dwisaputra, P. Hidayat, R. A. Syaichu, R, E.M.I. Hidayat, and D. Mahayana</i>
14.30-14.50	(95) Location of Sinabung Volcano Magma Chamber on 2013 Using Simulated Annealing Inversion Scheme <i>R. Kumalasari, W. Srigutomo, M. Djamal, I. Meilano, and H. Gunawan</i>

Radiography and Material Sciences (P1C)
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Room C Monday - November 6, 2017

12.30-12.50	(9) Graphene Ink-Coated Cotton Fabric-Based Flexible Electrode for Electrocardiography
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	<i>C. L. Lam, S.Md. Saleh, M.B.M.Yudin, C. Sriprachuabwong, A. Tuantranont, F.K. C. Harun, and D.H.B. Wicaksono</i>
12.50-13.10	(53) White emission from Dy³⁺ doped borate glass and their Judd-Ofelt analysis <i>L.Yuliantini, R. Hidayat, M. Djamal, P. Yasaka, K. Boonin, and J. Kaewkhao</i>
13.10-13.30	(70) Permeability Analysis of Fe₂O₃ Magnetic Core <i>E. Sutanto, A. Supadi, and F. Rusydi</i>
13.30-13.50	(94) Radiation Protection on Patient Dosimetry <i>A.R.Triandini, and M. Fathony</i>
13.50-14.10	(77) Development of glass for radiation shielding material <i>M. Djamal, L.Yuliantini, N. Rauf, R. Hidayat, J. Kaewkhao</i>
14.10-14.30	(98) Enhancement of luminescence light yield of Ln³⁺ doped glass by oxyfluoride glass matrix <i>P. Meejitpaisan and J. Kaewkhao</i>

Biomedical Image Processing and Classification (P2A)	
Room A Tuesday - November 7, 2017	
12.30-12.50	(71) Biometric Recognition based on Palm Vein Image Using Learning Vector Quantization <i>H. Setiawan and E. M. Yuniarno</i>
12.50-13.10	(68) Comparison of Facial Feature Extraction on Stress and Normal Using Principal Component Analysis(PCA) Method <i>M. C. Kirana, Y. R. Putra, and F. W. Sari</i>
13.10-13.30	(4) Implementation of Backpropagation Neural Network and Blood Cells Imagery Extraction for Acute Leukemia Classification <i>F. Asadi, F. M. Putra, M. I. Sakinatunnisa, I. Marzuki</i>
13.30-13.50	(45) Evaluation of Retinal Vascular Tortuosity Indexes <i>T. D. Nafia, A. Handayani, and T. L. R. Mengko</i>
13.50-14.10	(59) Image Based Automated ASPECT Score for Acute Ischemic Stroke Patients

	<i>F. Fahmi, H. A. Marquering, C. B. Majoie, M. A. V. Walderveen, G. J. Streekstra, and E. V. Bavel</i>
14-10-14.30	(79) Bleb Height Assessment for Post-Trabeculectomy by Using Stereo Image <i>A. F. Fahanani, H. Zakaria, A. Prahasta, E. Gustianty, R. M. Rifada, and A. Chairini</i>

Bio-mechanic and Instrumentation (P2B)

Room B
Tuesday - November 7, 2017

12.30-12.50	(63) Design Modification of an Affordable Prosthetic Knee Based on DFMA and Static Analysis <i>F. Ferryanto, K. A. Muhammad, T. Rubiyanto, S. Mihradi, T. Dirgantara, and A. I. Mahyuddin</i>
12.50-13.10	(46) Development and Evaluation of a Haptic-based Upper-limb Orthosis for Rehabilitation <i>N. Wan, K. Hung, H. Cheung, R. Liang, C. Chu, S. Choy, D. Ng, and D. H. K. Chow</i>
13.10-13.30	(32) Low-Cost Pressure Sensor Matrix Using Velostat <i>S. S. Suprpto, B. Supartono, A. W. Setiawan, H. Zakaria, and W. Adiprawita</i>
13.30-13.50	(99) Biomechanical Evaluation on Balance during Standing on Different Height and Contact Area Heeled Shoes <i>J. K. Aviani, L. L. Fitri, Suprijanto, T. Ayatullah, and A. I. Mahyuddin</i>
13.50-14.10	(91) Rule Based Intent Recognizer in Sit to Stand Movement Based on Knee Angle and Ground Reaction Force <i>Y. C. A. Hutabarat, W. Kongprawechnon, and K. Ekkachai</i>
14.10-14.30	(36) Control System for DC motor based Micro air pump to simulate oscillograph of blood pressure <i>Nico Antonio Santoso and Fuad Ughi</i>

Signal Processing and Classification (P2C)

Room C
Tuesday - November 7, 2017

12.30-12.50	(89) Cancer Detection Based on Microarray Data Classification Using Deep Belief Network and Mutual Information <i>U. N. Wisesty, B. Pratama, A. Aditsania, and Adiwijaya</i>
12.50-13.10	(80) Short-term Wind Speed Prediction Base on Backpropagation Levenberg-Marquardt Algorithm; Case Study Area Nganjuk <i>T. Multazam, R. I. Putri, M. Pujiantara, V. Lystianingrum, A. Priyadi, and M. H. Purnomo</i>
13.10-13.30	(31) Identifying Rules for Electroencephalograph (EEG) Emotion Recognition and Classification <i>E. S. Pane, M. A. Hendrawan, A. D. Wibawa, and M. H. Purnomo</i>
13.30-13.50	(57) Investigating Window Segmentation on Mental Fatigue Detection Using Single-channel EEG <i>M. A. Hendrawan, A. S. Pane, A. D. Wibawa, and M. H. Purnomo</i>
13.50-14.10	(92) Development Prototype System of Arm's Motor Imagery Utilizing Electroencephalography Signals (EEG) from Emotiv with Probabilistic Neural Network (PNN) as Signal Analysis <i>E. Fatmawati, S. K. Wijaya, and Prawito</i>
14.10-14.30	(65) Robust Optimization in Integrated Harvesting and Processing Scheduling of Strawberry under Demand Uncertainty <i>D. Chaerani, A.I. Nangoi, and E. Lesmana</i>

Image & Video Processing and Classification (P3A)	
Room A Tuesday - November 7, 2017	
15.00-15.20	(49) Detection and Counting of Mango Fruits in Occluded Condition using Image Analysis <i>A. Hutagalung, H. Nugroho, A. Suheryadi, and P. E. Yunanto</i>
15.20-15.40	(81) Region Label Annotation on Natural Scene Images Based on Superpixel Label Refining <i>T. Gelar and H. Nugroho</i>
15.40-16.00	(87) Development of Video Features to Detect Spatially Modified Video <i>A. Widyanto, H. Nugroho, P. E. Yunanto, and A. Suheryadi</i>
16.00-16.20	(23) Mobile Application of Video Watermarking using Discrete Cosine Transform on Android Platform <i>M. G. Busiri and R. Munir</i>
16.20-16.40	(28) Face Spoof Detection by Motion Analysis on the Whole Video Frames <i>H. E. Utami and H. Nugroho</i>

16.40-17.00	(44) RGB Color Cluster Re-Coloring Algorithm for Partial Color-Blind People <i>D.Q. Utama, T.L.R. Mengko, R. Mengko, A. P. Gandasubrata, and T.N. Azhar</i>
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Control and Instrumentation (P3B)

Room B
Tuesday - November 7, 2017

15.00-15.20	(42) Magnetic Imaging System Based on HMC5883L Sensor Array <i>D. Rahmawati, D. Danudirdjo, and A. B. Suksmono</i>
15.20-15.40	(61) Receiver Circuit Design for Signal Conditioning in Magnetic Induction Tomography System <i>M. Al-Hawari, A. I. Aulia, A. Rudin, Rohmadi, I. Muttakin, and W. P. Taruno</i>
15.40-16.00	(54) Simulation of Magnetic Induction Tomography Sensor with 8-Coils Solenoid and Planar <i>F. N. Adiputri, E. N. Prasetiani, Rohmadi, A. Saputra, I. Muttakin, and W. P. Taruno</i>
16.00-16.20	(62) Development of Electroencephalogram (EEG) Based ADS1299EEGFE-PDK and LaunchPad MSP432P401R <i>W. Apriadi, S. K. Wijaya, Prawito, and L. O. H. Z. Toresano</i>
16.20-16.40	(73) Development of EEG Data Acquisition System based on FPGA Zedboard <i>H. S. Gani, S. K. Wijaya, P. Prajitno, and L. O. H. Z. Toresano</i>
16.40-17.00	(84) Measurement of Cholesterol Concentration Based on Bioimpedance with AD5933-EVAL <i>K. Ain, R. A. Wibowo, S. Soelistiono, and L. Muniroh</i>

Information Technology (P3C)

Room C
Tuesday - November 7, 2017

15.00-15.20	(29) The Use of Two Fingers to Control Virtual Keyboards with Leap Motion Sensor <i>M. I. Rusydi, A. W. Setiawan, U. Syukrina, T. Erlina, R. Fernandez, A. Rusydi, and M. Sasaki</i>
15.20-15.40	(82) Hand Gesture Recognition System under Complex Background using Spatio Temporal Analysis <i>E. Pabendon, H. Nugroho, A. Suheryadi, and P. E. Yunanto</i>

15.40-16.00	(76) Full-Duplex MIMO Channel with Self-Interference Alignment and Zero Forcing <i>A. S. Arifin and A. Ilmiawan</i>
16.00-16.20	(30) Novel Local Searches for Finding Feasible Solutions in Educational Timetabling Problem <i>T. Mauritsius, Harisno, and P. John</i>
16.20-16.40	(78) Combination of Heuristic, Rule-Based and Machine Learning for Bibliography Extraction <i>E. Suryawati and D. H. Widyantoro</i>
16.40-17.00	(83) Identification of Twitter User Credibility Using Machine Learning <i>R. Kurniati and D. H. Widyantoro</i>