

RAHMAT BUDIARTO

Professor

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Social Media    



A results-driven enthusiastic researcher and inventor with more than 20+ years experiences in academic and 10 years in industry, more than 340 publications, recipient of 10+ prestigious awards including 4 awards on research products in network monitoring, secured 20+ university and national level research grants, started up research groups, supervised and graduated 18 PhDs, 12 Masters by research, and 80+ Master course work.

EDUCATION

- 1998 Nagoya Institute of Technology, Japan, Doctor Engineering in Computer Science
Computer and Electrical Engineering
Thesis Title: A Study on Geometrical Model of Knot in Computer Graphics
- 1995 Nagoya Institute of Technology, Japan, Master Engineering in Computer Science
Computer and Electrical Engineering
Thesis Title: Intelligent String Processing in Computer Graphics
- 1986 Bandung Institute of Technology, Indonesia, Bachelor of Sciences Department of Mathematics
Thesis Title: Quality Control for Non-Normal Process using CUSUM Chart

PROFESSIONAL APPOINTMENTS

• ACADEMIC

2014 – Current	Full Professor	Albaha University, Saudi Arabia
2013 – 2014	Full Professor/Director	Surya University, Indonesia Networked Computing Center, Indonesia
2011 – 2013	Full Professor	Universiti Utara Malaysia, Malaysia
2011 – 2011	Full Professor	Universiti Sains Malaysia, Malaysia
2005 – 2011	Associate Professor	Universiti Sains Malaysia, Malaysia
2000 – 2005	Lecturer	Universiti Sains Malaysia, Malaysia

• **INDUSTRY/ENGINEERING**

1998 – 2000 Senior System Engineer IT Center, PT. IPTN, Bandung, Indonesia
1989 – 1992 System Analyst IT Center, PT. IPTN, Bandung, Indonesia

• **MANAGERIAL**

2016 – 2019 Advisor Scientific Research Deanship, Albaha Univ.
2015 – present Chairman Smart Networked Computing Research Group
2013 – 2013 Director Networked Computing Center, Surya Univ.
2011 – 2013 Director of Research InterNetWorks Research Lab., UUM, Malaysia
2006 – 2009 Deputy Director National Advanced IPv6 Center, USM, MY.
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

• **CONSULTANCY**

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

• **CONFERENCE/WORKSHOP ORGANISER**

2022 EECSI22, Steering Comm. Member, Budi Luhur Univ., Indonesia
2022 ICACS22, Tech. Prog. Comm. Member, Iraq
2021 EECSI21, Chairman, Indonesia
2021 ICACS21, Tech. Prog. Comm. Member, Iraq
2020 ICCIS2020 Conf., Program Chairs, IACSIT, Vietnam City,
2019 ICCAI2019 Conf., International Comm. Board, USU, Indonesia
2018 ICCAI2018 Conf., International Comm. Board, USU, Indonesia
2017 ICCAI2017 Conf., International Comm. Board, USU, Indonesia
2017 EECSI2017 Conf., Steering Committee, UDA, Yogya, Indonesia
2016 ICCAI2016 Conf., International Comm. Board, USU, Indonesia
2016 EECSI2016 Conf., Steering Committee, UNISSULA, Indonesia
2015 EECSI2015 Conf., Steering Committee, UNSRI, Indonesia
2015 4th NetAPPs Conference, TPC Chair, UUM, Malaysia
2014 EECSI2014 Conf. Honorary Committee Chair, UDA, Indonesia

2012	3rd NetAPPs Conference, General Chair, UUM, Malaysia
2010	2nd NetAPPs Conference, General Chair, USM, Malaysia
2009	28th APAN Meeting and Conference 2009, Local Committee Co-Chair, Kuala Lumpur, Malaysia
2009	SECRYPT'09, Technical Committee Member, Portugal
2009	CCIT'09, International Committee Member, Indonesia
2008	DFMA'08, Co-Chairman, Steering Committee, USM, Malaysia
2008	SECRYPT'08, Technical Committee Member, Portugal
2007	SECRYPT'07, Technical Committee Member, Portugal
2006	SECRYPT'06, Technical Committee Member, Portugal
2006	DFMA'06, Chairman, USM, Malaysia
2005	DFMA'05, Steering Committee Member, Besancon, France
2005	COMPEX'05, Secretary, USM, Malaysia
2005	IPv6 Set-up Training, Chairman, MCMC, Malaysia
2001	12th APAN Meeting and Conference 2001, Local Committee Co-Chair, USM, Malaysia

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 (Membership No.: 90543082)
- IAES (Institute of Advanced Engineering and Sciences)
- AAAI -Assoc. for Advancement of Artificial Intelligence, (Membership no. 57672)
- ACM (Membership Nol.: 7566413)

PUBLICATIONS

Overall 343 publications: 1 Edited Book, 10 Book Chapters, 134 International Journal articles, 183 International Proceedings articles, 13 National Proceedings articles, and 2 other publications (see attachment)

AWARDS AND HONORS

2021	Best Paper Awards, 4 th International Conference on Data Science and Its Applications (ICoDSA)
2021	Best Paper Awards, 8 th International Conference on Electrical Engineering, Computer Science and Informatics (EECSI)
2019	Best Performance Staff (Research Category), College of Computer Science and IT, Albaha University
2011	Hall of Fame Award, High Impact Research Publication Category, Universiti Sains Malaysia
2007	Hall of Fame Award, Research Product Category, Universiti Sains Malaysia
2007	Silver Medal, Malaysia Technology Expo (MTE 2007) for research product: M-Protect: A High-Performance Network Worm Detection Engine using Memory Efficient Circular Buffer Techniques
2006	Hall of Fame Award, Research Product Category, Universiti Sains Malaysia

2006	Silver Medal, The 17th International Innovation, Invention, Industrial Design and Technology Exhibition (ITEX2006) for research product: J-Networm: A Multi-platform Network Worm Detection System
2006	Gold Medal, The 34 th International Exhibition of Invention New Techniques and Products, Geneva, Switzerland, for research product: iNetworm: Network Worm Monitoring System
2005	Gold Medal, IPTA R&D Expo 2005, for research product: iNetworm: Network Worm Monitoring System
2004	Second Runner-up, in RoboGP, Singapore, (Team Leader)
2004	Best Paper Award from the Journal of the Society for Art and Science, Japan
2002	Best Paper Award from the organizing committee of the 6th World Multiconference on Systemics, Cybernetics, and Informatics - SCI 2002, USA
1999	Young Researcher Award, Directorate of High Education, Ministry of Education, Republic of Indonesia
1998	Sagawa Foundation Scholarship Award, Japan
1997	Sagawa Foundation Scholarship Award, Japan
1997	Hayao Nakayama Foundation Award, (Sega Company), Japan
1996	Sagawa Foundation Scholarship Award, Japan

GRANTS AND FELLOWSHIPS

GRANTS IN NATIONAL LEVEL

31/5/2020 – 2/7/2020	"Square-2.ai" Startup Idea to Beat Covid-19 Pandemic on Business Sustainability Program (KACST), SAR 100,000, (Co-Founder)
1/1/ 2017	"Baddel" Startup Idea Which Adds into College Students Services Around the Kingdom, TAQADAM Program (KAUST- SABB bank), USD 40,000 (Co-Founder)
1/8/2013 – 31/5/2014	Deployment of IPv6 dual stack network at Indonesia Army HQ, IDR 600,000,000 (Principal Investigator)
1 /9/2012 – 31/8/2014	Capacity Building on IPv6 Technology for Public Sector in Malaysia, RM145,000, Knowledge Transfer Program (KTP), MoHE, (Main Researcher)
1/4/2011 – 31/3/2013	Study on Human Neocortex Inspired Memory System and its Neurogenetic Connections: Towards Brain-like Knowledge Engineering Approach, FRGS, RM58,000
1/9/2007 – 28/2/2009	Intelligent Passive Network Fault Detection & Isolation (E-SCIENCE FUND), RM 248,400, (Principal Investigator)
1/10/2007 – 31/10/2009	IPv6 National Development Project (Ministry of Energy Water & Communication), RM 5,000,000 (Project Co-Leader)
1/10/2007 – 31/3/2009	A New Security Mechanisms Model in the IPv4 to IPv6 Transition (FRGS-MoHE), RM 68,000 (Principal Investigator)
1/11/2006 – 31/5/2008	Secure Multimedia Conferencing System over WAN (E-Science Fund), RM 98,000 (Principal Investigator)

1/4/2002 – 30/9/2003 Intelligent Network Monitoring System, Top-Down IRPA, RM 524,000 (Project Leader)

GRANTS IN UNIVERSITY LEVEL

1/7/2020 – 31/1/2022 An Intelligent Specialized Tool to Trace and Monitor COVID-19 Spreading, (Albaha University Research Grant), SAR 80,000 (Researcher)

1/12/2019 – 31/10/2020 User Behaviour Analytics Tool Using Predictive-Memory Concept, (Albaha University Research Grant), SAR 45,000 (Researcher)

1/11/2017 – 31/8/2018 Development of Albaha University Network Security Management System (Albaha University Research Grant), SAR 55,000 (Researcher)

1/11/2017 – 31/8/2018 Infrastructure-less Fog Driving Assistance System Using Smartphone, (Albaha University Research Grant), SAR 42,000 (Researcher)

1/3/ 2016 – 28/2/2017 Albaha Smart Internet of Farming System, (Albaha University Research Grant), SAR 150,000 (Main Researcher)

1/10/2015 – 31/8/2016 Optimizing Enterprise Resource Planning (ERP) Implementation in Al Baha University (ABU): An Investigation Study, (Albaha University Research Grant), SAR 38,500 (Principal Investigator)

1/9/2014 – 31/8/2015 Energy Efficiency and Communications Protocols of Multi-Tier Mobile Communications Systems and their Impacts in Albaha District, (Albaha University Research Grant), SAR 19,000 (Co-Researcher)

1/8/2010 – 31/7/2013 Modelling Human Neocortex Inspired Memory System and its Neurogenetic Connections: Towards Brain-like Knowledge Engineering Approach, (RU Grants), RM245,200 (Principal Investigator)

1/1/2009 – 31/1/2012 Hierarchical Service Discovery and Advertisement In Mobile Ad-Hoc Networks, (RU Grants), RM 86,400 (Principal Investigator)

1/10/2007 – 31/3/2009 Distributed Network Monitoring and Security, (Golden Goose Project, RU Grants), RM 885,600 (Co-Leader)

1/5/2008 – 31/5/2010 A Study on Techniques for Handling Transmission Error of IPv6 Packets over Fiber Optic, (Short term-USM), RM 39,455 (Principal Investigator)

1/11/2000 – 31/5/2002 A Geometry Model and a Processing Method of Constrained Knots Based on Its Minimum Energy, Short-term Grant, RM 15,800 (Principal Investigator)

FELLOWSHIP

2002 JSPS (Japan Society for Sciences Promotion) Fellowship (Chukyo University), Toyota City, Japan

VISITING RESEARCHER/PROFESSOR

16-31 March 2019	Visiting Professor, Faculty of Engineering, Nagoya Institute of Technology, Japan
7-11 August 2017	Visiting Professor, Faculty of Computer Science & IT, Universitas Andalas, Indonesia
5-9 Sept. 2016	Visiting Professor, Faculty of Computer Science & IT, Universitas Sriwijaya, Indonesia
8-24 June 2009	Visiting Professor, Graduate School, Computer Sciences, Universitas Gajah Mada, Indonesia,
Feb 2002	Visiting Researcher under JSPS Fellowship, Chukyo University, Japan

NATIONAL-LEVEL PROJECT ACCOMPLISHED

10/2007 – 5/2008	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
12/2007 – 1/2008	Pilot Project: RFID-based Hajj System, Tabung Haji Malaysia in collaboration with Ummul Qura' University, Mecca, Kingdom of Saudi Arabia

INVITED AND KEYNOTE SPEAKER

INVITED SPEAKER

27 December 2022	Complex System Modeling for Securing Cyber Infrastructure", Mathematics Dept., Defence University, Indonesia
10 August 2021	"The Roles of STEM in Cybersecurity Education and Industry", Mathematics Dept., Defence University, Indonesia
2 December 2020	"Cybersecurity Attacks & Defences", CES Dept., ABU
17 September 2020	"Smart Learning Strategy at University Level", HMIF-UAI, Special Lecture, Jakarta
20 August 2020	"Research in Informatics: Challenge and Opportunity", Informatics-UAI Talkshow, Jakarta
19 August 2019	"The Convergence of AI, Machine Learning and Cyber Security", Sharing Session Telekom Innovation Day, Jakarta,
8-10 Sept. 2016	"Powering Network Monitoring System with Intelligence Engine", UNSRI, Indonesia
11 December 2012	"Verifying IPv6 Networks Deployment Through Audit Process", UUM IPv6 Deployment, Malaysia
6 June 2012	"Deployment of UUM IPv6 Networks, IPv6 Launch Day in Malaysia, MCMC, Cyberjaya, Malaysia
3 – 4 December 2008	"Computer-Based Batik Pattern Generation", South-East Asia Conference on Ethnomathematics, INSPEMS-UPM, Malaysia
10 June 2008	"IPv6 Transition to Next Generation Networks", Universitas Gadjah Mada, Indonesia
15 March 2008	"IPv6 An Imperative Key for IP-Based Network Convergence", STMIK-Mikroskil, Medan, Indonesia

29 October 2007	"IPv6 Pilot Project at MEWC", Taklimat Pelaksanaan IPv6, MAMPU, PICC, Putrajaya, Malaysia
30 May 2007	"IPv6: An Option for Rural Connectivity", Executive Training on Rural Connectivity, ITU-UUM, Malaysia
11 November 2006	"IPv6 and Next Internet technology", Public Lecture, UNSYIAH, Indonesia
25 July 2006	"Researches on the Next Generation Networks", Seminar Industri Telematika 2006, Pascasarjana USU-NAV6 USM, Medan, Indonesia
27 January 2006	"IPv6 Deployment in Malaysia", APAN IPv6 Task-force Meeting, Tokyo, Japan
March 2005	"IPv6 Deployment Status", The 3rd Annual Next Generation Networks, Marcus Evans
July 2004	"IPv6 Protocol Analyser", Indonesia IPv6 Forum (NICE'04)

KEYNOTE SPEAKER

28 November 2022	"Memory-Prediction Framework in Predictive Behavior", 3 rd International Recent Trends in Engineering, Advanced Computing and Technology Conference, Jeddah, Saudi Arabia
3 February 2022	"Memory-Prediction Framework: Theoretical Concept and Implementation", 2022 International Conference on Sciences and Technology, Universitas Raharja, Tangerang, Indonesia
13 November 2021	"AI Roles and Security Issues in Digital Transformation in the Era of Society5.0", Seminar Nasional Pengaplikasian Telematika (SINAPTIKA), Mercu Buana University, Indonesia
16 Dec. 2020	"AI in Healthcare for Assist Resource-Poor Settings Community Combating Covid19 Pandemic", World Class Visiting Professor, Universitas Sumatra Utara, Medan, Indonesia
1-2 December 2020	"Healthcare Engineering & Intelligent Systems for Aiding Resource-Poor Settings Community during Pandemic", The Sixth International Conference on Internet Applications, Protocols and Services (NETAPPS2020), Sintok, Malaysia
1-2 October 2020	"Memory-Prediction Framework for User Behavior Analytics of Insider Attacks", EECSI 2020
30-31 October 2018	"Cyber Security System for Supporting Sustainable Economic Development, FIRST Conference, Palembang, Indonesia
29-30 August 2013	"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
8-9 June 2013	"Future Internet Research @ InterNetWorks Lab", the 5th International Conference on Communication Software and Networks(ICCSN 2013), Kuala Lumpur, Malaysia
23 June 2011	"Malaysia Strategy on Content Business Development", International Seminar on Snapshot of content Business on Today's ICT Industry, Institut Manajemen Telkom, Bandung, Indonesia

8 August 2009	"Future Internet in Indonesia: IPv6 and Bottom Millions", ICCIT 2009, Tangerang, Indonesia
13 November 2006	"The Convergence of IP-Based Networks", Seminar on ICT: Today and Future Challenges, UNSYIAH, Indonesia
June 2005	"Ethno-mathematics & Computer Sciences", The 1st ICSMA Conference, Medan, Indonesia

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 and Systems Analysis, Microprocessor, Computational Techniques in C, Operating Systems, Compilers Theory and Design, Ethics & Professional Issues.

POSTGRADUATE

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

PhD Supervisiona

Graduated PhD Students

No.	Candidate name/ University	Thesis title	Graduated date	Role
1	Mohammed Mohammed Shagir Omar (USM)	Quality of Service Enabled Cross-Layer Multicast Framework for Mobile Ad Hoc Networks	February 2008	Main Supervisor
2	Ahmed Mansour Manasrah (USM)	Intelligence based network trouble shooting methods	December 2008	Co- Supervisor
3	Muhammad Fermi Pasha (USM)	Neocortex Inspired Hybrid Gene-Controlled Machine Intelligence Approach for Recognition and Identification	March 2010	Main Supervisor
4	Seyed Amin Hosseini Seno (USM)	Hierarchical Framework For Energy-Efficient and Secure Resource Management in Mobile Ad hoc Networks	March 2010	Main Supervisor
5	Salah Noori Saleh (USM)	Semi-Fluid: A Content Distribution Model for Faster Dissemination of Data	August 2010	Co- Supervisor
6	Raja Kumar Murugesan (USM)	An Expansionary Approach for the Allocation of Next Generation IPv6 Internet Address	March 2011	Co- Supervisor
7	Muawya Naser Salam Al-Dala'ien (USM)	Mutual Authentication Protocols for Low-Cost Radio Frequency Identification Systems	Sept 2011	Main Supervisor
8	Mohd Nizam Omar	Detecting Stepping Stones	April 2012	Main

	(USM)	Algorithm: Towards Solving Dropped Packet Problems		Supervisor
9	Umi Kalsom Yusof, UTM (USM)	Optimization Of Machine Allocation In Flexible Manufacturing System Using Bio-Inspired And Musical-Harmony Approaches	January 2013	Co-Supervisor
10	Alireza Taghizadeh (USM)	Performance Enhancement Framework for Network-based Inter-Domain IP Mobility in Mobile Wireless Networks	January 2013	Co-Supervisor
11	Abidah Hj M Taib (USM)	Security Framework for IPv4 To IPv6 Transition For Enterprise Network	April 2013	Main Supervisor
12	Bassam Naji Abdullah Al Tamimi (USM)	Dynamic Approach for Seamless Mobility in Co-Exist IPv4/IPv6 Networks Using Tunneling Mechanism	October 2013	Main Supervisor
13	Suliman Mohamed Ahmed Gaber (USM)	Content-Aware IPTV Delivery Networks Over Enhanced Peer-Service Area Architecture	June 2014	Co-Supervisor
14	Mohammad M. Rasheed (UUM)	Automatic System To Detect And Contain Unknown Internet Worms In The Early Stage	June 2012	Co-Supervisor
15	Aseel Mousa Jaafar, (UUM)	Temporal - Spatial Recognizer For Multi-Label	January 2018	Co-Supervisor
16	Mohammed Abdullah Ali Algharem UUM (UUM)	Frame-based QOS-Aware Multicast Resource Management Model for Optimizing Multicast Service in Long Term Evolution and Beyond Networks	November 2019	Main Supervisor
17	R. Sudrajat (UNPAD)	Development of Information System Framework for Digitalizing the History and Waqf Database Preservation of the Sumedang Larang Kingdom	December 2023	Co-Supervisor
18	Mohammed A. R. Alzahrani (UTM)	Colluding-Resistance Context-Aware Misbehaviour Detection Model for Vehicular Ad Hoc Network Using Machine Learning Techniques	January 2024	Co-Supervisor

Languages and Skills

Languages

Indonesian, English, Japanese

Skills

Python Programming,

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. Susanto, Deris Stiawan, M. Agus Syamsul A., Mohd Yazid Idris, and **Rahmat Budiarto**, 2021, Impact of Dimensionality Reduction on Performance of IOT Intrusion Detection System, in Internet of Things: Research and Practical Insights book, Bharat Bhushan, Sudhir Kumar Sharma, Bhuvan Unhelkar, Muhammad Fazal Ijaz, Lamia Karim (Eds.), CRC Press, Taylor & Francis Group. Ch. 6, pp. 101-124.
2. Ahmed Alahamadi, Tami Alwajeih, 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.
3. 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.
4. 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.
5. 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
6. 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.
7. 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-Iong (Eds.) Series: *Lecture Notes in Electrical Engineering*, Vol. 68, Springer, ISBN: 978-90-481-9418-6, pp. 83-95.
8. 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.

9. 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.
10. 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).

WoS/JCR JOURNAL

1. Sudrajat, Raden, Budi Nurani Ruchjana, Atje Setiawan Abdullah, and **Rahmat Budiarto**, 2023, Query Model Framework Design for Conservation History and Endowments Database: A Case Study on the Digitization of the Sumedang Larang Kingdom's History and Endowments in Indonesia, *Heritage*, Vol. 6, no. 12, pp. 7508-7530. <https://doi.org/10.3390/heritage6120394>, Q1 Jurnal, Impact Factor: 1.7.
2. Susanto, M. Agus Saymsul Arifin, Deris Stiawan, Mohd Yazid Idris, Mohammed Y. Alzahrani, and **Rahmat Budiarto**, 2023, IoT Botnet Detection Based on Features and Classification Optimization, *Journal of Information Processing Systems*, Q3 Journal, Impact factor 1.518, to appear in May 2023 issue.
3. M. Agus Syamsul Arifin, Susanto Susanto, Deris Stiawan, Bhakti Yudho Suprpto, Tasmi Salim, Mohd Yazid Idris, **Rahmat Budiarto** , 2024, Malicious Activity Detection in SCADA using Machine Learning Approach, *Journal of Information Processing System*, *Journal of Information Processing Systems*, Q3 Journal, Impact factor 1.518, to appear in.
4. Bachrudin Achmad, Ruchjana Budi Nurani, Abdullah Atje Setiawan, **Budiarto Rahmat**, 2023, Spatio-Temporal Model of a Product-Sum Simulation on Stream Network based on Hydrologic Distance, *Water*, MDPI Journal, 2023, 15, 2039. <https://doi.org/10.3390/w15112039>, Q1 Journal, Impact Factor: 3.530.
5. Deris Stiawan, Susanto, Abdi Bimantara, Mohd Yazid Idris, and **Rahmat Budiarto**, 2023, IoT Botnet Attack Detection using Deep Autoencoder and Artificial Neural network, *KSII Transactions on Internet and Information Systems*, vol. 17, no. 5, May 2023, pp. 1310-1338. Q3 Journal, Impact Factor 0.972.
6. Deris Stiawan, Dimas Wahyudi, Tri Wanda Septian, Mohd Yazid Idris, **Rahmat Budiarto**, 2023, The Development of an Internet of Things (IoT) Network Traffic Dataset with Simulated Attack Data, *Journal of Internet Technology (JIT)*, vol. 24, no. 2 , pp. 345-356, Mar. 2023. Q3 Journal, Impact factor 1.005.
7. Deris Stiawan, Ali Bardadi, Nurul Afifah, Lisa Melinda, Ahmad Heryanto, Tri Wanda Septian, Ali Bardadi, Mohd Yazid Idris , Imam Much Ibnu Subroto, Lukman and **Rahmat Budiarto***, 2023, An Improved LSTM-PCA Ensemble Classifier for SQL Injection and XSS Attacks Detection, *Computer Systems Science and Engineering*, Vol. 46, No. 2, pp. 1759-1774. DOI:10.32604/csse.2023.034047. Q2 journal, Impact factor 4.397.
8. Mohammed Alzahrani, Mohd Yazid Idris, Fuad A. Ghaleb, **Rahmat Budiarto**, 2022, An Improved Robust Misbehavior Detection Scheme for Vehicular Ad Hoc Network, *IEEE ACCESS*, vol. 10, pp. 111241-111253. doi: 10.1109/ACCESS.2022.3214838. Q1 Journal, Impact factor 3.9.
9. Kurniabudi, Deris Stiawan, Darmawijoyo, Mohd Yazid Bin Idris, Sarjon Defit, Yaya

- Sudarya Triana, **Rahmat Budiarto**, 2022, Improvement of Attack Detection Performance on the Internet of Things with PSO-Search and Random Forest, Journal of Computational Science, Elsevier, [Vol. 64](#), October 2022, 101833, <https://doi.org/10.1016/j.jocs.2022.101833>. Q1 Journal, Impact Factor: 5.8.
10. Susanto, Deris Stiawan, Dian Palupi Rini, M. Agus Syamsul Arifin, Mohd Yazid Idris, Nizar Alsharif, and **Rahmat Budiarto**, 2022, Dimensionality Reduction with Fast ICA for IoT Botnet Detection, Journal of Applied Security Research, Aug. 2022, DOI: 10.1080/19361610.2022.2079906, Q2 journal, Impact factor 0.80.
 11. **Rahmat Budiarto***, Ahmed Alqarni, Mohammed Y. Alzahrani, Muhammad F. Pasha, Mohammed Firdous, Deris Stiawan, 2022, User Behaviour Analytics Tool Using Simplified Predictive-Memory Concept, Materials & Continua (CMC), vol.70, no.2, pp.2679-2698, doi: 10.32604/cmc.2022.019847. Q1 Journal, Impact Factor: 3.772.
 12. Deris Stiawan, Somame Morianus Daely, Ahmad Heryanto, Nurul Afifah, Mohd. Yazid Idris, **Rahmat Budiarto**, 2021, Ransomware Detection Based On Opcode Behavior Using K-Nearest Neighbors Algorithm, Information Technology and Control (ITC), vol. 50, no. 3, pp.495-506. <https://doi.org/10.5755/j01.itc.50.3.25816>, Q2 Journal, Impact Factor 1.228.
 13. Deris Stiawan*, Meilinda Eka Suryani, Susanto, Mohd Yazid Idris, Muawaya Aldalaeien, Nizar Alsharif, and **Rahmat Budiarto***, 2021, Ping Flood Attack Pattern Recognition Using a K-Means Algorithm in an Internet of Things (IoT) Network, IEEE ACCESS, Aug. 2021, vol. 9, pp. 116475-116484, Q2 Journal, Impact Factor: 3.367. doi: 10.1109/ACCESS.2021.3105517.
 14. Muhammad Ayaz, Muhammad Fermi Pasha, Mohammed Y. Alzahrani, **Rahmat Budiarto**, 2021, Fast Health Interoperability Resources Standard: A Systematic Literature Review, JMIR Medical Information, vol. 9, no. 7:e21929, July 2021. doi: 10.2196/21929. PMID: 34328424, Q2 Journal, Impact Factor: 2.96. (<https://medinform.jmir.org/2021/7/e21929>).
 15. Deris Stiawan, Ahmad Heryanto, Ali Berdadi, Dian Palupi Rini, Imam Much Ibnu Subroto, Kurniabudi, Mohd. Yazid Idris, Abdul Hanan Abdullah, Bedine Kerim, **Rahmat Budiarto**, 2021, An Approach for Optimizing Ensemble Intrusion Detection Systems, IEEE Access, January. 2021 vol. 9, pp. 6930-6947. doi: 10.1109/ACCESS.2020.3046246. Q1 Journal, Impact Factor: 3.367.
 16. 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, July 2020, vol. 8, pp. 132911-132921, doi: 10.1109/ACCESS.2020.3009843. Q1 Journal, Impact Factor 5.8.
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