



## Curriculum Vitae

### I. PERSONAL PARTICULARS

Name : RAHMAT BUDIARTO  
 Latest Position : Professor, College of Computer Science and Information Technology, Albaha University, Saudi Arabia  
 Place and Date of Birth : Jakarta, 16 October 1961  
 Nationality : Indonesia  
 Marital Status : Married  
 Contact Address : College of Computer Science and Information Technology, Albaha Univ. P.O. Box 1988, Saudi Arabia  
 Tel : +966 55 345 1317/ +966 5 371 378 18  
 E-mail : rahmat @bu.edu.sa/rahmatbudiarto1961@gmail.com  
 SkypeID : bedex.budiarto  
 Orcid ID : ResearcherID: A-8982-2011, <https://orcid.org/0000-0002-6374-4731>

### II. A. ACADEMIC AND PROFESSIONAL QUALIFICATIONS

Year	Degree	Discipline	University
1998	Doctor of Engineering	Computer & Electrical Eng.	Nagoya Inst. Of Tech. Japan
1995	Master of Engineering	Computer & Electrical Eng.	Nagoya Inst. Of Tech. Japan
1986	Bachelor of Sciences	Mathematics	Bandung Inst. Of Tech. (ITB), Indonesia

### III. B. EXPERTISE

- Intelligent Systems for Data Mining and Knowledge Discovery Using Evolving Connectionist Systems
- Data Science
- Brain Modeling
- Intelligent Network Monitoring System
- Cybersecurity
- Next Generation Networks, Future Internet, IPv6

### IV. WORKING EXPERIENCE

#### A. ACADEMIC

Year	Position	Place of Work
2014 – recent	Professor	Albaha Universtiy, Saudi Arabia
2013 - 2014	Director/Professor	Networked Computing Center, Surya University, Indonesia
2011 - 2013	Professor	UUM, Malaysia
2011 – 2011	Professor	USM, Malaysia
2004 – 2011	Associate Professor	USM, Malaysia
2000 – 2004	Lecturer	USM, Malaysia
1999 – 2000	Visiting Lecturer	UII, Yogyakarta, Indonesia
1998 – 2000	Full-Time Lecturer	Univ. Jendral A.Yani, Bandung, Indonesia
1989 – 1992	Part-Time Lecturer	Univ. Jendral A.Yani, Bandung, Indonesia
1987 – 1988	Instructor	Polytechnic ITB, Bandung, Indonesia

#### B. INDUSTRY/ENGINEERING

Year	Position	Place of Work
1998 – 2000	Senior System Engineer	IT Center, PT. IPTN, Bandung, Indonesia
1989 – 1992	System Analyst	IT Center, PT. IPTN, Bandung, Indonesia

**C. MANAGERIAL**

<b>Year</b>	<b>Position</b>	<b>Place of Work</b>
2016 – 2019	Advisor	Scientific Research Deanship, Albaha University
2015 – recent	Chairman	Smart Networked Computing Research Group, Albaha
2013 – 2013	Director	Univ. Networked Computing Center, Surya University
2011 – 2013	Director of Research	InterNetWorks Research Lab., UUM, Malaysia
2005 – 2009	Deputy Director	National Advanced IPv6 Center, (NAv6), USM, Malaysia
2007 – 2009	Chairman	Fellowship Committee, of Asia Pacific Advanced Network (APAN)
2006 – 2008	Chairman	Security Working group APAN
2004 – 2006	Chairman	Security Bird of Feather (BoF) APAN
1999 – 2000	Head of IT Research Centre	STMIK-IM, Bandung, Indonesia

**D. CONSULTANCY**

<b>Year</b>	<b>Position</b>	<b>Place of Work</b>
2010-2014	Pv6 compliance Audit Consultant	Ministry of Communication & Information, Republic of Indonesia
2006-2011	IPv6 compliance Audit Consultant	Malaysia Commission for Multimedia & Communications
2006 – 2010	Technical Advisor	U18iXP Consortium/ GRASE-ICT, Indonesia
2004 - 2006	ISPs Security Audit Consultant	Malaysia Commission for Multimedia & Communications
1999 – 2000	Y2K Consultant	Bank Mandiri, Jakarta, Indonesia
1999	IT Consultant	BAPPENAS (National Agency for Planning & Development), Jakarta, Indonesia
1998 – 2000	IT Consultant	Micro Com, Jakarta, Indonesia

## E. CONFERENCE/WORKSHOP ORGANISER

Year	Position	Place of Work
2020	ICCCIS2020 Conf., Program Chairs	IACSIT, Ho Chi Minh City, Vietnam
2019	ICCAI2019 Conf., International Board	USU, Medan, Indonesia
2018	ICCAI2018, Conf. International Board	USU, Medan, Indonesia
2017	ICCAI2017 Conf., International Board	USU, Medan, Indonesia
2016	ICCAI2016 Conf., International Board	USU, Medan, Indonesia
2017	EECSI2017 Conf., Steering Committee	UDA, Yogyakarta, Indonesia
2016	EECSI2016 Conf., Steering Committee	UNISSULA, Semarang, Indonesia
2015	EECSI2015 Conf., Steering Committee	UNSRI, Palembang, Indonesia
2015	4 <sup>th</sup> NetAPPs Conference, TPC Co-Chair	UUM, Sintok, Malaysia
2014	EECSI2014 Conf. Honorary Chair	UDA University, Yogyakarta
2012	3 <sup>rd</sup> NetAPPs Conference, General Chair	UUM, Sintok, Malaysia
2011	5 <sup>th</sup> BIC-TA Conference, Local Co-Chair	USM, Penang, Malaysia
2009	28 <sup>th</sup> APAN Meeting and Conference 2009, Local Committee Co-Chair	Berjaya Hotel, Kuala Lumpur, Malaysia
2009	SECRYPT'09, Technical Member	Setubal, Portugal
2009	CCIT'09, International Committee Member	Jakarta, Indonesia
2008	DFMA'08, Co-Chairman, Steering Committee	USM, Penang
2008	SECRYPT'08, Technical Member	Setubal, Portugal
2007	SECRYPT'07, Technical Member	Setubal, Portugal
2006	SECRYPT'06, Technical Member	Setubal, Portugal
2006	DFMA'06, Chairman	USM, Penang, , Malaysia
2005	DFMA'05, Steering Committee Member	Besançon, France
2005	COMPEX'05, Secretary	USM, Penang, Malaysia
2005	IPv6 Set-up Training, Chairman	MCMC, Kuala Lumpur, Malaysia
2001	12 <sup>th</sup> APAN Meeting and Conference 2001, Local Committee Co-Chair	USM, Penang, Malaysia

## V. PROFESSIONAL MEMBERSHIP

- APAN (Asia Pacific Advance Network)
  - Security Working Group Chairman (2006 – 2009)
  - Fellowship Committee Chairman (2007-2009)
- IPSJ (Information Processing Society of Japan) – Member
- IMPACT(International Multilateral Partnership Against Cyber- Terrorism) R&D – Member
- IEEE Computer Society (Member No.: 90543082)
- IAES (Institute of Advanced Engineering and Sciences)
- AAAI (Assoc. for Advancement of Artificial Intelligence), Membership no. 57672

## VI. NATIONAL-LEVEL PROJECT ACCOMPLISHED

- Pilot Project: IPv4 to IPv6 Migration at Ministry of Energy Water and Communication (MEWC) and Malaysian Administrative Modernization and Management Planning Unit (MAMPU) at Prime Minister Office, October 2007 – May 2008
- Pilot Project: RFID-based Hajj System, Tabung Haji Malaysia in collaboration with Ummul Qura' University, Mecca, KSA, December 2007- January 2008.

## VII. AWARD

1. Hayao Nakayama Foundation Award, (Sega Company), Japan , 1997
2. Sagawa Foundation Scholarship Award, Japan, 1996 – 1998
3. Young Researcher Award, Directorate of High Education, Ministry of Education, Republic of Indonesia, 1999
4. Best Paper award from the organizing committee of the 6th World Multiconference On Systemics, Cybernetics, and Informatics - SCI 2002, USA, 2002
5. JSPS (Japan Society for Sciences Promotion) Fellowship (Chukyou Univeristy, Toyota City, Japan, Feb 2002)
6. Best Paper award from the Journal of the Society for Art and Sience, Japan, 2004
7. Second RunnerUp, in RoboGP, Singapore, 2004 (as team leader)
8. Gold Medal, IPTA R&D Expo 2005, PWTC, Kuala Lumpur, October 2005. (For research product: I-Networm: Network Worm Monitoring System)
9. Gold Medal, The 34<sup>th</sup> International Exhibition of Invention New Techniques and Products, Geneva, Switzerland, April 2006. (For research product: I-Networm: Network Worm Monitoring System)
10. Silver Medal, The 17<sup>th</sup> International Innovation, Invention, Industrial Design and Technology Exhibition (ITEX2006), KLCC, Kuala Lumpur, May 2006. (For research product: J-Networm: A Multi-platform Network Worm Detection System)
11. Silver Medal, Malaysia Technology Expo (MTE 2007), PWTC, Kuala Lumpur, March 2007 (For research product: M-Protect: A High Performance Network Worm Detection Engine using Memory Efficient Circular Buffer Techniques)
12. Hall of Fame Award, Research Product Category, USM, February 2006
13. Hall of Fame Award, Research Product Category, USM, March 2007
14. Hall of Fame Award, High Impact Research Publication Category, USM, March 2011
15. Best Performance Staff (Research Category), College of Computer Science and IT, Albaha University, 2019.

## VIII. POST GRADUATE SUPERVISION

### A. RESEARCH MODE

#### PhD

1. Mohammed Mohammed Shagir Omar, Quality of Service Enabled Cross-Layer Multicast Framework for Mobile Ad Hoc Networks, February 2008, USM
2. Ahmed Mansour Manasrah, Intelligence based network trouble shooting methods, December 2008 (Co-Supv.), USM
3. Muhammad Fermi Pasha, Neocortex Inspired Hybrid Gene-Controlled Machine Intelligence Approach for Recognition and Identification, March 2010, USM
4. Seyed Amin Hosseini Seno, Hierarchical Framework For Energy-Efficient and Secure Resource Management in Mobile Ad hoc Networks, March 2010, USM
5. Salah Noori Saleh, Semi-Fluid: A Content Distribution Model for Faster Dissemination of Data, August 2010 (Co-Sup.), USM.
6. Raja Kumar Murugesan, An Expansionary Approach for the Allocation of Next Generation IPv6 Internet Address, March 2011 (Co-Sup.), USM
7. Muawya Naser Salam Al-Dala'ien, Mutual Authentication Protocols for Low-Cost Radio Frequency Identification Systems, Sept 2011, USM
8. Mohd Nizam Omar, Detecting Stepping Stones Algorithm: Towards Solving Dropped Packet Problems, April 2012. USM
9. Mohammad M. Rasheed, Automatic System To Detect And Contain Unknown Internet Worms In The Early Stage, June 2012), (Co-Supervisor.), UUM
10. Umi Kalsom Yusof, Optimization Of Machine Allocation In Flexible Manufacturing System Using Bio-Inspired And Musical-Harmony Approaches (viva 8 January 2013), (Co-Supervisor), UTM
11. Alireza Taghizadeh, A Performance Enhancement Framework for Network-based Inter-Domain IP Mobility in Mobile Wireless Networks, (viva 16 January 2013), (Co-Supervisor), USM
12. Abidah Hj M Taib, Security Framework for IPv4 To IPv6 Transition For Enterprise Network, (viva 11 April 2013), (Co-Supervisor), USM
13. Bassam Naji Abdullah Al Tamimi, Dynamic Approach for Seamless Mobility in Co-Exist IPv4/IPv6 Networks Using Tunneling Mechanism (viva 24 October 2013), (Co-Supervisor), USM
14. Suliman Mohamed Ahmed Gaber, Content-Aware IPTV Delivery Networks Over Enhanced Peer-Service Area Architecture (viva 19 June 2014), (Co-Supervisor), USM
15. Aseel Mousa Jaafar, Temporal - Spatial Recognizer For Multi-Label Data (viva January 2018), (Co-Supervisor), UUM
16. Mohammed Abdullah Ali Algharem, Frame-based QOS-Aware Multicast Resource Management Model for Optimizing Multicast Service in Long Term Evolution and Beyond Networks (Viva: 19 November 2019), (Co-Supervisor), UUM

**Master**

1. Zaiyatul Hijah Abdul Majid, Innovative Method to Enable Real Time Analysis of IPv6 Packets Using Multithreaded Programming Concept, Nov. 2004 (Co-Supv.)
2. Muhammad Fermi Pasha, Adaptive Network Traffic Clustering System Using Evolving Connectionist System, May 2005
3. Azruddin Ahmad, Intelligent Network Monitoring, 2006
4. Tan Chen Wei, Design of Point to Multipoint Satellite Based Networking Protocol, May 2007 (Co-Supv.)
5. Simon Teh Chee Hong, ULE Robust Header Compression for IP-Based Communication over Digital Video Broadcasting-Sattellite (DVB-S), Dec. 2007 (Co-Supv.)
6. Maulana Abdul Aziz, Integration Of Conventional Web-Based GIS And GLOBALBASE Using Geometric Transformations And High-Level Middleware, June 2008
7. Usman Sarwar, Real Time Multiple CODECS Switching Architecture For Video Conferencing, Sept. 2008 (Co-Supv.)
8. Supriyanto, Improving IPv6 Packets Transmission Over High Speed Network by Introducing CRC Extension Header, August 2010
9. Ferdinand Murni Hamundu, Fuzzy Monte Carlo Simulation for Risk Analysis in Investment Project Evaluation, September 2011
10. Armanda Caesario Cornelis, SEAMSAR: Seamless and Secure Handover Model for Mobile IPTV using MIPv6, September 2011
11. Mehdi Zarei, EMS-MAC: Energy Efficient Contention-Based Medium Access Control Protocol For Mobile Sensor Networks, submitted thesis, April 2012
12. Tan Aik Theng, Security on RFID Communication, viva on September 2012

**In progress:****PhD**

1. Mohammed Abdullah Alzahrani (Co-Supervisor, Universiti Teknologi Malaysia)

**B. MIX-MODE (MASTER COMPUTER SCIENCES)**

1. Bassam Naji Abdullah Al-Tamimi, A New Algorithm to Handle The Problem of Source Routing After TEREDO Client, June 2008
2. Mohammed Ghaleb Mohammed Yousef, Securing IP4 to IPv6 Tunnel From Neighbor Discovery Attack, June 2008
3. Romi Fadillah Rahmat, A Neuro-Genetic Approach Using Simple Gene Regulatory Network to Construct a Distributed and Nested Adaptive Neural Network, June 2008
4. Saravanesh Supramaniam, New Scheme for Efficient Mobile-Server Communication, June 2008
5. Walid Muhamed A. El-Gadal, Utilizing MPLS Mechanism to Improve QoS in IPv6 Networks, June 2008
6. Mohamed Al Amin Ben Brahim, Congestion Control for UDP-Based Applications in IPv6 Networks Using ICMPv6, February 2009
7. Mohammad Azmi Qasem Al-Madi, Policy Based Routing with Quality of Service Control Approach for Internet Protocol Television (IPTV) Multicast Networks, February 2009
8. Rafeek M.Salem Abualead, Deployment of Explicit Congestion Notification (ECN) In Stream Control Transmission Protocol (SCTP) To Improve Congestion Management, February 2009
9. Shafer Suleman Mousa Slehat, A New Method to Secure TEREDO Client From NAT Holes Increase Attack Surface, February 2009
10. Primantara Hari Trisnawan, Analysis Of QoS Mechanism For Multiple Multicast Streams Of IPv6 Based IPTV Network, June 2009
11. Abdulaleem Ali Almazroi, Address Resolution Using Direct Mapping in IPv6, June 2009

### **C. COURSE WORK MODE (MASTER COMPUTER SCIENCES)**

1. Shamsul Bin Mohamad, Data Mining in Network Traffic Using Fuzzy Clustering
2. Mohamad Anuar Ali, A Study and Analysis of IPsec Issues in Mobile IPv6 Environment
3. Osama Radwan Hasan Abu Dayeh, How to Make IPv6 Multicast Reliable
4. Sami Mohamed Berhan Ahmed, IPv6 Transition Cost Model for USM
5. Eman Moh'd Khalefeh Alghzawi, Intrusion Detection System
6. Cheah Luan Ho, Unreliable Network Re-Authentication Protocol Based on Hybrid Key Using CSP Approach
7. Ong Chin Joo, Honeynet in Network Security Using Multi-Layer Data Control And Data Capture Mechanisms

### **D. COURSE WORK MODE (MASTER IT)**

- More than 60 Master IT students
- Pradeep Isawasan, Reconstruction of Binary Image Using Techniques of Discrete Tomography, UUM, 2012.

## **IX. TEACHING EXPERIENCE**

### **UNDERGRADUATE**

Calculus, Discrete Mathematics, Numerical Analysis, Statistics & Probability, Graph Theory, Intelligent Agent, Artificial Intelligent, Data Communication and Networking, Network Programming, Distributed Computing and Network, Network Management and Security, Network Design, Information Security, Signals & Systems Analysis, Microprocessor, Computational Techniques in C, Operating Systems, Ethics & Professional Issues, English for Special Purpose.

### **POSTGRADUATE**

Advanced Data Communication & Networking, Wireless Technology, Computer Forensics, Information Security, Network Management & Design, Introduction to Cybersecurity.

## **X. JOURNAL EDITOR**

1. Lead Guest Editor, Journal of Healthcare Engineering, Hindawi, for Special issue: Evolving Intelligent Systems in Healthcare to Aid Resource-Poor Communities June 2020 – March 2021.



## XI. GRANT

### NATIONAL LEVEL

1. Intelligent Network Monitoring System, Top-Down IRPA, RM 524,000, Rahmat Budiarto, Sureswaran Ramadass, Wan Tat Chee, April 2002 – September 2003 (Project Leader: Rahmat Budiarto, Project Coordinator: Sureswaran Ramadass)
2. Secure Multimedia Conferencing System over WAN (E-SCIENCE FUND), RM 98,000, Nov 2006 – May 2008 (Principle Investigator)
3. A New Security Mechanisms Model in the IPv4 to IPv6 Transition (FRGS-MoHE), RM 68,000, Oct 2007 – March 2009 (Principle Investigator)
4. IPv6 National Development Project (Ministry of Energy Water & Communication), RM 5,000,000, Oct. 2007 – Oct. 2009 (Project Co-Leader)
5. Intelligent Passive Network Fault Detection & Isolation (E-SCIENCE FUND), RM 248,400, Sept. 2007 – Feb 2009 (Principle Investigator)
6. Study on Human Neocortex Inspired Memory System and its Neurogenetic Connections: Towards Brain-like Knowledge Engineering Approach, FRGS, RM58,000, 1 April 2011- 31 March 2013 (Principle Investigator)
7. Capacity Building on IPv6 Technology for Public Sector in Malaysia, RM145,000, Knowledge Transfer Program (KTP), MoHE, 1 Sept. 2012 – 31 Augt. 2014 (Main Researcher)
8. Deployment of IPv6 dual stack network at Indonesia Army HQ, IDR 600,000,000 Aug. 2013- March 2014. (Principle Investigator)
9. “Baddel” startup idea which adds into college students services around the Kingdom. TAQADAM program (KAUST- SABB bank), USD 40,000, January 2017 (Co-Founder)
10. “Square-2.ai” startup idea to beat Covid-19 pandemic on business sustainability program (KACST), SAR 100,000, 31 Mei – 2 Jul. 2020 (Co-Founder)

## UNIVERSITY LEVEL

1. A Geometry Model and a Processing Method of Constrained Knots Based on Its Minimum Energy, Short-term Grant, RM 15,800, November 2000–May 2002 (Principle Investigator)
2. A Study on Techniques for Handling Transmission Error of IPv6 Packets over Fiber Optic, (Short-term-USM), RM 39,455, May 2008 – May 2010 (Principle Investigator)
3. Distributed Network Monitoring and Security, (Golden Goose Project, RU Grants), RM 885,600, Oct 2007 – March 2009 (Co-Leader)
4. Hierarchical Service Discovery And Advertisement In Mobile Ad-Hoc Networks, (RU Grants), RM 86,400, January 2009 – January 2012 (Principle Investigator)
5. Modeling Human Neocortex Inspired Memory System and its Neurogenetic Connections: Towards Brain-like Knowledge Engineering Approach, (RU Grants), RM245,200), August 2010 – July 2013 (Principle Investigator)
6. Energy Efficiency and Communications Protocols of Multi-Tier Mobile Communications Systems and their Impacts in Albaha District, (Albaha University Research Grant), SAR 19,000, September 2014- August 2015 (Co-Researcher)
7. Optimizing Enterprise Resource Planning (ERP) Implementation in Al Baha University (ABU): An Investigation Study, (Albaha University Research Grant), SAR 38,500, Oct. 2015 –August 2016. (Principal Investigator).
8. Albaha Smart Internet of Farming System, (Albaha University Research Grant), SAR 150,000, March 2016 –Feb. 2017 (Main Researcher).
9. Infrastructure-less Fog Driving Assistance System Using Smartphone, (Albaha University Research Grant), SAR 42,000, Nov. 2017 –August 2018. (Researcher)
10. Development of Albaha University Network Security Management System (Albaha University Research Grant), SAR 55,000, Nov. 2017 –August 2018. (Researcher)
11. User Behavior Analytics Tool Using Predictive-Memory Concept, (Albaha University Research Grant), SAR 45,000, Dec. 2019- Oct. 2020. (Researcher)
12. An Intelligent Specialized Tool to Trace and Monitor COVID-19 Spreading, (Albaha University Research Grant), SAR 200,000, Jul. 2020- Jan.. 2022. (Researcher)

## XII. PUBLICATION (SEE ATTACHMENT FOR DETAILS)

Overall 288 publications: 1 Edited Book, 9 Book Chapters, 101 International Journals, 163 International Proceedings, 14 National Proceedings.

## XIII. VISITING RESEARCHER/PROFESSOR

1. Visiting Researcher under JSPS (Japan Society for Sciences Promotion) Fellowship (Chukyou Univeristy, Toyota City, Japan, Feb 2002)
2. Visiting Professor, Graduate School, Computer Sciences, Universitas Gajah Mada, Yogyakarta, Indonesia, 8-24 June 2009
3. Visiting Professor, Faculty of Comp. Sc. & IT, Universitas Sriwijaya, Palembang, 5-9 Sept. 2016
4. Visiting Professor, Faculty of Comp. Sc. & IT, Universitas Andalas, Padang, 7-11 August. 2017
5. Visiting Professor, Faculty of Engineering, Nagoya Institute of Technology, Japan, 16-31 March 2019
6. Visiting Professor, Faculty of Mathematics & Natural Science, Universitas Padjadjaran, 12-14 August 2019

## IX. INVITED AND KEYNOTE SPEAKER

### INVITED SPEAKER

1. "IPv6 Protocol Analyser", Indonesia IPv6 Forum (NICE'04), July 2004
2. "IPv6 Deployment Status", The 3<sup>rd</sup> Annual Next Generation Networks, Marcus Evans, March 2005
3. "IPv6 Deployment in Malaysia", APAN IPv6 Task-force Meeting, Tokyo, 27 January 2006
4. "Researches on the Next Generation Networks", Seminar Industri Telematika 2006 Pascasarjana USU-NAv6 USM, Medan, 25 July 2006.
5. "IPv6 and Next Internet technology", Public Lecture, Malikussaleh University, Aceh, 11 November, 2006
6. "IPv6: An Option for Rural Connectivity", Executive Training on Rural Connectivity, ITU-UUM, 30 May 2007
7. "IPv6 Pilot Project at MEWC", Taklimat Pelaksanaan IPv6, MAMPU, PICC, PUTRAJAYA, 29 Oct. 2007
8. "IPv6 An Imperative Key for IP-Based Network Convergence", STMIK-Mikroskil, Medan, 15 March 2008
9. "IPv6 Transition to Next Generation Networks", Universitas Gajah Mada, Yogyakarta, 10 June 2008
10. "Computer-Based Batik Patern Generation", South-East Asia Conference on Ethnomathematics, INSPEMS-UPM, 3 – 4 December 2008
11. "Deployment of UUM IPv6 Networks, IPv6 LaunchDays in Malaysia, MCMC, Cyberjaya, 6 June 2012
12. "Verifying Ipv6 Networks deployment Through Audit Process", UUM IPv6 Deplyoment, Sintok, 11 Dec 2012
13. "Powering Network Monitoring System with Intelligence Engine", Universitas Sriwijaya, Palembang, 8-10 September 2016.
14. "The Convergence of AI, Machine Learning and Cyber Security", Sharing Session Telekom Innovation Day, Jakarta, 19 August. 2019

### KEYNOTE SPEAKER

1. "Ethno-mathematics & Computer Sciences", The 1<sup>st</sup> ICSMA Conference, Medan, June 2005
2. "The Convergence of IP-Based Networks", Seminar on ICT: Today and Future Challenges, Syiah Kuala University, 13 November 2006
3. "Future Internet in Indonesia: IPv6 and Bottom Millions", ICCIT 2009, Tangerang, Indonesia 8 August 2009
4. "Malaysia Strategy on Content Business Development", International Seminar on Snapshot of content Business on Today's ICT Industri-2011, Intstitut Manajemen Telkom, Bandung, Indonesia, 23 June 2011
5. "Future Internet Research @ InterNetWorks Lab", the 5<sup>th</sup> International Conference on Communication Software and Networks (ICCSN 2013), Kuala Lumpur, Malaysia, , 8-9 June 2013
6. "The Use of IT as Business Intelligence in the Economic Growth for Social Welfare with ASEAN Economic Community", International Conference on Social Welfare-based Investment Policy in Anticipation of ASEAN Economic Community Growth, Semarang, Indonesia, 29-30 August 2013
7. "Cyber Security System for Supporting Sustainable Economic Development, FIRST Conference, Palembang, Indonesia, 30-31 October 2018

## XV. CONSULTATION

1. Installing and Commissioning of Complex Eureka's High Speed Local Area Network and Providing Related Services, USAINS, 2005
2. Conduct Internet Network Service Provider Security Audit 2005, MCMC, 15 Dec 2005 – 31 January 2006
3. Commercialization of Research Product : Intelligent Network Monitoring System (iNetmon), 2006
4. CELCOM: 3G-Based Applications R&D Program, November 2006 till present
5. iBurst Technological Overview, Tech Evaluation, Market Potential and In-depth Test & Analysis, Due Dilligent Reprort for KZEN SOLUTIONS BERHAD, 8 December 2006
6. Conduct ISP/IASP IPv6 Compliance audit Consultation, 2007, MCMC, 28 March 2007
7. Project Leader, Implementation of RFID-Based Human Tracking for Hajj Pilgrims, Ummul-Qura' University, Mecca, Saudi Arabia, December 2007
8. Project Leader, IPv4-IPv6 Transition Pilot Project at MEWC, September 2007 – April 2008
9. Project Leader, IPv4-IPv6 Transition Pilot Project at MAMPU, May 2008 – December 2008
10. Team Leader, IPv6 Compliance Audit Level-3, MCMC, Malaysia, MAY 2012
11. Member, Risk Management Committee, ICON+, Indonesia, April 2013 – March 2014
12. Project Leader, Transition Indonesia Army HQ Network into IPv4/IPv6, Indonesia, Nov. 2013- March 2014
13. Network Infrastructure & Security Consultant, ITCenter, Albaha University, August 2014- 2015

## **Publication List**

### **Edited Book:**

1. Vasuky Mohanan, **Rahmat Budiarto**, Ismat Aldmour, 2017, Powering the Internet of Things With 5G Networks, IGI Publisher.

### **Book Chapter:**

1. Masashi Yamada, **Rahmat Budiarto**, Yuichiro Itoh, Tsuyoshi Miyazaki, Hirohisa Seki, Hidenori Itoh, 1998, An Evolutionary String Pattern Generation and Its Application to a 3D Cat's Cradle Playing System, *Evolutionary Computations and Intelligent Systems Book*, Gordon & Breach, Inc. (14 pages).
2. Muhammad Fermi Pasha, **Rahmat Budiarto**, Muhammad Syukur, Masashi Yamada, 2008, Adaptive Real-Time Network Monitoring System: Detecting Anomalous Activity with Evolving Connectionist System, In Joaquim Filipe, Helder Coelhas, *Communications in Computer and Information Sciences (CCIS)*, Volume 3, Springer-Verlag. ISBN:978-3-540-75992-8r, pp. 113-125.
3. Sureswaran Ramadass, **Rahmat Budiarto**, Azlan Osman, 2009, Telecommunication in Malaysia, Malaysia at 50 and Beyond, Editor Abdul Razak Baginda, Malaysia Strategic Research Center Publisher, pp. 133-163.
4. Mohd Nizam Omar and **Rahmat Budiarto**, 2010, Hybridizing Intelligent Host-Based And Network-Based Stepping Stone Detections, Book Chapter: Machine Learning and Systems Engineering, 1st Edition, Rieger, Burghard; Amouzegar, Mahyar; Ao, Sio-long (Eds.) Series: Lecture Notes in Electrical Engineering, Vol. 68, Springer, ISBN: 978-90-481-9418-6, pp. 83-95.
5. Ferdinand Murni Hamundu, Ahmad Suhaimi Baharudin and **Rahmat Budiarto**, 2012, Fuzzy-Monte Carlo Simulation for Cost Benefit Analysis of Knowledge Management System Investment, Book chapter: New Research on Knowledge Management Technology./ Book 3", ISBN 979-953-307-744-3, InTech Publisher, February 2012, pp. 71-86.
6. Muâwya Naser, Pedro Peris-Lopez, Mohammad Rafie, **Rahmat Budiarto**, 2012, Low-Cost Mutual Authentication Protocols, Book Chapter, *Cryptography: Protocols, Design and Applications*, Nova Publishers.  
[http://www.novapublishers.org/catalog/product\\_info.php?cPath=23\\_29&products\\_id=29688](http://www.novapublishers.org/catalog/product_info.php?cPath=23_29&products_id=29688).
7. Vasuky Mohanan, **Rahmat Budiarto**, Sivakumar Ramakrishnan, 2014, Access Network Selection in a 4G Environment, in *Broadband Wireless Access Networks for 4G: Theory, Application, and Experimentation*, Editorial: IGI GLOBAL Publisher, January 2014, pp.325-344.
8. Adil Fahad Alharthi, Mohammed Alzahrani, Ismat Aldmour, Muhammad Fermi Pasha, Deris Stiawan, **Rahmat Budiarto**, 2017, Smart Real-Time Internet of Thing Network Monitoring System In: *Powering Internet of Thing with 5G Technologies book*, Vasuky Mohanan, **Rahmat Budiarto**, Ismat Aldmour (Eds.), IGI Publisher.
9. Ahmed Alahamadi, Tami Alwajeeh, Vasuky Mohanan, **Rahmat Budiarto**, 2017, Always Best Connected Wireless Sensor Network for Internet of Farming In: *Powering Internet of Thing with 5G Technologies book*, Vasuky Mohanan, **Rahmat Budiarto**, Ismat Aldmour (Eds.), IGI Publisher

## SI/ESCI JOURNAL

1. **Rahmat Budiarto**, Masashi Yamada, Hirohisa Seki, Hidenori Itoh, 1996, An Interactive System For Constructing Cat's Cradle String Diagram Using GA, *Computers and Industrial Engineering*, Vol. 31, No3-4, Elsevier Publisher, pp. 939-943. Q1 Journal, **(impact factor 0.632)**
2. Masashi Yamada, **Rahmat Budiarto**, Mamoru Endoh, Shinya Miyazaki, 2004, Comic Image Decomposition for Reading Comics on Cellular Phones, *IEICE Transaction on Information Systems*. Vol.e87-d, No.6, June 2004, pp. 1370-1376. Q3 Journal, **(impact factor 0.274)**
3. Mohammed Saghir, Tat Chee Wan, **Rahmat Budiarto**, 2005, Load Balancing QoS Multicast Routing Protocol in Mobile Ad hoc Networks, *Lecture Notes in Computer Science*, Publisher: Springer-Verlag GmbH, Volume 3837 / 2005, ISSN: 0302-9743, pp. 83-97. Q2 Journal, **(impact factor 0.402)**
4. Muhammad Fermi Pasha, **Rahmat Budiarto**, Mohammad Syukur, and Masashi Yamada, 2006, EFIS: Evolvable-Neural-Based Fuzzy Inference System and Its Application for Adaptive Network Anomaly Detection, in D.S. Yeung et al. (Eds.): *ICMLC 2005*, LNAI 3930, 2006. Springer-Verlag Berlin Heidelberg 2006, pp. 662–671. **(impact factor 0.302)**
5. Seyed Amin Hosseini Seno, Tat-Chee Wan, **Rahmat Budiarto**, Masashi Yamada, 2010, Management of Energy Consumption on Cluster Based Routing Protocol for MANET, *IEICE Transactions On Information & Systems*, (ISSN: 0916-8516), Vol. E93-D, No.3, March 2010, pp.550-559. Q3 Journal, **(impact factor 0.268)**
6. Muhammad Fermi Pasha, Romi Fadillah Rahmat, **Rahmat Budiarto**, Mohammad Syukur, 2010, A Distributed Autonomous Neuro-Gen Learning Engine and Its Application to the Lattice Analysis of Cubic Structure Identification Problem, *International Journal of Innovative Computing, Information and Control* (ISSN: 1349-4198), Volume 6, Number 3(A), March 2010, pp. 1005–1022. Q2 Journal, **(impact factor 1.667)**
7. Manjur SK, Omar Abouabdalla, **Rahmat Budiarto**, Tat-Chee Wan, Mosleh Abu-Alhaj and Ahmed M. Manasrah, 2011, Conference Gateway for Heterogeneous Clients: Real Time Switching Clients and InterAsterisk eXchange Clients, *International Journal of Innovative Computing, Information and Control* (ISSN: 1349-4198), January 2011, Vol. 7 No. 1, pp. 395-406. Q2 Journal, **(impact factor 1.667)**
8. Seyed Amin Hosseini Seno, **Rahmat Budiarto**, Tat-Chee Wan, 2011, A Routing Layer-Based Hierarchical Service Advertisement and Discovery for MANETs, *Ad Hoc Networks*, Elsevier, ISSN: 1570-8705, Vol. 9, Issue: 3, May 2011, pp. 355-367. Q1 Journal, **(impact factor: 2.110)**
9. Seyed Amin Hosseini Seno, **Rahmat Budiarto**, Tat-Chee Wan, 2011, A Secure Mobile Ad hoc Network Based on Distributed Certificate Authority, *Arabian Journal for Science and Engineering* (ISSN: 1319-8025), Springer Publisher, February 2011, Vol.36, No.2, pp.245-257, DOI:10.1007/s13369-010-0018-4. Q2 Journal, **(impact factor: 0. 243)**.
10. Mehdi Zarei, **Rahmat Budiarto**, Tat-Chee Wan, 2011, EMS-MAC Energy Efficient Contention-based Medium Access Control Protocols for Mobile Sensor Networks, *Computer Journal*, Oxford University Publisher, June 2011, doi:10.1093/comjnl/bxr053. Q2 Journal, **(Impact factor 0. 785)**
11. Muâwya Naser, Pedro Peris-Lopez, **Rahmat Budiarto**, 2011, A Note on the Security of PAP, *Computer Communications Journal*, ISSN: 0140-3664, Elsevier), 34(18), pp.2248-2249, Q1 Journal, **(impact factor 1.044)**
12. Tan Aik Theng, Zurinani Zainol, **Rahmat Budiarto**, 2013, Flowgraph Models for Estimating Total Time of Authentication Process In RFID System, *Journal of the Franklin Institute*, Elsevier Publisher, 350 (2013),pp.1298–1311. Q1 Journal, **(impact factor 2.546)**

13. Alireza Taghizadeh, Tat-Chee Wan, **Rahmat Budiarto**, 2014, A Fast Inter-Domain Network-based IP Mobility Scheme for Urban Areas, *Journal of Communications and Networks*, Vol. 16, No. 6, December 2014, pp. 645-655. Q2 Journal, (Impact Factor **1.007**)
14. K.G. Subramanian, Pradeep Isawasan, **Rahmat Budiarto**, Ibrahim Venkat, 2015, Binary Image Reconstruction Based On Prescribed Numerical Information, *Journal of Acta Mathematicae Applicatae Sinica*, Vol.31, No.2, (2015), pp.519–528, Q3 Journal, (Impact Factor **0.250**),
15. Romi Fadillah Rahmat, Muhammad Fermi Pasha, **Rahmat Budiarto**, Mohammad Syukur, 2015, A Gene-Regulated Nested Neural Network, *International Arab Journal of Information Technology*, Vol. 12, No. 6, November 2015, pp.531-538. Q2 Journal, (impact factor **0.519**).
16. Mohammed Algharem, Mohammed Hasbullah Omar, Ismat Aldmour, **Rahmat Budiarto**, 2018, Multicast Resource Allocation with Opportunistic Scheduling in LTE Networks, *Elektronika Ir Elektrotehnika*, Vol. 24, No 5, pp. 92-101. Q3 Journal, (Impact factor **0.684**).
17. Romi F. Rahmat, Andreas T.S.M., Fahmi Fahmi, Muhammad Fermi Pasha, Mohammed Yahya Alzahrani, **Rahmat Budiarto**, 2019, Analysis of DICOM Image Compression using Huffman Coding, *Journal of Healthcare Engineering*, Hindawi, Vol. 2019, Article ID 5810540, <https://doi.org/10.1155/2019/5810540>, Q3 journal, Impact Factor: **1.803**.
18. Alqithami, S. **Budiarto**, R. Alzahrani, M. Hexmoor, H. 2020, Towards Social Capital in a Network Organization: A Conceptual Model and an Empirical Approach. *Entropy*, May 2020, 22, 519-. Q2 Journal, Impact Factor: **2.494**
19. M. Hasnain, M. F. Pasha, I. Ghani, M. Imran, M. Y. Alzahrani and **R. Budiarto**, 2020, Evaluating Trust Prediction and Confusion Matrix Measures for Web Services Ranking, *IEEE Access*, vol. 8, issue. 1. pp. 90847-90861, 2020, doi: 10.1109/ACCESS.2020.2994222. Q1 Journal, Impact Factor: **4.640**.
20. Muhammad Hasnain, Muhammad Fermi Pasha, Imran Ghani, **Rahmat Budiarto**, 2020, Protection Challenges of Pregnant Women against Vertical Transmission during COVID-19 Epidemic: A Narrative Review, *American Journal of Infection Control*, PMID: PMC7328570, PMID: 32621859. Q1 Journal, Impact Factor: **2.294**. <https://doi.org/10.1016/j.ajic.2020.06.206>.
21. Kurniabudi, D. Stiawan, Darmawijoyo, M. Y. Bin Idris, A. M. Bamhdi and R. Budiarto, *CICIDS-2017 Dataset Feature Analysis With Information Gain for Anomaly Detection*, *IEEE Access*, vol. 8, pp. 132911-132921, 2020, doi: 10.1109/ACCESS.2020.3009843. Q1 Journal, Impact Factor: **4.640**.
22. Muhammad Ayaz, Muhammad Fermi Pasha, Mohammed Y. Alzahrani, **Rahmat Budiarto**, 2020, Fast Health Interoperability Resources Standard: A Systematic Literature Review, *Journal of Medical Internet Research*, to appear, Q1 Journal, Impact Factor: 5.030.
23. **Rahmat Budiarto**, Ahmad Alqarni, Mohammed Y. Alzahrani, and Muhammad F. Pasha, 2020, User Behaviour Analytics Tool Using Simplified Predictive-Memory Concept, *IEEE ACCESS*.
24. Deris Stiawan, Somame Morianus Daely, Ahmad Heryanto, **Rahmat Budiarto**, 2020, Ransomware Detection Based On Opcode Behavior Using K-Nearest Neighbors Algorithm, *Journal of Information Technology and Control*, Q3 Journal

## SCOPUS Journal:

1. Masashi Yamada, **Rahmat Budiarto**, Hirohisa Seki, Hidenori Itoh, 1994, A Representation Method Of Ayatori Process And Its String Diagram Processing Method, *Transaction of Information Processing Society of Japan*, Vol. 35, No. 3, pp. 497-504.
2. **Rahmat Budiarto**, Masashi Yamada, Hirohisa Seki, Hidenori Itoh, 1996, An Interactive System Implementation For Constructing Cat's Cradle Diagrams And Its Evaluation, *Transaction of Information Processing Society of Japan*, Vol. 37, No. 2, pp. 231-241.
3. Masashi Yamada, **Rahmat Budiarto**, Hirohisa Seki, Hidenori Itoh, 1997, Topology Of Cat's Cradle Diagrams And Its Characterization Using Knot Polynomials, *Transaction of Information Processing Society of Japan*, Vol. 38, No. 8, pp. 1537-1582.
4. Seyed-Amin Hosseini-Seno, B. Pahlevanzadeh, T. C. Wan, **R. Budiarto**, M. M. Kadhum, 2009, A Distributed Resource-Management Approach in MANETs, *Journal of Engineering Science and Technology (JESTEC)*, Vol. 4 No. 2, Feb. 2009, pp. 142-153.
5. Seyed Amin Hosseini Seno, **Rahmat Budiarto**, Tat-Chee Wan, 2009, SHSDAP: Secure Hierarchical Service Discovery and Advertisement Protocol in Cluster Based Mobile Ad hoc Network, *World Applied Sciences Journal*, (ISSN: 1818-4952), Vol. 7 (Special Issue of Computer & IT): 107-114, Dec. 2009.
6. Mansooreh Jalalyazdi, Seyed Amin Hosseini Seno, **Rahmat Budiarto**, 2009, A New Distributed Resource Management in Mobile Grid for M-Learning, *World Applied Sciences Journal*, (ISSN: 1818-4952), Vol. 7 (Special Issue of Computer & IT), Dec. 2009, pp.115-128.
7. Mu'awya Naser, Muhammad Rafie, **Rahmat Budiarto**, Wafaa A.H. Ali alsalihiy, 2010, Security Considerations in Embedding RFID in 'Hajj' System, *European Journal of Scientific Research*, (EJSR), ISSN 1450-216X Vol.42 No.1 (2010), pp.133-138.
8. Supriyanto, Manjur Al Kolhar, **Rahmat Budiarto** and Zainal A. Hasibuan, 2010, Error Detection using CRC Extension Header for IPv6 Packets over High Speed Networks", *European Journal of Scientific Research*, ISSN 1450-216X Vol.43 No.2 (2010), pp.192-203.
9. Mohammad M. Rasheed, Osman Ghazali, **Rahmat Budiarto**, 2012, SYN Scanning Worm Detection, *Trends in Applied Sciences Research*, eISSN: 2151-7908, pISSN: 1819-3579, Academic Journals Inc., USA, 2012, pp.1-13
10. Mohammad M. Rasheed, Osman Ghazali, **Rahmat Budiarto**, 2012, Fast Detection of Stealth and Slow Scanning Worms in Transmission Control Protocol, *Journal of Applied Sciences*, ISSN: 1812-5654, 2012, pp.1-8
11. Ferdinand Murni H, Satriyo Wibowo, **Rahmat Budiarto**, 2012, Measuring The Tangibles And Intangibles Value Of An ERP Investment, *journal of Information and Communication Technology*, UUM Publisher, 11, 2012, pp. 93-111.
12. Suliman Mohamed A. Gaber, Putra Bin Sumari, **Rahmat Budiarto**, 2012, Balanced Content Allocation Scheme For Peer-Service Area CDN Architecture For IPTV Services, *Journal of Information and Communication Technology*, UUM Publisher, 11, 2012, pp. 131-146.
13. Umi Kalsom Yusof, **Rahmat Budiarto**, Safaai Deris, 2012, Constraint-Chromosome Genetic Algorithm for Flexible Manufacturing System Machine-Loading Problem, *International Journal of Innovative Computing, Information and Control* (ISSN: 1349-4198), March 2012, Vol. 8 No.3A, pp. 1591-1610.



14. Alireza Taghizadeh, Tat-Chee Wan, **Rahmat Budiarto**, Fa Toh Yap and Azlan Osman, 2012, A Performance Evaluation Framework For Network-Based Ip Mobility Solutions, International Journal of Innovative Computing, Information and Control (ISSN: 1349-4198), Vol 8. No. 10(B), October 2012, Vol. No., pp. 7263-7288.
15. Umi Kalsom Yusof, Safaai Deris and **Rahmat Budiarto**, 2013, Machine Allocation Optimization in Semiconductor Assembly Industry Using a Hybrid of Bio-Inspired and Musical-Harmony Approach. ICIC Express Letters, ISSN: 1881-803X, Volume 7, Number 3(A), March 2013, pp. 839-845.
16. Vasuky Mohanan, **Rahmat Budiarto**, 2013, Wireless Communication Technologies For Vehicular Nodes – A Survey, International Journal of Mobile Computing and Multimedia Communications (IJMCMC), DOI: 10.4018/IJMCMC, ISSN: 1937-9412, IGI Global Publisher), 2013, pp.58-77.
17. Bassam Naji Al-Tamimi, **Rahmat Budiarto**, Mohd. Adib Omar, Kamal M. Alhendawi, 2014, Exploiting IPv6 Routing Headers Type 0/2 In Different IP Wireless Networks: Attack Scenario & Analysis, Journal of Theoretical and Applied Information Technology, Dec. 2014, pp.372-378.
18. Ismat Aldmour, Thair Al-Dala'in, Lelyzar Siregar, **Rahmat Budiarto**, 2015, Seamless And Secure Handover Model For Mobile IPTV Network Using FMIPv6, International Journal of Electrical and Computer Engineering (IJECE). IAES Institute of Advanced Engineering and Science, ISSN: 2088-8708, Vol.5, No.2, April 2015, pp. 371-378.
19. Bassam Naji Al-Tamimi, Mohammed Shenify, **Rahmat Budiarto**, 2015, A New Algorithm For Protecting Mobile Home Network From IPv6 Routing Header Vulnerability In Mixed IP Networks, Journal of ICT, UUM Press, Vol 14, 2015, pp. 73-93
20. Ismat Aldmour, Thair Al-Dala'in, Lelyzar Siregar, **Rahmat Budiarto**, 2015, Seamless And Secure Handover Model For Mobile IPTV Network Using FMIPv6, International Journal of Electrical and Computer Engineering (IJECE). IAES Institute of Advanced Engineering and Science, ISSN: 2088-8708, Vol.5, No.2, April 2015, pp. 371-378
21. Fatemeh Hakimifar, Seyed-Amin Hosseini-Seno, Mohammad Hossein Moattar, Thair Al-Dala'in, **Rahmat Budiarto**, 2015, Adaptive Energy-aware Cluster Based Routing Protocol for Mobile Ad Hoc Networks, Telkomnika Journal, ISSN: 1693-6930, e-ISSN: 2302-9293, Vol.13, No.2, June 2015, pp.711-721
22. Mu'awya Naser, Ismat Aldmour, **Rahmat Budiarto**, Pedro Peris-Lopez, 2015, SLRV: An RFID Mutual Authentication Protocol Conforming to EPC Generation-2 Standard, Telkomnika Journal, ISSN: 1693-6930, e-ISSN: 2302-9293, Vol.13, No.3, September 2015, pp. 1054-1061
23. Fatemeh Banaie, Seyed Amin Hosseini Seno, Ismat Aldmour, and **Rahmat Budiarto**, 2015, A Polynomial-based Pairwise Key Pre-distribution and node Authentication Protocol for WSNs, Telkomnika Journal, ISSN: 1693-6930, e-ISSN: 2302-9293, Vol.13, No.4, December 2015, pp. 1113-1121
24. Deris Stiawan, Mohd. Yazid Idris, Abdul Hanan Abdullah, **Rahmat Budiarto**, 2016, Penetration Testing and Mitigation of Vulnerabilities Windows Server, International Journal of Network Security, ISSN: 1816353X, EISSN: 18163548, Vol.18, No.3, May 2016, pp. 501-513
25. Moh'D Suliman Shakkah, Khaled Alaqeel, Ali Alfageeh, **Rahmat Budiarto**, 2016, An Investigation Study on Optimizing Enterprise Resource Planning (ERP) Implementation in Emerging Public University: Al Baha University Case Study, International Journal of Electrical and Computer Engineering (IJECE), ISSN:2088-8708, Vol 6, No. 4, August 2016, pp.1920-1928.
26. Deris Stiawan, Mohd. Yazid Idris, Abdul Hanan Abdullah, Fahad Aljaber, **Rahmat Budiarto**, 2017, Cyber-Attack Penetration Test and Vulnerability Analysis, International Journal of Online Engineering, (Ijoe), Vol 13, No 01, January 2017, pp. 125-132. (**Best Paper Award**)

<http://online-journals.org/index.php/i-joe/issue/view/299>

27. Majzoob K. Omer, Osama E. Sheta, Mohamed S. Adrees, Deris Stiawan, Munawar A. Riyadi, **Rahmat Budiarto**, 2018, Deep Neural Network for Heart Disease Medical Prescription Expert System, Indonesian Journal of Electrical Engineering and Informatics (IJEEI), Vol. 6, No. 2, June 2018, pp. 217-224 ISSN: 2089-3272, DOI: 10.11591/ijeei.v6i2.456.
28. Romi Fadillah Rahmat, Sarah Purnamawati, Eka Pratiwi Goenfi, Opim Salim Sitompul, Muhammad Fermi Pasha, **Rahmat Budiarto**, 2018, A Study On Dynamic Hand Gesture Recognition For Finger Disability Using Multi-Layer Neural Network, Journal of Theoretical and Applied Information Technology, Vol.96. No 11, June 2018, pp. 3413-3425.
29. M. Algharem, M. H. Omar, M. I. Alghamdi, and **R. Budiarto**, 2018, A New Approach to Optimize Power Consumption in MBMS, Journal of Advanced Research in Dynamical and Control Systems (JARDCS), vol. 10, pp.1333-1339, 2018.
30. M. Algharem, M. H. Omar, and **R. Budiarto**, 2018, Dynamic Resource Allocation With Clustering Schemes for Enhancing Multicast Services Over LTE Networks, Journal of Telecommunication, Journal of Advanced Research in Dynamical and Control Systems (JARDCS), vol. 10, pp.1340-1349, 2018.
31. Mostafa Alghamdi, Tami Alwajeeh, Fahad Aljabeer, Setiawan Assegaff, **Rahmat Budiarto**, 2018, Experimenting Hand-Gesture Image Recognition using Simple Deep Neural Network, International Journal of Engineering & Technology, 7 (3.32), pp.103-105.  
<https://www.sciencepubco.com/index.php/ijet/article/view/18403/8331>
32. Kurniabudi, Benni Purnama, Sharipuddin, Darmawijoyo, Deris Stiawan, Samsuryadi, Ahmad Heryanto, **Rahmat Budiarto**, 2019, Network Anomaly Detection Research : A Survey, Indonesian Journal of Electrical Engineering and Informatics (IJEEI), Vol. 7, No. 1, March 2019, pp. 37-50 ISSN: 2089-3272, DOI: 10.11591/ijeei.v7i1.773.  
<http://section.iaesonline.com/index.php/IJEEI/article/view/773/pdf>.
33. Deris Stiawan, Diky Aryandi, Ahmad Heryanto, Tri Wanda Septian, Mohd. Yazid Idris and **Rahmat Budiarto**, 2019, Behavior Pattern Recognition of Game Dragon Nest Using Bloom Filter Method, International Journal of Communication Networks and Information Security (IJCNIS), vo. 11, no. 1, April 2019, pp. 128-133.
34. Deris Stiawan, Mohammad Yazid Bin Idris, Reza Firsandaya Malik, Siti Nurmaini, Nizar Alsharif and **Rahmat Budiarto**, 2019, Investigating Brute Force Attack Patterns in IoT Networks 2019, Journal of Electrical and Computer Engineering (JECE), Hindawi, Volume 2019, Article ID 4568368. <https://doi.org/10.1155/2019/4568368>. Q2 Journal,
35. Deris Stiawan, Dimas Wahyudi, Ahmad Heryanto, Samsuryadi, Mohd. Yazid Idris, **Rahmat Budiarto**, 2019, TCP FIN Flood Attack Pattern Recognition on Internet of Things (IoT) with Rule Based Signature Analysis, International Journal of Online and Biomedical Engineering (iJOE), Vol. 15, Issue 7, pp.124-139.
36. Rahmat, Romi Fadillah; Dennis; Sitompul, Opim Salim; Purnamawati, Sarah; **Budiarto, Rahmat.**, 2019, Advertisement billboard detection and geotagging system with inductive transfer learning in deep convolutional neural network, TELKOMNIKA, Vol. 17, Iss. 5, (Oct 2019): pp. 2659-2666. DOI:10.12928/TELKOMNIKA.v17i5.11276.
37. Erwin Setiawan Panjaitan, **Rahmat Budiarto**, (2019). The Role of Intelligence in e-Learning Usage: An Extension of UTAUT Model. International Journal of Advanced Trends in Computer Science and Engineering, vol.8, pp. 3160-3165. 10.30534/ijatcse/2019/79862019.

38. Darmawan, M.F., Abidin, A.F.Z., Kasim, S., Sutikno, T., **Budiarto, R.** 2020, Random forest age estimation model based on length of left hand bone for asian population, International Journal of Electrical and Computer Engineering (IJECE), Vol. 10, No. 1, 2020, pp. 549-558, DOI: 10.11591/ijece.v10i1.
39. M. Miftakul Amin, Adi Sutrisman, Deris Stiawan, Ermatita Ermatita, Mohammed Y Alzahrani, **Rahmat Budiarto**, 2020, Interoperability Framework for Integrated E-Health Services, Bulletin of Electrical Engineering and Informatics (BEEI), vol. 9. No. 1, pp.354-361.  
**DOI:** 10.11591/eei.v9i1.1825.
40. Ahmad Firdaus, Mohd Faizal Ab Razak, Wan Isnii Sofiah Wan Din, Danakorn Nincarean, Shahreen Kasim, Tole Sutikno, **Rahmat Budiarto**, 2020, Selecting Root Exploit Features Using Flying Animal-Inspired Decision, Indonesian Journal of Electrical Engineering and Informatics, Vol 7. No. 4, pp. 628-639. DOI: 10.11591/ijeei.v7i4.1146.
41. Sharipuddin, Benni Purnama, Kurniabudi, Eko Arip Winanto, Deris Stiawan, Darmawijoyo Hanapi, Rahmat Budiarto, Mohd Yazid bin Idris, 2020, Intrusion Detection with Deep Learning on IoT Heterogeneous Network, CITEI
42. Resti Handayani, Deris Stiawan, Ahmad Heryanto, Rahmat Budiarto, Farkhana Muchtar, Nurul Afifah, 2020, The Implementation of Ransomware Classification Using Random Forest Algorithm, CITEI
43. M. Agus Syamsul Arifin, Susanto, Deris Stiawan, Mohd Yazid Idris, Rahmat Budiarto, 2020, The Trends of SCADA Security Challenges in Heterogeneous Networks, CITEI
44. Susanto, M. Agus Syamsul Arifin, Deris Stiawan, Mohd. Yazid Idris, Rahmat Budiarto, 2020, The Trend of Malware Detection in IoT Network, CITEI
45. Deris Stiawan, Fepiliana, Ahmad Heryanto, Rahmat Budiarto, 2020, Analyzing Bellman-Ford Algorithm on Determining Shortest Paths in Software Defined Network, Journal of Communications Software and Systems JCOMSS

**Non-ISI Journal:**

46. **Rahmat Budiarto**, Masashi Yamada, Hirohisa Seki, Hidenori Itoh, 1997, A System For Simulating And Displaying Magic Game In Cat's Cradle And A Characterization Method Of Its String State, *Forma*, Vol. 12, No. 1, pp. 75-89.  
<http://www.scipress.org/journals/forma/abstract/1201/12010075.html>
47. Masashi Yamada, Hidenori Itoh, Hirohisa Seki, **Rahmat Budiarto**, 1994, A Cat's Cradle String Diagram Display Method Based On A Genetic Algorithm, *Forma*, Vol. 9, No. 1, pp. 11-28.
48. **Rahmat Budiarto**, Abdullah Zawawi H. Talib, Zaharin Yusoff, Masashi Yamada, 2003, An Intelligent Method for Processing String in 3-D Based on Its Minimum Energy, *Journal of Neural, Parallel & Scientific Computations*, Vol.11, No. 1&2, Dynamic Publisher, Atlanta, March 2003, pp. 119-126.
49. Masashi Yamada, Shigeki Suzuki, **Rahmat Budiarto**, Mamoru Endoh, Shinya Miyazaki, 2004, A System for Reading Comics on Cellular Phones and its Evaluation, Journal of the Society for Art and Science. Vol.3, No.2, June 2004, pp. 149-158. **(The 3<sup>rd</sup> Best Paper Award)**

50. Mohammed Saghir, Tat-Chee Wan, **Rahmat Budiarto**, 2006, A New Cross-Layer Framework For QoS Multicast Applications In Mobile Ad Hoc Networks, International Journal of Computer Science and Network Security (IJCSNS), VOL.6 No.10, October 2006, pp. 142-151.
51. A. Hadi Arifin, Dahlan Abdullah, Sami Mohamed Berhan, and **Rahmat Budiarto**, 2006, An Economical IPv4-to-IPv6 Transition Model: A Case Study for University Network, International Journal of Computer Science and Network Security (IJCSNS), VOL.6 No.11, Nov. 2006, pp. 170-178.
52. Mohammad Syukur, Muhammad Fermi Pasha, **Rahmat Budiarto**, 2007, A Neural Network-Based Application to Identify Cubic Structures in Multi Component Crystalline Materials Using X-Ray Diffraction Data, International Journal of Computer Science and Network Security (IJCSNS), VOL.7 No.2, Feb. 2007, pp. 49-54.
53. Seyed Amin Hosseini Seno, **Rahmat Budiarto**, Tat-Chee Wan, 2007, Survey and New Approach in Service Discovery and Advertisement for Mobile Ad-hoc Networks, International Journal of Computer Science and Network Security (IJCSNS), Vol.7 No.2, Feb. 2007, pp. 275-285.
54. Sureswaran Ramadass, **Rahmat Budiarto**, Ho Cheah Luan, 2007, Unreliable Network Re-Authentication Protocol Based on Hybrid Key Using CSP Approach, International Journal of Computer Science and Network Security (IJCSNS), Vol. 7, No.11, Nov 2007, pp. 173-183.
55. Chee-Hong Teh, Tat-Chee Wan, **Rahmat Budiarto**, Way-Chuang Ang, 2007, Unidirectional Lightweight Encapsulation with Header Compression for IP Based Satellite Communication over DVB-S, Lecture Notes in Computer Science, Publisher: Springer-Verlag GmbH, Volume 4866 / 2007, ISSN: 0302-9743, pp. 99-113.
56. A. Hadi Arifin, **Rahmat Budiarto**, 2008, The Tsunami Transformation: How The Agency For Reconstruction and Rehabilitation (BRR) Converts Disaster Into an Opportunity to Develop Tsunami Affected Regions of Aceh and Nias, Asia Academic of Management Journal (AAMJ), January 2008, pp. 93-114.
57. Mohd Nizam Omar, Lelyzar Siregar, **Rahmat Budiarto**, 2008, Dropped Packet Problems in Stepping Stone Detection, International Journal of Computer Science and Network Security (IJCSNS), Vol. 8, No.2, Feb. 2008, pp. 109-115.
58. Muhammad Azmi Al-Madi, Rosnah Idrus, Sureswaran Ramadass, **Rahmat Budiarto**, 2008, PQMAS: A Model for Policy-Based Routing Rules in the IPv6 Offering QoS for IPTV Broadcasting, International Journal of Computer Science and Network Security (IJCSNS), Vol. 8, No.3, March 2008, pp. 173-183.
59. Muhammad Azmi Al-Madi, Rosnah Idrus, Azlan Osman, **Rahmat Budiarto**, 2008, Performance Evaluation of the PBR and QoS Control Routing for Multi-Channel Adaptive Streaming (PQMAS) Mode, International Journal of Computer Science and Network Security (IJCSNS), Vol. 8, No.4, April 2008, pp. 85-93.
60. Seyed Amin Hosseini Seno, Bahareh Pahlevanzadeh, Tat-Chee Wan, **Rahmat Budiarto**, Masomaeh Ghahremani, 2008, A New Approach CBRP Based Resource Information Management in MANETs, submitted to International Journal of Computer Science and Network Security (IJCSNS), Vol. 8, No.5, May 2008, pp.301-308.
61. Mohd Nizam Omar, **Rahmat Budiarto**, 2009, Intelligent Network-Based Stepping Stone Detection Approach, World Academy of Science, Engineering and Technology (WASET) Journal ISSN: 2070-3724, Vol. 53, May 2009, pp. 834-841.
62. Zainal A. Hasibuan, Romi Fadhilah Rahmat, Muhammad Fermi Pasha, **Rahmat Budiarto**, 2009, Adaptive Nested Neural Network (ANNN) Based on Human Gene Regulatory Network (GRN) for

Gene Knowledge Discovery Engine, International Journal of Computer Science and Network Security (IJCSNS), VOL.9 No.6, June 2009, pp. 43-54.

63. Mohd Nizam Omar and **Rahmat Budiarto**, Stepping Stone Detection (SSD): Towards to Provide Future SSD-based Research, MASAUM Journal of Basic and Applied Sciences (MJBAS) (ISSN 2076-0841) Volume.1 No.2 September 2009, pp. 222-232.
64. Nazrul Nifkuzyaire Bin Zainudin, **Rahmat Budiarto**, Khurram Ghani, 2009, Terminal Mobility In 3G and Beyond 3G Networks: Mobile Terminal and IPv6 Factors, Journal of Information & Communication Technology, Vol.3 No.1, Dec. 2009, pp. 36-49.
65. Aik Theng Tan, **Rahmat Budiarto**, Zainal A. Hasibuan, 2010, An Analysis of Multiple Tag Co-Existence Method For Generating Multiple Reader Co-Existence Proof, Journal of Communication and Computer, ISSN 1548-7709, USA, Vol. 7, No. 4, April 2010, pp. 5-14.
66. Zainal A. Hasibuan, Aan Kurniawan, **Rahmat Budiarto**, 2010, Multi-Format Concept-Based Information Retrieval Using Data Grid, Journal of Advanced Computing and Applications, Vol. 1, Issue 1, June 2010, pp. 41-52.
67. Aik Theng Tan, Dahlan Abdullah, Ronsen Purba, **Rahmat Budiarto**, 2010, Multiple RFID Tag/Reader Co – Existence Proof Based On Rabin Cryptosystem, International Journal of Computer Science and Network Security (IJCSNS), Vol.10 No.8, Aug. 2010, pp.215-223.
68. Abdulaleem Ali ALmazroi, **Rahmat Budiarto**, Merza Abbas, 2011, Address Resolution using Direct Dynamic Neighbor Mechanism for Packet Transmission in IPv6, International Journal of Computer Science & Information Security (IJCSIS), Vol. 9 No. 12, Dec., 2011 (selected as the best paper)
69. Bassam Naji Al-Tamimi, **Rahmat Budiarto**, and Mohd Adib Omar, 2012, A New Scheme for a Mobile Node Seamless Mobility in Mixed Networks IPv4 and IPv6 Traversing NAT Routers, International Journal of Computer and Electrical Engineering (IJCEE), Vol. 4, No. 6, December 2012 (ISSN: 1793-8163), pp. 857-860.
70. Khalil I. Gathwan, Abdul Razak Yaakub, **Rahmat Budiarto**, 2013, EAODV: A\*-based Enhancement Ad-hoc on Demand Vector Protocol to Prevent Black Hole Attacks, Journal Computer Science and Information, Vol. 6, Issue 2, June 2013, pp. 45-51.
71. Somayeh Soltani, Seyed Amin Hosseini Seno, Maryam Nezhadkamali, **Rahmat Budiarto**, 2014, A survey on real world botnets and detection mechanisms, International Journal of Information and Network Security (IJINS), Institute of Advanced Engineering and Science (IAES), ISSN: 2089-3299, Vol. 3, No. 2, April, 2014, pp. 116-127.
72. Muaway Naser, Yazn Alshamaila, **Rahmat Budiarto**, Pedro Peris-Lopez, 2015, SURV: Shelled Ultralightweight Randomized Value Authentication Protocol for Low-Cost RFID Tags, International Journal of Computer and Electrical Engineering vol. 7, No. 3, June 2015, pp. 206-214.
73. Suliman Mohamed Fati, Putra Sumari, **Rahmat Budiarto**, 2015, Fair and Popularity based Content Allocation Scheme for IPTV Delivery Networks, International Journal of Computer Applications, ISSN: 0975 – 8887, December 2015, Volume 131, No.5, December 2015, pp. 21-26.
74. Ibrahim Alghamdi, Dhafer Ali F. Alshehri, Abdullah Alghamdi, Bedine Kerim, **Rahmat Budiarto**, 2016, Cloud-Based Retrieval Information System Using Concept For Multi-Format Data, Journal of Computer Engineering Application, ISSN: 2252-4274 | EISSN: 2252-5459, Vol.5, No.1, February 2016, pp. 1-10.
75. Ahmadreza Montazerolghaem, Seyed-Amin Hosseini-Seno, Mohammad Hossein Yaghmaee and **Rahmat Budiarto**, 2016, High Load Control Mechanism for SIP Servers, Journal of Computer Engineering Application, ISSN: 2252-4274 | EISSN: 2252-5459, Vol.5, No.2, June 2016, pp. 47-56.

76. **Rahmat Budiarto**, Lelyzar Siregar, Deris Stiawan, 2017, Network-on-Chip Paradigm for System-on-Chip Communication, Journal of Computer Engineering Application, ISSN: 2252-4274 | EISSN: 2252-5459, Feb. 2017, vol. 6, no. 1, pp. 1-4.
77. Mohd. Algharem, Mohd. Hasbullah Omar, Deris Stiawan, Ismat Aldmour, **Rahmat Budiarto**, 2018, Adaptive Modulation-Coding Selection Mechanisms for Single-cell LTE Broadcasting in Enterprise Network, International Journal of Digital Enterprise Techniques (IJDET), Inderscience Publisher, Vol. 1, Nos. 1/2, 2018, pp. 60-78.
78. Deris Stiawan, Christian Prabowo, Ahmad Heryanto, Nurul Afifah, Agus Eko Minarno, Rahmat Budiarto, 2020, Visualization of Grandblue Fantasy Game Traffic Pattern Using Deep Packet Inspection Method, Kinetik: Game Technology, Information System, Computer Network, Computing, Electronics, and Control

## Publication List – International Proceedings

### ISI/IEEE/ACM/SCOPUS Proceedings

1. Masashi Yamada, **Rahmat Budiarto**, Hidenori Itoh, Hirohisa Seki, 1994, A String Diagram Transformation Process Using A Genetic Algorithm- A Cat's Cradle Diagram Generating Method, *Proceedings of the third Pacific Rim International Conference on AI*, Vol. 1, Beijing, Aug. 1994, pp. 429-434.
2. **Rahmat Budiarto**, Masashi Yamada, Hirohisa Seki, Hidenori Itoh, 1997, A 3-D String Figures Display System For Animating Cat's Cradle Game, *Proceedings of the Fifth Pacific Graphics Conference*, Seoul, October 1997, pp. 30-38.
3. Azman Samsudin, **Rahmat Budiarto** and Hailiza Kamarulhali, 2002, OTIS-D2 de Bruijn: Self-Routed Permutation Optoelectronic Switching Network, *Proceedings of the 6<sup>th</sup> World Multiconference On Systemics, Cybernetics, and Informatics - SCI 2002*, Orlando, Jul. 2002, vol. X, pp. 204-209. (**Best Paper award**)
4. **Rahmat Budiarto**, Abdullah Zawawi H. Talib, Zaharin Yusoff, Masashi Yamada, 2002, An Intelligent Method for Processing String in 3-D Based on Its Minimum Energy, *Proceedings of the 2<sup>nd</sup> International Workshop on Intelligent Systems Design and Application*, Atlanta, Aug. 2002, pp. 241-244.
5. Chen Wei, Tan, Tat Chee, Wan, **Rahmat Budiarto**, 2003, Deployment of UDL Mesh Satellite Networks Using DVB-s Technology, *The 9<sup>th</sup> Asia Pacific Conference on Communication (APCC2003)*, Penang, September 2003 pp. 873-877 (IEEE Catalog Number: 03EX732).
6. Salem Meftah, Rosehaslina Razali, Azman Samsudin and **Rahmat Budiarto**, 2003, Enhancing Public-Key Cryptosystem Using Parallel Karatsuba Algorithm With Socket Programming, *Proceedings of The 9<sup>th</sup> Asia-Pasific Conference on Communication (APCC2003)*, Penang, Sep. 2003, pp. 706-710 (IEEE Catalog Number: 03EX732).
7. Muhammad Aiman Mazlan, Azman Samsudin and **Rahmat Budiarto**, 2003, Secure Groups Communication for Mobile Agents Based On Public Key Infrastructure, *Proceedings of The 9<sup>th</sup> Asia-Pasific Conference on Communication (APCC2003)*, Penang, Sep. 2003, pp. 1023-1027 (IEEE Catalog Number: 03EX732).
8. Lee Sian Choon, Azman Samsudin, and **Rahmat Budiarto**, 2004, Lightweight and Cost-Effective MPEG Video Encryption, *Proceedings of The 1<sup>st</sup> International Conference on Information & Communication Technologies: from Theory to Applications (ICTTA'04)*, Damascus, Syria, April 2004, (pp. 525, distributed in CD-ROM – IEEE Catalog Number: 04EX852C).
9. **Rahmat Budiarto**, Sureswaran Ramadass, Azman Samsudin, Salah Noori, 2004, Development of Penetration Testing Model for Increasing Network Security, *Proceedings of The 1<sup>st</sup> International Conference on Information & Communication Technologies: from Theory to Applications (ICTTA'04)*, Damascus, Syria, April 2004, (pp. 563, distributed in CD-ROM – IEEE Catalog Number: 04EX852C).
10. **Rahmat Budiarto**, Azman Samsudin, Chuah Wee Heong, Salah Noori, 2004, Honeypots: Why We Need A Dynamics Honeypot? *Proceedings of the 1<sup>st</sup> International Conference on Information & Communication Technologies: from Theory to Applications (ICTTA'04)*, Damascus, Syria, April 2004, (pp. 565, distributed in CD-ROM – IEEE Catalog Number: 04EX852C).
11. Bee Sien, Azman Samsudin and **Rahmat Budiarto**, 2004, A New Image-Database Encryption Based On A Hybrid Approach of Data-at-Rest and Data-in-Motion Encryption Protocol, *Proceedings of The 1<sup>st</sup> International Conference on Information & Communication Technologies:*

- from Theory to Applications (ICTTA'04)*, Damascus, Syria, April 2004, (pp. 603, distributed in CD-ROM – IEEE Catalog Number: 04EX852C).
12. R. Sureswaran, S. Noori, **R. Budiarto** & S. Rao, 2004, Scalable and Reliable Multi Session Document Sharing System, *Proceedings of The 1<sup>st</sup> International Conference on Information & Communication Technologies: from Theory to Applications (ICTTA'04)*, Damascus, Syria, April 2004, (pp.613, distributed in CD-ROM – IEEE Catalog Number: 04EX852C).
  13. S. Noori, R. Sureswaran, **R. Budiarto** & S. Rao, 2004, A New Algorithm For Advanced File Distribution System Design, *Proceedings of The 1<sup>st</sup> International Conference on Information & Communication Technologies: from Theory to Applications (ICTTA'04)*, Damascus, Syria, April 2004, (pp.615, distributed in CD-ROM – IEEE Catalog Number: 04EX852C).
  14. Zaidi Jumandi, Azman Samsudin and **Rahmat Budiarto**, 2004, Optimized Arbitrary Size Networks, *Proceedings of The 1<sup>st</sup> International Conference on Information & Communication Technologies: from Theory to Applications (ICTTA'04)*, Damascus, Syria, April 2004, (pp.665, distributed in CD-ROM – IEEE Catalog Number: 04EX852C).
  15. Putra Sumari, Irfan Afif, Hailiza Kamarulhaili, **Rahmat Budiarto**, 2004, Scheduling Requests in Hierarchical Multimedia Storage Server, *Proceedings of International Conference on Computer Graphics, Imaging and Vision (CGIV'04)*, Penang, July 2004, pp. 220-225.
  16. Putra Sumari, Irfan Afif, Hailiza Kamarulhaili, **Rahmat Budiarto**, 2004, Color-based Image Retrieval using Wavelet, *Proceedings of International Conference on Computer Graphics, Imaging and Vision (CGIV'04)*, Penang, July 2004, pp. 45-49.
  17. Usman Sarwar, Sureswaran Ramadass, **Rahmat Budiarto**, 2007, Dawn Of The Mobile Malware: Reviewing Mobile Worms, *Proceedings of the 14<sup>th</sup> IEEE International Conference On Telecommunications (ICT) and the 8<sup>th</sup> IEEE Malaysia International Conference on Communications (MICC) Conferences*, Penang, 15-17 May 2007, IEEE Catalog Number: 07EX1734C (Distributed in CD-ROM)
  18. Seyed Amin Hosseini Seno, Tat-Chee Wan, **Rahmat Budiarto**, 2007, Hybrid Hierarchical Approach for Addressing Service Discovery Issues in MANETs, *Proceedings of the 14<sup>th</sup> IEEE International Conference On Telecommunications (ICT) and the 8<sup>th</sup> IEEE Malaysia International Conference on Communications (MICC) Conferences*, Penang, 15-17 May 2007, IEEE Catalog Number: 07EX1734C (Distributed in CD-ROM)
  19. Wang Chuang Ang, Chee Hong Teh, Tat-Chee Wan, **Rahmat Budiarto**, 2007, Performance Evaluation of Unidirectional Lightweight Encapsulation Using NS-2 and DVB-S TestBed, *Proceedings of the 14<sup>th</sup> IEEE International Conference On Telecommunications (ICT) and the 8<sup>th</sup> IEEE Malaysia International Conference on Communications (MICC) Conferences*, Penang, 15-17 May 2007, IEEE Catalog Number: 07EX1734C (Distributed in CD-ROM)
  20. Ahmad Manasrah, Muhammad Fermi Pasha, **Rahmat Budiarto**, Sureswaran Ramadass, 2007, POSFinger: A New Fingerprint For Passive Remote Operating System Identification, *Proceedings of the 3<sup>rd</sup> International Conference on Distributed Framework for Multimedia Applications (DFMA 2007)*, Paris, 4-6 June 2007, pp. 110-116.
  21. **Rahmat Budiarto**, Sureswaran Ramadass, Muhammad Fermi Pasha, Ahmad Manasrah, and Saravanesh Supramaniam, 2007, High Performance Network Worm Detection Engine using Memory Efficient Circular Buffer, *Proceedings of the 3<sup>rd</sup> International Conference on Distributed Framework for Multimedia Applications (DFMA 2007)*, Paris, 4-6 July 2007, pp. 105-109.
  22. Muhammad Fermi Pasha, **Rahmat Budiarto**, Sureswaran Ramadass, and Mohammad Syukur, 2008, A Sequential Hierarchical Superset Implementation of Neocortex Memory System and its



Case Study of Automated Network Forensic Analysis, Proceedings of International Conference on Artificial Intelligence 2008, Las Vegas, 14-16 July 2008, pp. 490-495.

23. Taufiq Abdul Gani, Ahamad Tajudin Khader, **Rahmat Budiarto**, Mohammed Azmi Al-Betar, 2008, Assessing Examination Timetabling Problems Using Fuzzy Pareto Optimality, proceedings of The 7<sup>th</sup> International Conference on the Practice and Theory of Automated Timetabling, Montréal, 18 – 22 August, 2008, (available online at: [http://w1.cirrelt.ca/%7Epatat2008/PATAT\\_7\\_PROCEEDINGS/Papers/Al-Betar-TC2b.pdf](http://w1.cirrelt.ca/%7Epatat2008/PATAT_7_PROCEEDINGS/Papers/Al-Betar-TC2b.pdf))
24. Bassam Altamimi, Abidah Hj Mat Taib, **Rahmat Budiarto**, 2008, Protecting Teredo Clients from Source Routing Exploits, Proceedings of the 4<sup>th</sup> International Conference on Distributed Framework for Multimedia Applications (DFMA 2008), Penang, 21-22 Oct., 2008, pp. 126-133.
25. Mohd Nizam Omar, Lelyzar Siregar, **Rahmat Budiarto**, 2008, Hybrid Stepping Stone Detection Method, Proceedings of the 4<sup>th</sup> International Conference on Distributed Framework for Multimedia Applications (DFMA 2008), Penang, 21-22 Oct., 2008, pp. 134-138.
26. Supriyanto, Raja Kumar Murugesan, **Rahmat Budiarto**, Sureswaran Ramadass, 2008, Handling Transmission Error for IPv6 Packets over High Speed Networks, Proceedings of the 4<sup>th</sup> International Conference on Distributed Framework for Multimedia Applications (DFMA 2008), Penang, 21-22 Oct., 2008, pp. 159-163.
27. Raja Kumar Murugesan, **Rahmat Budiarto** and Sureswaran Ramadass, 2008, Performance Improvement of IPv6 Packet Transmission through Address Resolution using Direct Mapping, Proceedings of the 4<sup>th</sup> International Conference on Distributed Framework for Multimedia Applications (DFMA 2008), Penang, 21-22 Oct., 2008, pp. 164-169.
28. Lelyzar Siregar, **Rahmat Budiarto**, Mohd Nizam Omar, Adil Hidayat Rosli, 2008, Quality of Service Performance for Xcast in IPv6 Network, Proceedings of the 4<sup>th</sup> International Conference on Distributed Framework for Multimedia Applications (DFMA 2008), Penang, 21-22 Oct., 2008, pp.170-173.
29. Bahareh Pahlevanzadeh, Seyed Amin Hosseini Seno, Wan Tat-Chee, **Rahmat Budiarto**, 2008, New Approach for Flow Control Using PAUSE Frame Management, Proceedings of the 4<sup>th</sup> International Conference on Distributed Framework for Multimedia Applications (DFMA 2008), Penang, 21-22 Oct., 2008, pp. 214-219
30. Bahareh Pahlevanzadeh, Awinder Kaur, Seyed Amin Hosseini Seno, Rosnah Idrus, **Rahmat Budiarto**, 2008, IPv6 and e-Government Integration – A Way towards Next-Generation Networks, Proceedings of the 3<sup>rd</sup> International Conference on “E-Commerce with focus on Developing Countries (ECDC 08)”, Isfahan, Iran, 22 -23 October 2008, pp. 43-49
31. S.A. Hosseini Seno, B. Pahlevanzadeh, T.C. Wan, **R. Budiarto**, S. Ramadass, 2009, Routing Layer Service Advertisement Approach for MANETs, Proceedings of International Conference on Future Networks (ICFN 2009), Bangkok, March 7-9, 2009, Published by IEEE Comp Society Publisher, pp. 249-253.
32. Masoumeh Ghahremani, Mohsen Kahani, Seyed-Amin Hosseini-Seno, **Rahmat Budiarto**, 2009, A New Approach for Web Applications Examination before Publishing, Proceedings of (IEEE Comp Society) International Conference on International Conference on Future Computer and Communication (ICFCC 2009), Kuala Lumpur, April 3-5, 2009, pp. 470-473.
33. Mu'awya Naser, Mohammad Almjaly, Muhammad Rafie Muhammad Arsyad, **Rahmat Budiarto**, 2009, A Framework for RFID Systems' Security for Human Identification Based on Three-Tier Categorization Model, Proceedings of (IEEE Comp Society) International Conference on Signal Acquisition and Processing (ICSAP 2009), Kuala Lumpur, April 3-5 2009, pp. 103-107.

34. Ferdinand Murni H, Lelyzar Siregar, **Rahmat Budiarto**, 2009, Evaluating the Best of Knowledge Management Technology for Small Medium Enterprise Based on Fuzzy Analytic Hierarchy Process, Proceeding of the 3<sup>rd</sup> Asia Modeling Symposium, Bandung, 25-26 May 2009, pp.200-205.
35. **Rahmat Budiarto**, Pradeep Isawasan, Maulana Abdul Aziz, 2009, Transformation of Spatial Data Format for Interoperability between GIS Applications , Proceedings of the 6th International Conference Computer Graphics, Imaging and Visualization, Tianjin, China, August 2009, pp. 536-539.
36. Raja Kumar, M., Sureswaran, Ramadass., and **Rahmat Budiarto**, 2009, Improving the Performance of IPv6 Transmission over LAN, Proceedings of IEEE Symposium on Industrial Electronics and Applications (ISIEA 2009), Kuala Lumpur, 4-6 Oct 2009, pp. 182-187.
37. Supriyanto, **Rahmat Budiarto**, Raja Kumar, Murugesan, Sureswaran, Ramadass. 2009, CRC Extention Header (CEH): A New Model to Handle Transmission Error for IPv6 Packets over Fiber Optic Links, Proceedings of IEEE Symposium on Industrial Electronics and Applications (ISIEA 2009), Kuala Lumpur, 4-6 Oct 2009, pp.569-573.
38. Primantara Hari Trisnawan, **Rahmat Budiarto**, 2009, Priority-Based QoS Mechanism for Multiple Multicast IPTV Streams, Proceedings of ACM-SIGCOMM Asian Internet Engineering Conference (AINTEC) 2009, Bangkok, 18-20 November 2009, pp.19-24.
39. Arini Widhiarsi, Vasuky Mohanan, Muhammad Fermi Pasha, **Rahmat Budiarto**, 2010, Vertical Handover Scheme for Car-to-Car Communication Based on IEEE 802.21 Standard, Proceedings of the Second International Conference on Computer Engineering and Applications (ICCEA2010), Bali, 19-21 March 2010, pp. 143-147.
40. Ferdinand Murni H, **Rahmat Budiarto**, 2020, A Fuzzy Inference System Approach For Knowledge Management Tools Evaluation, Proceedings of 12<sup>th</sup> International Conference on Computer Modelling and Simulation (UKSim2010), Cambridge, UK, 24 - 26 March 2010, pp.305-310.
41. Alireza Taghizadeh, Tat-Chee Wan and **Rahmat Budiarto**, 2010, MPLS Assisted Handover in IP-Based Mobility Management Schemes: A Survey, Proceedings of the 2<sup>nd</sup> IEEE-International Conference on Computer Research and Development (ICCRD 2010), Kuala Lumpur, 7-10 May, 2010, pp.34-38.
42. Reihaneh Hosseinzadeh Hariri, Seyed Amin Hosseini Seno, **Rahmat Budiarto**, 2010, A Cluster Based Object Oriented Service Discovery and Advertisement proposed for MANETs, Proceedings of the International Conference on Networking and Information Technology (ICNIT 2010), Manila, Philippines, June 11 - 13, 2010, pp.377-380
43. Armanda Caesario Cornelis, **Rahmat Budiarto**, Wan Tat Chee, 2010, Low latency Binding Update Mechanism Using MIPv6 for Mobile Internet Television, Proceedings of International IEEE Distributed Framework & Applications, Yogyakarta, 2-3 August 2010, pp. 261-265.
44. Alfin Syafalni, **Rahmat Budiarto**, Mohd. Azam Osman, Nabil Elmarzouqi, 2010, Design of the Robot Intelligent Interaction and Teleoperation via Multilayer-Cross Control Communication Framework, Proceedings of International IEEE Distributed Framework & Applications, Yogyakarta, 2-3 August 2010, pp. 127-132.
45. Primantara Hari Trisnawan, Abraham Lock Jun Jiang, Loh Chong Hooi, **Rahmat Budiarto**, 2010, Performance of QoS Mechanism for HD IPTV in Jumbo Ethernet Frame IPv6 Network, Proceedings of 2<sup>nd</sup> IEEE International Conference on Network and Their Applications (NETApps 2010), 22-23 September 2010, pp.90-94.

46. Lelyzar Siregar, Rizal Fatoni Aji, Zainal. A. Hasibuan, **Rahmat Budiarto**, 2010, Quality Of Service For IPTV Using Xcast In IPv6 Network, Proceedings of 2<sup>nd</sup> IEEE International Conference on Network and Their Applications (NETApps 2010), 22-23 September 2010, pp. 101-104.
47. Alireza Taghizadeh, Tat-Chee Wan and **Rahmat Budiarto**, 2010, Scalable Network Controlled Handover with Aggregated Binding Scheme in IP-based Cellular Networks, Proceedings of ACM-SIGGRAPH Asian Internet Engineering Conference 2010 (AINTEC2010), Bangkok, 15-17 Nov., 2010, pp72-79.
48. 'Abidah Hj Mat Taib, **Rahmat Budiarto**, 2010, Securing Tunnel Endpoints for IPv6 Transition in Enterprise Networks, Proceedings of the International Conference on Science and Social-science Research (ICSSR 2010), December 5 - 7, 2010, Kuala Lumpur, Malaysia, pp.1126-1131.
49. Majid Hosseini, Hassan Chizari, Chai Kok Soon and **Rahmat Budiarto**, 2010, RSS-based Distance Measurement in Underwater Acoustic Sensor Networks: An Application of the Lambert W Function, The 4<sup>th</sup> IEEE International Conference on Signal Processing and Communication Systems, (ICSPCS 2010), Gold Coast, 13-15 December 2010, (distributed in CD-ROM)
50. Mahdi Zareei, **Rahmat Budiarto**, Tat-Chee Wan, 2011, Study of Mobility Effect on Energy Efficiency in Medium Access Control Protocol, Proceedings of IEEE Symposium on Computer and Informatics (ISCI 2011), Kuala Lumpur, 20-22 March 2011 (to appear)
51. Wan Nor Ashiqin Wan Ali, Abidah Hj Mat Taib, Naimah Mohd Hussin, **Rahmat Budiarto**, Jamal Othman, 2011, Distributed Security Policy for IPv6 Deployment, 3rd International Symposium & Exhibition in Sustainable Energy & Environment, ISESEE 2011, Melaka, 1-3 June 2011, pp.201-205.
52. Ferdinand Murni H, Satriyo Wibowo, **Rahmat Budiarto**, 2011, Measuring The Tangibles And Intangibles Value Of An ERP Investment, Proceedings of the 3<sup>rd</sup> International Conference on Computing and Informatics, ICOCI 2011, Bandung, 8-9 June, 2011, pp.61-66 (Selected as one of the best papers).
53. Armanda Caesario Cornelis, **Rahmat Budiarto**, Edwin Purwadensi, 2011, IMSI-Based Care Of-Address Creation For Fast Binding Update In MIPv6, Proceedings of the 3<sup>rd</sup> International Conference on Computing and Informatics, ICOCI 2011, Bandung, 8-9 June, 2011, pp.321-326.
54. Suliman Mohamed. Fati, Putra Sumari, **Rahmat Budiarto**, 2011, Balanced and Popularity based Content Allocation Scheme For Peer-Service Area CDN Architecture For IPTV Services, Proceedings of the 4<sup>th</sup> IEEE International Conference on Computer Science and Information Technology, IEEE ICCSIT 2011, Chengdu, 10-12 June 2011.
55. Umi Kalsom Yusof, **Rahmat Budiarto**, Syafaai Deris, Ibrahim Venkat, 2011, Machine Loading Optimization in Flexible Manufacturing System (FMS) using an Hybrid of Bio-Inspired and Musical-Composition Approach, Proceedings of International Conference on Bio-Inspired Computing: Theories and Applications, Penang, 27-29 Sept. 2011, pp. 89-95. (**Best Paper Award**).
56. Mehdi Zareei, Azar Zarei, **Rahmat Budiarto**, Mohd Adib Omar, 2011, A Comparative Study of Short Range Wireless Sensor Network on High Density Networks, Proceedings of the 17<sup>th</sup> Asia Pacific Conference on Communications, Sabah, Malaysia, 2-5 October 2011, (distributed in CD-ROM)
57. Bassam Naji Al-Tamimi, **Rahmat Budiarto**, and Mohd. Adib Omar, 2011, Seamless Mobility in Mixed Networks (IPv4 and IPv6) Traversing NAT Routers, Proceedings of International Conference on Electronics, Networks and Computer (ICENC 2011), Kuala Lumpur, 2-4 November 2011, (distributed in CD-ROM)

58. Alireza Taghizadeh, Tat-Che Wan, **Rahmat Budiarto**, 2011, A Comparative Performance Evaluation of Inter-domain Network-based IP Mobility Solutions, Proceedings of Asia Workshop on Future Internet Technologies 2011 (AWFIT2011), Bangkok, 12 November 2011, pp.136-139
59. Vasuky Mohanan, **Rahmat Budiarto**, Wan Mohd Nazmee Wan Zainon, 2012, Holistic Network Selection for Wireless Mobile Nodes in a 4G Environment, Proceedings of The 18<sup>th</sup> Asia-Pacific Conference on Communications (APCC 2012), Jeju island, Korea, October 15-17, 2012, pp.53-58.
60. Vasuky Mohanan, **Rahmat Budiarto**, Mohd Azam Osman, 2013, Holistic Network Selection Using Dynamic Weights to Achieve Personalized ABC, Proceedings of the 19<sup>th</sup> Asia-Pacific Conference on Communications (APCC 2013), Bali, Indonesia, 29-31 August 2013, pp.196-201.
61. Suliman Mohamed Fati, Putra Sumari, **Rahmat Budiarto**, 2014, Provisioning Virtual IPTV Delivery Networks Using Hybrid Genetic Algorithm, Proceedings of ACM IMCOM (ICUIMC)'14, January 9–11, 2014, Siem Reap, Cambodia, doi:[10.1145/2557977.2557978](https://doi.org/10.1145/2557977.2557978).
62. Ahmadreza Montazerolghaem, Seyed-Amin Hosseini-Seno, Mohammad Hossein Yaghmaee and **Rahmat Budiarto**, 2014, High Load Diminution by Regulating Timers in SIP Servers, Proceedings of International Conference Electrical Engineering, Computer Science and Informatics (EECSI 2014), Yogyakarta, Indonesia, 20-21 August 2014, pp.46-51
63. Alireza Tajalli, Seyed-Amin Hosseini-Seno and, Mohamed Shenify, **Rahmat Budiarto**, 2014, An Incentive Mechanism for Cooperative Data Replication in MANETs A Game Theoretical Approach, Proceedings of International Conference Electrical Engineering, Computer Science and Informatics (EECSI 2014), Yogyakarta, Indonesia, 20-21 August 2014, pp.111-115
64. Mu'awya Naser, Pedro Peris-Lopez, Ismat Aldmour, **Rahmat Budiarto**, 2014, Vulnerabilites In Mutual Authentication Protocol Conforming To EPC Generation-2 Standard, Proceedings of International Conference Electrical Engineering, Computer Science and Informatics (EECSI 2014), Yogyakarta, Indonesia, 20-21 August 2014, pp. 173-176. (The best paper award).
65. Ismat Aldmour, Thair Al-Dala'in, Lelyzar Siregar, **Rahmat Budiarto**, 2014, Enhancement of FMIPv6 by Utilising Concurrent Binding Update Process, Proceedings of International Conference Electrical Engineering, Computer Science and Informatics (EECSI 2014), Yogyakarta, Indonesia, 20-21 August 2014, pp.183-185
66. Mohd. Algharem, Mohd. Hasbullah Omar, Muhammed I. Alghamdi, **Rahmat Budiarto**, 2014, Performance comparison of Downlink Packet Scheduling Algorithms in LTE Network, Proceedings of International Conference Electrical Engineering, Computer Science and Informatics (EECSI 2014), Yogyakarta, Indonesia, 20-21 August 2014, pp. 424-428
67. Mahdi Zareei, Muhammed I. Alghamdi, A.K.M. Muzahidul Islam, Sabariah Baharun and **Rahmat Budiarto**, 2014, Energy Efficient Handover Management in Cluster Based Wireless Sensor Network, Proceedings of International Conference Electrical Engineering, Computer Science and Informatics (EECSI 2014), Yogyakarta, Indonesia, 20-21 August 2014, pp.433-436
68. Fatemeh Banaie, Seyed-Amin Hosseini-Seno, Mohammad Hossein Yaghmaee and **Rahmat Budiarto**, 2014, Dynamic Prioritization of Path for Quality-of-Service Differentiation in Multi-Priority Traffic, Proceedings of International Conference Electrical Engineering, Computer Science and Informatics (EECSI 2014), Yogyakarta, Indonesia, 20-21 August 2014, pp.446-450
69. Fatemeh Banaie, Seyed Amin Hosseini Seno, Reem Hajaj Aljoufi, and **Rahmat Budiarto**, 2014, MPKMS: A Matrix-based Pairwise Key Management Scheme for Wireless Sensor Networks, Proceedings of International Conference Electrical Engineering, Computer Science and Informatics (EECSI 2014), Yogyakarta, Indonesia, 20-21 August 2014, pp.462-467

70. Fatemeh Hakimifar ,Seyed-Amin Hosseini-Seno, Mohamed Shenify and **Rahmat Budiarto**, 2014, An Efficient Cluster-based Routing Protocol for Mobile Ad Hoc Networks, Proceedings of International Conference Electrical Engineering, Computer Science and Informatics (EECSI 2014), Yogyakarta, Indonesia, 20-21 August 2014, pp.476-481
71. Mohammed Shenify, **Rahmat Budiarto**, Sultan Aljahdali, Hisham M. Alsaghie, 2015, Incorporating R&D Activities into Computer Engineering Teaching & Learning Program in Albaha University, Proceedings of The 3<sup>rd</sup> International Conference on Learning and Teaching in Computing and Engineering (LaTiCE, IEEE Technically Sponsored) 2015, Taipei, 9-12 April 2015, pp. 7-8.
72. Deris Stiawan, Ahmad Heriyanto, Ahmad Fali Oklilas, **Rahmat Budiarto**, 2015, Intrusion Prevention in Heterogeneous System based on Behavior-Based Approaches, Proceedings of 2015 International Conference on Science in Information Technology (ICSITech), Yogyakarta, 27-28 October 2015, pp. 369-373
73. Zahra Eskandari, Seyed Amin Hosseini Seno, Deris Stiawan, Bedine Kerim, **Rahmat Budiarto**, 2016, Energy-Aware Optimal Clustering in Wireless Sensor Network Using Integer/Linear Programming, Proceedings of the 8<sup>th</sup> International Conference on Information Technology and Electrical Engineering (ICITEE 2016), Yogyakarta, Indonesia, 5-6 Oct. 2016.
74. Deris Stiawan, Mohd. Yazid Idris, Reza Fersandaya Malik, Siti Nurmaini, **Rahmat Budiarto**, 2016, Anomaly Detection and Monitoring in Internet of Things Communication, Proceedings of the 8<sup>th</sup> International Conference on Information Technology and Electrical Engineering (ICITEE 2016), Yogyakarta, Indonesia, 5-6 Oct. 2016.
75. Romi Fadillah Rahmat, Alvin Rizki, Adil Fahad Alharthi, **Rahmat Budiarto**, 2016, Big Data Forecasting Using Evolving Multi-layer Perceptron: Gold Price Case Study, proceedings of the 4th KACSTIT conference on Big Data, Riyadh, 6-9 Nov. 2016
76. Tami Alwajeih, Adil Fahad Alharthi, Romi Fadillah Rahmat, **Rahmat Budiarto**, 2016, Fast Learning for Big Data Using Dynamic Function, Proceedings of the 3<sup>rd</sup> International Conference on Electrical Engineering, Computer Science and Informatics (EECSI 2016), Semarang, Indonesia, 23-24 Nov. 2016, pp. 329-333, (The best paper award)
77. Mohd.Algharem, Mohd. Hasbullah Omar, Deris Stiawan, **Rahmat Budiarto**, 2016, Optimizing Subgroups Formation for E-MBMS Transmissions in LTE Networks, Proceedings of the 3<sup>rd</sup> International Conference on Electrical Engineering, Computer Science and Informatics (EECSI 2016), Semarang, Indonesia, 23-24 Nov. 2016, 211-217.
78. Khaled Alaqeel, Moh'D Suliman Shakkah, Romi Fadillah Rahmat, Ali Alfageeh, **Rahmat Budiarto**, 2016, Organization Readiness and ERP Implementation in Albaha University, Proceedings of the 3<sup>rd</sup> International Conference on Electrical Engineering, Computer Science and Informatics (EECSI 2016), Semarang, Indonesia, 23-24 Nov. 2016, pp.287-292.
79. Romi Fadillah Rahmat, Indera Surya Satria, Baihaqi Siregar, **Rahmat Budiarto**, 2016, Water Pipeline Leakage Monitoring and Detection Using Flow Liquid Meter Sensor, Proceedings of the 3<sup>rd</sup> International Conference on Electrical Engineering, Computer Science and Informatics (EECSI 2016), Semarang, Indonesia, 23-24 Nov. 2016, 154-159.
80. Dani Gunawan, Anwar Pasaribu, Romi Fadillah Rahmat, **Rahmat Budiarto**, 2016, Automatic Text Summarization for Indonesian Language Using TextTeaser, Proceedings of the 3<sup>rd</sup> International Conference on Electrical Engineering, Computer Science and Informatics (EECSI 2016), Semarang, Indonesia, 23-24 Nov. 2016, pp. 281-286.
81. Mohammad Fadly Syahputra, Samuel Indra Gunawan Situmeang, Romi Fadillah Rahmat, **Rahmat Budiarto**, 2016, Noise Reduction in Breath Sound Files Using Wavelet Transform-Based Filter,

Proceedings of the 3<sup>rd</sup> International Conference on Electrical Engineering, Computer Science and Informatics (EECSI 2016), Semarang, Indonesia, 23-24 Nov. 2016, pp. 189-194.

82. M F Syahputra, V Felicia, R F Rahmat, and R **Budiarto**, 2016, Scheduling Diet for Diabetes Mellitus Patients using Genetic Algorithm, Proceedings of the 1<sup>st</sup> International Conference on Computing and Applied Informatics, Medan, Indonesia, 14 Dec. 2016, IOP Conf. Series: Journal of Physics: Conf. Series 801 (2017) 012033, doi:10.1088/1742-6596/801/1/012033.
83. R F Rahmat, A F Pulungan, S Faza, and **R Budiarto**, 2016, Image Classification of Ribbed Smoked Sheet using Learning Vector Quantization, Proceedings of the 1<sup>st</sup> International Conference on Computing and Applied Informatics, Medan, Indonesia, 14 Dec. 2016, IOP Conf. Series: Journal of Physics: Conf. Series 801 (2017) 012033, doi:10.1088/1742-6596/801/1/012050.
84. M. Ridwan Zalbina, Deris Stiawan, Ahmad Heryanto, Tri Wanda Septian, Moh. Yazid Idris, **Rahmat Budiarto**, 2017, Payload Recognition and Detection of Cross Site Scripting Attack, Proceedings of ICACC2017, pp. 172-176.
85. Deris Stiawan, Sari Sandra, Esam Alzharani, **Rahmat Budiarto**, 2017, Comparative Analysis of K-Means Method and Naïve Bayes Method for Brute Force Attack Visualization, Proceedings of ICACC2017, pp. 177-182.
86. Napsiah, Deris Stiawan, Ahmad Heryanto, Tri Wanda Septian, Lelyzar Siregar, **Rahmat Budiarto**, 2017, Denial of Service Attack Visualization with Clustering using K-Means Algorithm, Proceedings of International Conference on Electrical Engineering and Computer Science, Palembang 22-23 August 2017, pp. 177-183.
87. Deris Stiawan, Fitri Noviani, Sri Desy Siswanti, Tri Wanda Septian, Munawar A Riyadi, Fahad Aljaber, **Rahmat Budiarto**, 2017, Analysis of Custody Transfer on Moving Bundle Protocol of Wireless Router in Delay Tolerant Network (DTN), Proceedings of IEEE 4<sup>th</sup> International Conference on Information Technology, Computer and Electrical Engineering (ICITACEE), Semarang, 18-19 October 2017, pp. 50-53.
88. Mohd.Algharem, Mohd. Hasbullah Omar, Romi Fadillah Rahmat, **Rahmat Budiarto**, 2017, A Low-Complexity Subgroup Formation with QoS-Aware for Enhancing Multicast Services in LTE Networks, Proceedings of 2<sup>nd</sup> International Conference on Computing and Applied Informatics (ICCAI 2017), Medan, 28-30 November 2017, IOP Conf. Series: Journal of Physics: Conf. Series 978 (2018) 012094, doi :10.1088/1742-6596/978/1/012094.
89. R F Rahmat, Royananda, M A Muchtar, R Taquiuddin, S Adnan, R Anugrahwaty, **R Budiarto**, 2017, Automated Color Classification of Urine Dipstick Image in Urine Examination, Proceedings of 2<sup>nd</sup> International Conference on Computing and Applied Informatics (ICCAI 2017), Medan, 28-30 November 2017, doi :10.1088/1742-6596/978/1/012008.
90. Benni Purnama, Sharipuddin, Kurniabudi, Ahmad Heryanto, Deris Stiawan, Darmawijoyo, **Rahmat Budiarto**, 2018, Monitoring Connectivity of Internet of Things Device on Zigbee Protocol, Proceedings of 2<sup>nd</sup> International Conference on Electrical Engineering and Computer Science (ICECOS), Bangka-Belitung, 2-4 October, 2018, pp. 351-356.
91. Sharipuddin, Kurniabudi, Benni Purnama, Deris Stiawan, Darmawijoyo, **Rahmat Budiarto**, 2018, Measurement of Component Performance (Sensor) on Internet of Thing (IoT), Proceedings of 2<sup>nd</sup> International Conference on Electrical Engineering and Computer Science (ICECOS), Bangka-Belitung, 2-4 October, 2018, pp. 339-344
92. Kurniabudi, Benni Purnama, Sharipuddin, Deris Stiawan, Darmawijoyo, **Rahmat Budiarto**, 2018, Preprocessing and Framework For Unsupervised Anomaly Detection in IoT: Work On Progress,

Proceedings of 2nd International Conference on Electrical Engineering and Computer Science (ICECOS), Bangka-Belitung, 2-4 October, 2018, pp. 345-350.

93. M. S. Adrees, O. E. Sheta, M. K. Omer, D. Stiawan, **R. Budiarto**, 2018, A Framework of Promoting Government Services using Social Media: Sudan E-Government Case Study, Proceedings of the 2<sup>nd</sup> Forum in Research, Science, and Technology (FIRST 2018), Palembang, 30-31 Oct. 2018.
94. Deris Stiawan, Ubaidillah, Tri Wanda Septian, Reza Firsandaya Malik, Fepiliana, **Rahmat Budiarto**, Ahmad Heryanto, 2018, Analysis WhatsApp Forensic and Visualization in Android Smartphone with Support Vector Machine (SVM) Method, International Conference on Information System, Computer Science and Engineering (ICONISCSE 2018), Palembang, 26-27 Nov. 2018,
95. [Muhammad Fermi Pasha](#), [Hui San Lee](#), [Arini Widhiyasi](#), [Ronsen Purba](#), [Ahmed Mansour](#), [Rahmat Budiarto](#), 2020, [Neural Network-based Mobile App Framework to Aid Resource-poor Setting Community Health](#), 2020-International Conference on Computing and Information Technology (ICCIT-1441), Tabuk, Saudi Arabia, 10-11 Sept. 2020, pp....
96. [Kurniabudi](#), [Deris Stiawan](#), [Rahmat Budiarto](#), 2020, [Improving the Anomaly Detection by Combining Best-First and PSO Search Methods on Feature Selection](#), 7<sup>th</sup> International Conference on Electrical Engineering, Computer Science and Informatics (EECSI), Yogyakarta, October 1-2, 2020,
97. [Sharipuddin](#), [Beni Purnama](#), [Kurniabudi](#), [Eko Arip Winanto](#), [Deris Stiawan](#), [Darmawijoyo](#), [Hanapi](#), [Rahmat Budiarto](#), 2020, [Features Extraction on IoT Intrusion Detection System Using Principal Components Analysis \(PCA\)](#), 7<sup>th</sup> International Conference on Electrical Engineering, Computer Science and Informatics (EECSI, Yogyakarta, ), October 1-2, 2020,
98. [Susanto](#), [Deris Stiawan](#), [M. Agus Syamsul Arifin](#), [Mohd. Yazid Idris](#), [Rahmat Budiarto](#), [Classification Malware Botnet IoT Using Tools Weka and Scikit-learn Machine Learning](#), 7<sup>th</sup> International Conference on Electrical Engineering, Computer Science and Informatics (EECSI, Yogyakarta, ), October 1-2, 2020,

#### Non Scopus Proceedings:

99. **Rahmat Budiarto**, Masashi Yamada, Hidenori Itoh, Hirohisa Seki, 1994, Constrained Knot Representation And Its Process, *Proceedings of the third International Conference on Automation, Robotics and Computer Vision*, Vol. 3, Singapore, Nov. 1994, pp. 1457-1461.
100. **Rahmat Budiarto**, Masashi Yamada, Tsutomu Kunitachi, Hirohisa Seki, Hidenori Itoh, 1995, An Implementation of a Cat's Cradle Diagram Display System, *Proceedings of the Annual National Symposium on Graphics and CAD*, Tokyo, Oct. 1995, pp. 25-31.
101. **Rahmat Budiarto**, Masashi Yamada, Tsutomu Kunitachi, Hirohisa Seki, Hidenori Itoh, 1995, AYASYS: An Interactive System For Constructing Cat's Cradle Diagrams, *Proceedings of the Second Asian Conference on Computer Vision*, Vol.3, Singapore, Dec. 1995, pp. 295-299.
102. Masashi Yamada, **Rahmat Budiarto**, Tsutomu Kunitachi, Hirohisa Seki, Hidenori Itoh, 1996, A Cat's Cradle Display System and String State Characterizations Based on a Link Polynomial, *Proceedings of the World Automation Congress (WAC'96)*, pp. 769-774.
103. **Rahmat Budiarto**, Azman Samsudin, Masashi Yamada, 2002, Simple Knit Design System Using Pattern Matching, *Proceedings of the 5<sup>th</sup> IASTED-CGIM (Computer Graphics and Imaging)*, Hawaii, Aug. 2002, pp. 116-120,

104. Zaiyatul Hijah, **Rahmat Budiarto**, Azman Samsudin, Sureswaran Ramadass, 2002, IPv6 Packet Analyzer, *Proceedings of Asia Pacific Advance Network (APAN-2002) Conference*, Shanghai, Aug. 2002, pp. 22-27.
105. Azruddin Ahmad, Gobithasan Rudrusamy, **Rahmat Budiarto**, Azman Samsudin, Sureswaran Ramadass, 2002, Hybrid Rule Based Fuzzy-Neural Expert System For Passive Network Monitoring, *Proceedings of the Arab Conference on Information Technology (ACIT'02)*, Dhaha, Dec. 2002, pp. 746-752.
106. Hassan Ibrahim, Azman Samsudin, **Rahmat Budiarto**, 2002, Optimised Butterfly-Kautz Rearrangeable Nonblocking Networks, *ATCM2002*, Mellaca, Dec. 2002, pp. 400-410.
107. Gobithasan Rudrusamy, Azruddin Ahmad, **Rahmat Budiarto**, Azman Samsudin, Sureswaran Ramadass, 2003, Fuzzy Based Diagnostics System For Identifying Network Traffic Flow Anomalies, *Proceedings of the ROVISIP'03*, Penang, Jan. 2003, pp. 190-195.
108. R. Sureswaran, **Rahmat Budiarto**, V. Siva, 2003, Satellite Bandwidth Requirements For An MCS Based Multimedia Conference, *Proceedings of the SAINT2003 Workshop*, Orlando, Jan. 2003, (pp.56-59).
109. Sureswaran Ramadass, Azlan Bin Osman, **Rahmat Budiarto**, N. Sathianathan, Ng Chin Keong, Choi Sy Jong, 2003, Real-Time Virus Detection System Using iNetmon Engine, *Proceedings of Asia Pacific Advance Network (APAN-2003) Conference*, Fukuoka, Jan. 2003, (CD-ROM).
110. Zaiyatul Hijah, **Rahmat Budiarto**, Sureswaran Ramadass, S.J. Choi, 2003, Implementation of IPv6 Protocol Analyzer and Network Monitoring, *Proceedings of the 3<sup>rd</sup> Information and Computer Engineering Postgraduate Workshop (ICEP 2003)*, Shongkhla, Thailand, Jan. 2003, pp. 28-32.
111. Sureswaran Ramadass, Choi Sy Jong, **Rahmat Budiarto**, 2003, iNetmon– A Real-Time Network Monitoring Tool, *Proceedings of the International Conference on Information Networking (ICOIN2003)*, Jeju Island, Korea, Feb. 2003, pp. 561-572.
112. **Rahmat Budiarto**, Bahari Belaton, Abdullah Zawawi Hj. Talib, 2003, Topological Transformations of Constrained Knots, *Proceedings of International Conference on Research and Education in Mathematics (ICREM 2003)*, Bangi, April 2003, (CD-ROM)
113. Azruddin Ahmad, **Rahmat Budiarto**, Sureswaran Ramadass, 2003, Network Share Virus Detection Using Fuzzy Rules, *Proceedings of Conference on Intelligent System and Robotics (CISAR-ATC 2003)*, PutraJaya, May 2003 (distributed in CD-ROM).
114. R Sureswaran, **B. Rahmat**, SJ Choi, 2003, A tool to Monitor Networks in Real Time, *Proceedings of The IASTED Conference on Computer Science and Technology (IASTED-CST 2003)*, Cancun, Mexico, May 2003, pp. 125-130.
115. Muhammad Aiman Mazlan, Azman Samsudin, **Rahmat Budiarto**, 2003, Secure Groups Communication Using Mobile Agents Technologies, *Proceedings of The 3<sup>rd</sup> International Conference on Information Technology in Asia (CITA'03)*, Kuching, July 2003, pp. 269- 274.
116. R Sureswaran, SJ Choi, **B. Rahmat**, 2003, FIFO Buffer for iNetmon to Monitor Gigabit Network, *Proceedings of Network Research Workshop APAN2003*, Busan, August 2003, pp. 193-200.
117. **Rahmat Budiarto**, Saravanan.K, Sureswaran Ramadass, 2003, Network Security Policy, (*presented in Network Security Workshop, APAN Conference 2003*), Busan, August 2003.



118. Masashi Yamada, **Rahmat Budiarto**, Mamoru Endoh And Shinya Miyazaki, 2003, A System for Reading Comics on Cellular Phones and Comic Image Decomposition, *Proceedings of the 8<sup>th</sup> International Workshop on Mobile Multimedia Communications (MoMuc2003)*, Munich, Oct 2003, pp. 17-22.
119. Azruddin Ahmad, **Rahmat Budiarto**, Sureswaran Ramadass, 2004, Inetmon: Intelligent Monitoring – Appliance of AI techniques in Passive Network Monitoring, *Proceedings of ICEP-2004*, Phuket, Jan 2004, pp. 57-61.
120. Muhammad Fermi Pasha, **Rahmat Budiarto**, Putra Sumari, Azlan Osman, 2004, Data Mining And Rule Generation In Network Traffic Using Fuzzy Clustering Techniques, M2USIC 2004, Cyber Jaya, October, 2004, pp. 17-20.
121. Taufiq Abdul Gani, Ahamad Tajudin Khader, **Rahmat Budiarto**, Razamin Ramli, 2004, Population Diversity in Optimization of Examination Timetabling Using a Hybrid Evolution Strategies Algorithm, *Proceedings of the International Conference on Statistics and Mathematics and Its Application in the Development of Science and Technology*, Bandung, Oct., 2004, pp. 207-212.
122. Muhammad Fermi Pasha, **Rahmat Budiarto**, Ahamad Tajudin Khader, 2004, Developing Online Adaptive Engine for Profiling Network Traffic using Evolving Connectionist Systems, *Proceedings of International Conference on Neuro Computing and Evolving Intelligence 2004*, Auckland, New Zealand, Dec. 2004, pp. 69-70.
123. Taufiq Abdul Ghani, Ahamad Tajudin Khader, **Rahmat Budiarto**, 2004, Optimizing Examination Timetabling using a Hybrid Evolution Strategies, *International Conference on Autonomous Robots and Agents*, Palmerston North, New Zealand, Dec. 2004, pp. 345- 349.
124. Teh Chee Hong, Wan Tat Chee and **Rahmat Budiarto**, 2004, Experiences with the NS Simulator, *IEEE Computer Society Malaysia Chapter NS-2 Network Simulation Workshop 2004*, November 2004, ITMA, UPM Serdang, MALAYSIA, (distributed in CD-ROM)
125. Masashi Yamada, Muhammad Syukur, Muhammad Fermi Pasha, **Rahmat Budiarto**, 2005, Key Distribution Protocols Using Braid Group: One-way Function Based on Markov Problem, *Proceedings of the 1<sup>st</sup> IMT-GT Regional Conference on Mathematics and Statistics and Their Applications (IRCMSA 2005)*, Medan, Indonesia, June 2005, pp. 525-535.
126. **Rahmat Budiarto**, 2005, Ethno-mathematics & Computer Sciences, Keynote speech, IRCMSA 2005.
127. Mohd Anuar Ali, **Rahmat Budiarto**, Sureswaran Ramadass, 2005, Securing Binding Update between Mobile Node and Correspondent Node in Mobile IPv6 Environment, *Proceedings of the APAN Network Research Workshop 2005*, Taipei, August 2005, pp. 69-73.
128. E. Garcia, H Guyennet, JC Lapayre, S Ramadass, **R Budiarto**, N Kassim, 2005, Collaborative Telemedicine Components Integration in a Multimedia Conferencing System, *Proceedings of the APAN Network Research Workshop 2005*, Taipei, August 2005, pp. 59-67.
129. Muhammad Fermi Pasha, **Rahmat Budiarto**, and Mohammad Syukur, 2005, A Connectionist Engine for Evolvable Network Monitoring System with Anomaly Detection Capabilities *Proceedings of the International Conference on Instrumentation, Communication and Information Technology (ICICI 2005)*, Bandung, Indonesia, August 2005, pp. 111-116.
130. Muhammad Fermi Pasha, **Rahmat Budiarto**, Mohammad Syukur, 2005, Connectionist Model For Distributed Adaptive Network Anomaly Detection System, *Proceedings of the Fourth International Conference on Machine Learning and Cybernetics (ICMLC2005)*, Guangzhou, China, August 2005, pp. 3915-3920.

131. Muhammad Fermi Pasha, **Rahmat Budiarto**, Masashi Yamada, 2005, Adaptive Real-Time Network Monitoring System Detecting Anomalous Activity with Evolving Connectionist System, Proceedings of the 2<sup>nd</sup> International Conference on e-Business and Telecommunication Networks (ICETE 2005), Reading, UK, October 2005, pp. 201-209. (**Selected as one of the best papers**)
132. Teh Chee Hong, Wan Tat Chee, **Rahmat Budiarto**, 2005, A Comparison of IP Datagrams Transmission using MPE and ULE over Mpeg-2/DVB Networks, Proceedings of ICICS 2005, Bangkok, Thailand, Dec. 2005, (Distributed in CD-ROM).
133. Mohammed Saghir, Tat-Chee Wan, **Rahmat Budiarto**, 2006, QoS Multicast Routing Based on Bandwidth Estimation in Mobile Ad Hoc Networks, Proceedings of the International Conference on Computer and Communication Engineering, ICCCE'06 Vol. I, Kuala Lumpur, Malaysia, 9-11 May 2006, pp. 384-389.
134. Mohammad Syukur, Muhammad Fermi Pasha, Sureswaran Ramadass, and **Rahmat Budiarto**, 2006, A Distributed Approach of Intelligent Network Traffic Monitoring and Anomaly Detection Application, Proceedings of the 2<sup>nd</sup> International Conference on Distributed Framework for Multimedia Applications (DFMA 2006), Penang, 15-17 May 2006, pp. 160-165.
135. Ong Chin Joo, **Rahmat Budiarto**, Gian Chand Sodhy, 2006, HoneyNet In Network Security Using Multi-Layer Data Control And Data Capture Mechanisms, Proceedings of the 3<sup>rd</sup> IASTED International Conference on Communications and Computer Networks, Lima, Peru, 4-6 Oct. 2006, pp. 114-119.
136. Abidah Hj Mat Taib, **Rahmat Budiarto**, Azman Samsudin, 2007, IPv6 Transition: Why a New Security Mechanism Model is Necessary, Proceedings of APAN Research Workshop 2007, pp. 35-41.
137. Maulana Abdul Aziz, Lelyzar Siregar, Muhammad Fermi Pasha, **Rahmat Budiarto**, 2008, Geometric Transformations and High-level Middleware for Web-based GIS to Autonomous GIS Transformation, Proceedings of International Conference on Mathematics and Natural Sciences 2008, Institut Teknologi Bandung, October 28 - 30, 2008. pp. (distributed in CD-ROM)
138. B. Pahlevanzadeh, S.A. Hosseini-Seno, T.C Wan, **R. Budiarto**, 2008, DH-IDS Using Mobile Agents for MANET, Proceedings of International Conference on Mathematics and Natural Sciences 2008, Institut Teknologi Bandung, October 28 - 30, 2008. pp. (distributed in CD-ROM)
139. B. Pahlevanzadeh, S.A. Hosseini-Seno, T.C Wan, **R. Budiarto**, 2008, A Survey on How to break Hash Functions, Proceedings of International Conference on Mathematics and Natural Sciences 2008, Institut Teknologi Bandung, October 28 - 30, 2008. pp. (distributed in CD-ROM)
140. A. Hosseini-Seno, B. Pahlevanzadeh, T. C. Wan, **R. Budiarto**, M. M. Kadhum, 2008, A Distributed Resource-Management Approach in MANETs, Proceedings of International Conference on Network Applications, Protocols and Services (NetApps2008), Sintok, Malaysia, 21-22 Nov, 2008, pp. (distributed in CD-ROM), **selected as one of the 10 best paper and being published in Journal of Engineering Science and Technology (JESTEC)**, <<http://jestec.taylors.edu.my/>>
141. B. Pahlevanzadeh, S.A. Hosseini Seno, T.C. Wan, **R. Budiarto**, Mohammed M. Kadhum, 2008, A Cluster-Based Distributed Hierarchical IDS for MANETs, Proceedings of International Conference on Network Applications, Protocols and Services (NetApps2008), Sintok, Malaysia, 21-22 Nov, 2008, pp. (distributed in CD-ROM)
142. Seyed Amin Hosseini Seno, Bahareh Pahlevanzadeh, Wan Tat-Chee, **Rahmat Budiarto**, 2008, A Security Scheme for Cluster Based Mobile Adhoc Networks, Proceedings of 2<sup>nd</sup> International Conference on Science and Technology (ICSTIE 2008), Penang, 12-13 Dec.2008, pp.2591-2597.

143. Bahareh Pahlevanzadeh, Seyed Amin Hosseini Seno, Wan Tat-Chee, **Rahmat Budiarto**, 2008, A Comparative Study on The Development of Ethernet Flow Control, Proceedings of 2<sup>nd</sup> International Conference on Science and Technology (ICSTIE 2008), Penang, 12-13 Dec.2008, pp.2335-2342.
144. Abidah Mat Taib, Adil Hidayat, **Rahmat Budiarto**, 2008, Issues and challenges in IPv6 transition, Proceedings of 2<sup>nd</sup> International Conference on Science and Technology (ICSTIE008), Penang, 12-13 Dec.2008, pp.2291-2297.
145. Seyed Amin Hosseini Seno, T. C. Wan, **R. Budiarto**, 2009, Energy Efficient cluster based routing protocol for MANETs, International Conference on Computer Engineering and Applications (ICCEA 2009), Manila, June 2009, pp. 435-439.
146. Raja Kumar, M., Sureswaran, R., and **Budiarto, R.**, 2009 Service Provisioning in terms of Performance for IPv6 Based Communication, in Proceedings of APAN Network Research Workshop, Kuala Lumpur, 20 - 23 July 2009, pp. 37-44.
147. Supriyanto, Abidah M. Taib, **Rahmat Budiarto**, 2009, Selecting a Cyclic Redundancy Check (CRC) Generator Polynomial for CEH (CRC Extension Header), Proceedings of the 11<sup>th</sup> International Conference on Quality in Research (QiR), Jakarta Indonesia, 3-6 August, 2009, 245-250.
148. Primantara H.S, Armanda C.C, **R. Budiarto**, Tri Kuntoro P, 2009, QoS Mechanism With Probability for IPv6-Based IPTV Network, Proceedings of International Conference on Creative Communication and Innovative Technologies (ICCI09), Jakarta, 8 August 2009. pp. 206-211.
149. Mohd Nizam Omar, **Rahmat Budiarto**, 2009, Intelligent Host-based Stepping Stone Detection Approach, The World Congress on Engineering and Computer Science 2009, San Francisco, USA, 20-22 October, 2009, pp. 815-820
150. Tan Aik Theng, Muhammad Rafie Hj. Mohd. Arshad, **Rahmat Budiarto**, 2009, Applying multiple tag co- Existence Proof for Proofing Multiple Reader Existence, Proceedings of IEEE International Conference On Antennas, Propagation And Systems (INAS 2009), 3-5 Dec 2009, Johor Bahru, pp. 82.1-82.5.
151. Supriyanto, Iznah Hasbullah, **Rahmat Budiarto**, 2009, Exploiting IPv6 Extension Header To Handle Transmission Error For Ipv6 Packets Over High Speed Networks, Proceedings of IEEE International Conference on Advanced Computer Science and Information System (ICACSIS 2009), Jakarta, 5-7 Dec 2009, pp.273-278.
152. Armanda Caesario Cornelis, Primantara Hari Trisnawan, **Rahmat Budiarto**, 2009, Seamless And Secure Mobile IPTV Binding Update Using Mobile Ipv6, Proceedings of IEEE International Conference on Advanced Computer Science and Information System (ICACSIS 2009), Jakarta, 5-7 Dec 2009, pp. 279-282.
153. Mohammad M. Rasheed, Osman Ghazali, **Rahmat Budiarto**, 2012, Behavioral Analysis For Scanning Internet Worms, Proceedings of 3<sup>rd</sup> International Conference on Engineering and ICT (ICEI2012), Melaka, Malaysia, 4 -5 April 2012, pp. 59-63.
154. Abidah Hj Mat Taib, Nurul Sharidah Shaari, Wan Ashiqin Wan Ali and **Rahmat Budiarto**, 2012, SF-ICMP6: Selective Filtering ICMPv6 Messages for a Secure IPv6 Deployment, Proceedings of the 3<sup>rd</sup> International Conference on Networks Applications Protocols and Services (NetAPPS2012), Sintok, Malaysia, 19-20 September 2012, pp.1-6.
155. Vasuky Mohanan and **Rahmat Budiarto**, 2012, Vehicular Communication Survey, Proceedings of the 3<sup>rd</sup> International Conference on Networks Applications Protocols and Services (NetAPPS2012), Sintok, Malaysia, 19-20 September 2012, pp.48-55.

156. Mahdi Zareei, **Rahmat Budiarto**, Suhaidi Hassan, 2012, Impact of Simulation Parameters on The Performance of WSNs MAC Protocol, Proceedings of the 3<sup>rd</sup> International Conference on Networks Applications Protocols and Services (NetAPPS2012), Sintok, Malaysia, 19-20 September 2012, pp.63-66.
157. Mohd Samsu Sajat, Suwannit Chareen Chit, and **Rahmat Budiarto**, 2013, Performance Metrics for Evaluating Energy Efficient MAC Protocols in Wireless Sensor Network, Proceedings of Rural ICT Development (RICTD) International Conference 2013, Malacca, MALAYSIA, 25 - 27 Jun 2013, pp (distributed in CD-ROM).
158. **Rahmat Budiarto**, Mohammed Saleh T. Alghamdi, Arnold Pears, Lelyzar Siregar, 2015, The Study Process of Computer Science Students at AlBaha University: A Preliminary Study, Proceedings of the AlBaha University and Uppsala University Symposium on Quality in Computing Education (ABU3QCE 2015), Albaha, KSA, 24-25 February 2015, pp.3-6
159. Ali Alshehri, Naif Hamed Almutairy, El-Sayed Osman, Mohamed Shenify and, **Rahmat Budiarto**, 2015, Improvement of Teaching Listening English as Secondary Language Using Student Response Systems, A Case Study at King Fahd Secondary School in Albaha: Towards Informed Teacher Decisions, Proceedings of the AlBaha University and Uppsala University Symposium on Quality in Computing Education (ABU3QCE 2015), Albaha, KSA, 24-25 February 2015, pp.47-51.
160. Mohammed AlGhareem, Mohd Hasbullah Omar, Ibrahim Alghamdi, **Rahmat Budiarto**, 2015, An Efficient Modulation and Coding Scheme Selection Mechanism for Single-cell Mode E-MBMS, Proceedings of the 2nd International Conference on EECSEI, Palembang, Indonesia 19-21 August, 2015 (distributed in CD-ROM)
161. Ibrahim Alghamdi, Abdullah Alghamdi, Bedine Kerim, **Rahmat Budiarto**, 2015, Autonomous-Collaborative Mobile Cloud Resource Management System, Proceedings of the International Conference on Innovation, Entrepreneurship and Technology (ICONIET2015), BSD City, Indonesia, 25-26 Nov. 2015, pp. 441-446.
162. Vasuky Mohanan, Moh'D Suliman Shakkah, **Rahmat Budiarto**, 2015, Holistic Policy Framework for Context Based Network Selection for Mobile Nodes, Proceedings of ICONIET2015, BSD City, Indonesia, 25-26 Nov. 2015, pp.447-453.
163. Saad Alqithami, Musaad Alzahrani, Rahmat Budiarto, Henry Hexmoor, 2019, A Measurement of Social Capital in an Open Source Software Project, proceedings of 2019 International Conference on Social Computing, Behavioral-Cultural Modeling, & Prediction and Behavior Representation in Modeling and Simulation, July 09-12, 2019, Lehman Auditorium, George Washington University, Washington DC, USA. [http://sbp-brims.org/2019/proceedings/papers/working\\_papers/Alqithami.pdf](http://sbp-brims.org/2019/proceedings/papers/working_papers/Alqithami.pdf).

## Publication List – National Proceedings

1. Masashi Yamada, **Rahmat Budiarto**, Hirohisa Seki, Hidenori Itoh, 1993, A Characterization of Knot Constrained by Points and Its Processing, *Proceedings of the 7<sup>th</sup> Annual National Conference of JSAI (Japan Society of Artificial Intelligence)*, Tokyo, Mac. 1993, pp. 31-34.
2. Masashi Yamada, **Rahmat Budiarto**, Hidenori Itoh, Hirohisa Seki, 1994, CAI for a Cat's Cradle (Ayatori) Construction, *Proceedings of the Annual National Conference of JCET (Japan Community of Education & Technology)*, Gifu, Oct. 1994, pp. 657-658.
3. **Rahmat Budiarto**, Jimmy Tirtawangsa, Ahmad Munansyah, Edward P. Purba, 1999, Penyetabil Evolusioner Untuk Membangun Pola Tali-Temali 3-Dimensi Dan Aplikasinya, *Proceedings of the National Seminar on Computational Intelligence*, Jakarta, Jul. 1999, pp. 151-155.
4. **Rahmat Budiarto**, Azman Samsudin, Abdullah Zawawi Hj. Talib, Bahari Belaton, 2002, Energy Based String (Rope) Visualization System in Three-Dimensions, *Proceedings of the National Conference on Computer Graphics and Multimedia-CoGRAMM'02*, Melaka, Oct. 2002, pp.444-448.
5. R. Sureswaran, S.J. Choi & **B. Rahmat**, 2003, iNetmon. Bringing Security to the IT world, *Proceedings of IPTA2003*, Kuala Lumpur, Oct.2003 (distributed in CD-ROM)
6. **Rahmat Budiarto**, Muhammad Fermi Pasha, Putra Sumari, Azlan Osman, 2004, Netmansys: A Web Based Internet Usage Monitoring System Using Defensive Rule Setting, COGRAM 2004, Selangor, Dec., 2004, pp. 256-260.
7. Mohammed Saghir, Tat Chee Wan, **Rahmat Budiarto**, 2005, Multicast Routing with Quality of Service in Mobile Ad hoc Networks, *Proceedings of the 1<sup>st</sup> National Computer Science Postgraduate Colloquium 2005*, Penang, June 2005, (Distributed in CD-ROM)
8. Teh Chee Hong, Wan Tat Chee, **Rahmat Budiarto**, Simulation and Design of IP over DVB using Multi-Protocol Encapsulation and Ultra Lightweight Encapsulation, *Proceedings of the 1<sup>st</sup> National Computer Science Postgraduate Colloquium 2005*, Penang, June 2005, (Distributed in CD-ROM)
9. Mohd Anuar Ali, **Rahmat Budiarto**, 2005, Diffie-Hellman based binding to secure Mobile and Correspondent Binding Update in Mobile IPv6, *Proceedings of the 1<sup>st</sup> National Computer Science Postgraduate Colloquium 2005*, Penang, June 2005, (Distributed in CD-ROM)
10. Maulana Abdul Aziz, **Rahmat Budiarto**, Abdullah Zawawi Haji Talib, 2005, Transforming GIS Coordinate System to GLOBALBASE Coordinate System, *Proceedings of the 1<sup>st</sup> National Computer Science Postgraduate Colloquium 2005*, Penang, June 2005, (Distributed in CD-ROM)
11. Taufiq Abdul Ghani, Ahamad Tajudin Khader and **Rahmat Budiarto**, 2005, Saturation Degree and Backtracking Algorithm in Creating Optimal Solution For Examination Timetabling Problem, *Proceedings of the 1<sup>st</sup> National Computer Science Postgraduate Colloquium 2005*, Penang, June 2005, (Distributed in CD-ROM)
12. Muhammad Fermi Pasha, **Rahmat Budiarto**, 2005, An Implementation of Intelligent Semester Planner to Plan Ahead Undergraduate Studies, *Proceedings of the National Conference on Programming Sciences 2005 (ATUR2005)*, Putrajaya, December 2005, pp.145-155.
13. Abidah Hj. Mat Taib, **Rahmat Budiarto**, 2007, Security Mechanisms for IPv4 to Ipv6 Transition, *Proceedings of the 5<sup>th</sup> Student Conference on Research and Development (SCORED2007)*, Bangi, Dec. 2007, (distributed CD-ROM).

### Other Publication:

1. **Rahmat Budiarto**, 2001, Integrating Network Management And Security Into Network Design, Network Management Tutorial, Asia Pacific Advance Network (APAN-2001) Conference, Penang, Aug. 2001, pp. 27-39.