

## Curriculum Vitae

### Assoc. Prof. Dr. Azizol Abdullah

#### Academic Qualifications

PhD in Distributed System, Universiti Putra Malaysia, 2010  
Master of Science in Engineering in Telematics, University of Sheffield, UK, 1996  
Bachelor of Computer Science, Universiti Putra Malaysia, 1994

#### Current Professional Membership

- EC-Council Certified Security Specialist
- EC-Council Network Security Administrator
- Certified EC-Council Instructor

#### Current Teaching and Administrative Responsibilities

- Software Defined Networking
- Network Analysis and Design
- Network Management
- Grid Computing Advanced Network Security
- Network Security
- Internet and Cloud Computing Security
- Network Security Management

#### Previous Employment

Employer	Designation / Department	Start Date	Date Ended
Universiti Putra Malaysia	Associate Professor, Department of Communication Technology and Network	1 Jan 2019	Until now
Universiti Putra Malaysia	Senior Lecturer, Department of Communication Technology and Network	1 Oct 2008	31 Dis 2018
Universiti Putra Malaysia	Lecturer, Department of Communication Technology and Network	1996	31 Sep 2008
Universiti Putra Malaysia	Tutor, Department of Computer Science	1994	1996

#### Conferences and Training

##### Conferences:

##### Seminar Papers Presented

1. Ali, F.B.M., Latip, R., Ibrahim, H., **Abdullah, A.** 2021. *Optimization on Replication Performance via Balance Quorum (BQ) and Data Center Selection Method (DCSM) Algorithms in Cloud Environment*. ACM International Conference Proceeding Series, pp. 1–6
2. Franco, D.J., Muhammed, A.B., Subramaniam, S.K., **Abdullah, A.**, Silva, R.M., Akram, O.K. 2019. *A Review on Current and Old SCADA Networks Applied to Water Distribution Systems*. 2019 1st International Conference of Intelligent Computing and Engineering: Toward Intelligent Solutions for Developing and Empowering our Societies, ICOICE 2019, art. no. 9035134, .
3. Normalia Samian, Zuriati Ahmad Zukamain, **Azizol Abdullah**, Zurina Mohd Hanapi. *Compare and Measure Selfishness Detection (CMSD) Mechanism: Promptness and Accuracy*. Seventh International Conference on Ubiquitous and Future Networks (ICUFN), 2015. Sapporo, Japan.

4. Bakri Yahaya, Rohaya Latip, **Azizol Abdullah**, Mohamed Othman. *Medical Data Simulation with Self-Adaptive Multi-Instance Broker in Hierarchical Cluster Grid Structure*. International Conference on Computer Assisted System in Health (CASH), 2014, Putrajaya, Malaysia.
5. Mehdi Barati, **Azizol Abdullah**, Nur Izura Udzir, Ramlan Mahmod, Norwati Mustapha. *Distributed Denial of Service Detection Using Hybrid Machine Learning Technique*. Proceedings of 2014 International Symposium on Biometrics and Security Technologies (ISBAST). 2014 Kuala Lumpur, Malaysia.
6. Sura Khalil Abd, S.A.R Al-Haddad, Fazirulhisyam Hashim, **Azizol Abdullah**. *A Review of Cloud Security Based on Cryptographic Mechanisms*. Proceedings of 2014 International Symposium on Biometrics and Security Technologies (ISBAST). 2014 Kuala Lumpur, Malaysia.
7. Warusia Yassin, Nur Izura Udzir, **Azizol Abdullah**, Mohd Taufik Abdullah, Hazura Zulzalil, Zaiton Muda. *Signature-Based Anomaly Intrusion Detection using Integrated Data Mining Classifiers*. Proceedings of 2014 International Symposium on Biometrics and Security Technologies (ISBAST). 2014 Kuala Lumpur, Malaysia.
8. Bakri Yahaya, Rohaya Latip, **Azizol Abdullah**, Mohamed Othman. *A Clustering-Based Hybrid Replica Control Protocol for High Availability in Grid Environment*. Proceedings of International Conference on Computational and Network Technologies 2014 (ICCNT2014), Bali, Indonesia.
9. Maizura Ibrahim, Hamidah Ibrahim, Rohaya Latip, **Azizol Abdullah**. *Enhancing the Performance of Advanced Fine-Grained Grid Authorization System*. Proceedings of International Conference on Computational and Network Technologies 2014 (ICCNT2014), Bali, Indonesia.
10. Mehdi Barati, **Azizol Abdullah**, Ramlan Mahmod, Norwati Mustapha, and Nur Izura Udzir. *Features Selection For IDS in Encrypted Traffic using Genetic Algorithm*. Proceedings of the 4<sup>th</sup> International Conference on Computing and Informatics, ICOCI 2013. 2013 Sarawak, Malaysia.
11. Omid Seifaddini, **Azizol Abdullah**, Hamid Vosough. *RED, GRED, AGRED Congestion Control Algorithms in Heterogeneous Traffic Types*. Proceedings of the 4<sup>th</sup> International Conference on Computing and Informatics, ICOCI 2013. 2013 Sarawak, Malaysia.
12. Yassin, W., Udzir, N. I., Muda, Z., **Abdullah, A.**, & Abdullah, M. T. *A Cloud-based Intrusion Detection Service framework*. Proceedings 2012 International Conference on Cyber Security, Cyber Warfare and Digital Forensic. Kuala Lumpur, Malaysia.
13. Rohaya Latip, Hamidah Ibrahim, Mohamed Othman, Md. Nasir Sulaiman, and **Azizol Abdullah**. *Simulation of diagonal data replication in mesh*. Proceedings of the 2nd International Conference on Computing & Informatics' 09, (ICOCI09) Kuala Lumpur, Malaysia 124 - 128.
14. Rohaya Latip, Hamidah Ibrahim, Mohamed Othman, Md. Nasir Sulaiman, and **Azizol Abdullah**. *Diagonal data replication protocol for large dynamic network*. Proceedings of 4th International Conference on Information and communication Technology and System (ICTS) 2008 Surabaya, Indonesia 492-497.
15. Rohaya Latip, Hamidah Ibrahim, Mohamed Othman, Md. Nasir Sulaiman, and **Azizol Abdullah**. *Framework of diagonal data replication in 2D mesh*. Proceedings of the 4th International Conference on Information Technology and Multimedia (ICIMU' 2008) Selangor, Malaysia 330-336.
16. **Azizol Abdullah**, Mohamed Othman, Md Nasir Sulaiman, Hamidah Ibrahim, Abu Talib Othman. *DECENTRALIZED REPLICATION STRATEGIES FOR P2P BASED SCIENTIFIC DATA GRID*. In Proceedings of the 3rd International Symposium on Information Technology 2008 (ITSim2008), 26th - 29th of August 2008, Kuala Lumpur, Malaysia.
17. **Azizol Abdullah**, Mohamed Othman, Md Nasir Sulaiman, Hamidah Ibrahim, Abu Talib Othman. *Towards a Scalable Scientific Data Grid Model and Services*. In Proceedings of the IEEE International Conference on Computer and Communication Engineering (ICCCE 2008), 13-15 May 2008, Kuala Lumpur, Malaysia.
18. **Azizol Abdullah**, Mohamed Othman, Md Nasir Sulaiman, Hamidah Ibrahim, Abu Talib Othman. *Towards A Scalable Scientific Data Grid Model and Discovery Service* - has been accepted for oral presentation at the Third EELA Conference, in Catania, Italy, from 3rd to 5th December 2007.
19. **Azizol Abdullah**, Mohamed Othman, Md Nasir Sulaiman, Hamidah Ibrahim, Abu Talib Othman. *A Simulation Study of Data Discovery Mechanism for Dynamic Scientific Data Grid Environment*. Symposium on Intelligent Systems and Information Technology (ISITS 2004). 17 February 2004, ITMA, Universiti Putra Malaysia, Serdang.
20. **Azizol Abdullah**, Mohamed Othman, Md Nasir Sulaiman, Hamidah Ibrahim, Abu Talib Othman. *Data Discovery Mechanism for A Large Peer-To-Peer Based Scientific Data Grid Environment*. ICT Seminar 2004, 15 January 2004, School of Information and Communication Technology, University College of Technology and Management Malaysia, Shah Alam, Malaysia.
21. **Azizol Abdullah**, Mohamed Othman, Md Nasir Sulaiman, Hamidah Ibrahim, Abu Talib Othman. *A Simulation Study of Data Discovery Mechanism for Dynamic Scientific Data Grid Environment*.

Accepted in 4th Information and Computer Engineering Postgraduate Workshop (ICEP2004). January 22-23. Department of Computer Engineering, Prince of Songkla University, Phuket, Thailand.

22. **Azizol Abdullah**, Mohamed Othman, Md Nasir Sulaiman, Hamidah Ibrahim, Abu Talib Othman. *Data Grid: The Dynamic Scientific Data Sharing Environment For World Wide Collaboration*. INSPER WEEKLY Seminar 2003, 7 July 2003, Institute for Mathematical Research, Universiti Putra Malaysia, Malaysia.

### Trainings:

1. Modern Protection Against Modern Threats. 26 June 2019. Zenith Hotel Putrajaya.
2. Advanced Global Problem Based Learning 2018 (AgBPL 2018) workshop. Shibaura Institute of Technology, Tokyo, Japan, 18 – 27 November 2018.
3. Robotic Programming-SPHERO, 22 – 24 August 2017, Shibaura Institute of Technology, Tokyo, Japan.
4. “Program Akademi Kepimpinan Pengajian Tinggi –Strategic Leadership Development For University Management”. Higher Education Leadership Academy (AKEPT), 1 – 2 November 2016.
5. Express Learning for CISSP® Exam Preparation, 23-27 June 2014, Pullman Putrajaya Lakeside Hotel
6. Core Skills for Network Penetration Testers (CS-NPT), 9-11 Apr 2014, Putrajaya Shangri-La Hotel, Core Skills for Cyber Security Practitioners (CS-CSP), 28-30 Jan 2014, The Gardens Hotel & Residences Hotel, Kuala Lumpur
7. Capstone Project, 24 Apr 2014, Faculty of Human Ecology, UPM

### Research and Publications (last 3 years)

#### Research Projects:

1. Contact Tracing Strategy for Digital Forensic Triage in identifying Malicious IoT device(s), 01-SEPT-2019-30-NOV-2022
2. Access Control Testing Method for Data security and Privacy on Public Cloud Multi-Tenant SaaS Applications, 01-AUG-2016 -31-JAN-2019
3. A Hybrid Multibiometric Continuous Authentication Framework Based on Shielding Functions and Non-Invertible Transformation, 01-NOV-2015 - 31-OCT-2017
4. Multi-layer Access Control for Authenticating, Monitoring and Controlling Mobile Devices in Bring Your Own Device (BYOD) Environment, 02-NOV-2015-30-OCT-2017
5. Enhanced Tight Finite Key Scheme For Quantum Key Distribution (QKD) Protocol To Authenticate Multi-Party System In Cloud Infrastructure, Dec-2013 - Nov-2016

#### Publications:

1. Sa'ad, S., Muhammed, A., Abdullahi, M., **Abdullah, A.**, Ayob, F.H. 2021. *An enhanced discrete symbiotic organism search algorithm for optimal task scheduling in the cloud*. Algorithms, 14(7), 200.
2. Adnan, A., Muhammed, A., Ghani, A.A.A., **Abdullah, A.**, Hakim, F. 2021. *An intrusion detection system for the internet of things based on machine learning: Review and challenges*. Symmetry, 13(6), 1011.
3. Fazlina, M.A., Latip, R., **Abdullah, A.**, Ibrahim, H., Alrshah, M.A. 2021. *Crucial File Selection Strategy (CFSS) for Enhanced Download Response Time in Cloud Replication Environments*. Baghdad Science Journal, 18(4), pp. 1356–1364.
4. Ali, F.M., Latip, R., Alrshah, M.A., **Abdullah, A.**, Ibrahim, H. 2021. *Vigorous Replication Strategy with Balanced Quorum for Minimizing the Storage Consumption and Response Time in Cloud Environments*. IEEE Access, 9, pp. 121771–121785, 9526598.
5. Alsaih, M.A., Latip, R., **Abdullah, A.**, Subramaniam, S.K., Alezabi, K.A. 2020. *Dynamic job scheduling strategy using jobs characteristics in cloud computing*. Symmetry, 12 (10), art. no. 1638, pp. 1-13.
6. Ibrahim, M., Abdullah, M.T., **Abdullah, A.**, Perumal, T. 2020. *An epidemic based model for the predictions of OOFI in an IoT platform*. SSRG International Journal of Engineering Trends and Technology, (1), pp. 52-56.
7. Fara Jamal, Mohd. Taufik Abdullah, **Azizol Abdullah** and Zurina Mohd. Hanapi. 2020. *A Systematic Review Of Bring Your Own Device (BYOD) Authentication Technique*. Journal of Physics, 1529(2020).

8. Joshua Samual, Masnida Hussin, Nor Asilah Wati Abdul Hamid, Mas Rina Mustaffa, **Azizol Abdullah**.2020. *Awareness of Energy Consumption in Cloud Data Centers: A Survey on Employee Engagement in Energy Management*. Journal of Critical Reviews, Vol 7, Issue 8.
9. Ahmed Adnan, Abdullah Muhammed, Abdul Azim Abd Ghani, **Azizol Abdullah** and Fahrul Hakim. 2020. *Hyper-Heuristic Framework for Sequential Semi-Supervised Classification Based on Core Clustering*. Symmetry, 12, 1292; doi:10.3390/sym12081292
10. Hussin, M.,Ibrahim, A.Z.M.,**Abdullah, A.** 2019. *Scalable communication infrastructure through resource provisioning approach for reliable social networking system*. International Journal of Innovative Technology and Exploring Engineering, Volume 8, Issue 8, Pp 196-203.
11. Fara Jamal, Mohd. Taufik Abdullah, **Azizol Abdullah** and Zurina Mohd. Hanapi. 2019.*Reliable Access Control for Mobile Cloud Computing (MCC) with Cache-Aware Scheduling*. IEEE Access 7,8896905, pp. 165155-165165.
12. Somayyeh Gholizadeh, **Azizol Abdullah**, Mohamed Othman, Zurina Mohd Hanapi, Mohsen Heydarian. *Optimized topology control in mobile IP networks using a new parametric routing algorithm*. Computers and Electrical Engineering. Vol.68, No.2 May 2018 Pp.225-240.
13. Abdulkader, Z.A., **Abdullah, A.**, Abdullah, M.T., Zukarnain, Z.A. 2018. *A survey on sybil attack detection in vehicular ad hoc networks (VANET)*. Journal of Computers (Taiwan), Vol. 29, No. 2, pp. 1 - 6.
14. Shareef, Z.A., Hussin, M., **Abdullah, A.**, Muhammed, A. 2018. *Class-based QoS scheduling of WiMAX networks*. Journal of High Speed Networks, Vol. 24, No. 4, pp. 345 - 362.
15. Abdulkader, Z.A., **Abdullah, A.**, Abdullah, M.T., Zukarnain, Z.A. 2018. *Malicious node identification routing and protection mechanism for vehicular ad-hoc network against various attacks*. International Journal of Networking and Virtual Organisations, 19(2), pp. 153-175.
16. Jegede, A., Udzir, N.I., **Abdullah, A.**, Mahmood, R.. 2018. *Revocable and non-invertible multibiometric template protection based on matrix transformation*. Pertanika Journal of Science and Technology. 26(1), pp. 133-159
17. Maharazu Mamman; Zurina Mohd Hanapi; **Azizol Abdullah**; Abdullah Muhammed. 2017. *An Adaptive Call Admission Control With Bandwidth Reservation for Downlink LTE Networks*. IEEE Access, 2017 Vol: 5, pp: 10986–10994. (I.F: 3.244)
18. Mohammad Ali Khoshkholghi; Mohd Noor Derahman; **Azizol Abdullah**; Shamala Subramaniam; Mohamed Othman. 2017. *Energy-Efficient Algorithms for Dynamic Virtual Machine Consolidation in Cloud Data Centers*. IEEE Access, 2017 Vol: 5, pp: 10709-10722. (I.F: 3.244)
19. Mabni, Z., Latip, R., Ibrahim, H., **Abdullah, A.** 2017. *A high availability cluster-based replica control protocol in data grid*. Journal of Information and Communication Technology, 16(1), pp. 43-62.
20. Ambursa, F.U., Latip, R., **Abdullah, A.**, Subramaniam, S. 2017. *A particle swarm optimization and min–max-based workflow scheduling algorithm with QoS satisfaction for service-oriented grids*. Journal of Supercomputing, 73(5), pp. 2018-2051. (I.F: 0.917)
21. Abdulkader, Z.A., **Abdullah, A.**, Abdullah, M.T., Zukarnain, Z.A. 2017. *LI-AODV: Lifetime improving AODV routing for detecting and removing black-hole attack from VANET*. Journal of Theoretical and Applied Information Technology, 95(1), pp. 196-209.
22. Ambursa, F.U., Latip, R., **Abdullah, A.**, Subramaniam, S. 2017. *Probabilistic reliability prediction models for task scheduling in distributed systems: A review*. Journal of Engineering and Applied Sciences, 12(3), pp. 644-652.
23. Jegede, A., Udzir, N.I., **Abdullah, A.**, Mahmood, R. 2017. *A secure and privacy preserving iris biometric authentication scheme with matrix transformation*. Lecture Notes in Computer Science (including subseries Lecture Notes in Artificial Intelligence and Lecture Notes in Bioinformatics), 10144 LNCS, pp. 341-352.
24. Hasan, D., Hussin, M., **Abdullah, A.** 2017. *Effective amplification mitigation and spoofing detection during DNS flooding attacks on internet*. Journal of Engineering and Applied Sciences, 12(3), pp. 475-480.
25. Mohamaddiah, M.H., **Abdullah, A.**, Hussin, M., Subramaniam, S. 2017. *A multi-level scheduling for resource provisioning mechanism in cloud systems*. Journal of Telecommunication, Electronic and Computer Engineering, 9(1-3), pp. 53-57.
26. Alkharasani, A.M., Othman, M., **Abdullah, A.**, Lun, K.Y. 2016. *An optimized aggregate marker algorithm for bandwidth fairness improvement in classifying traffic networks*. Eurasip Journal on Wireless Communications and Networking, 2016(1),76.
27. Mohamaddiah, M.H., **Abdullah, A.**, Hussin, M., Subramaniam, S. 2016. *Job allocation using two-level prioritization stage directed acyclic graph (DAG) model in cloud environment*. Advanced Science Letters, 22(10), pp. 2817-2821.

28. Ghouhani, B.E., **Abdullah, A.**, Abdul Hamid, N.A.W., Abdul Rahman, A.R. 2016. *A feedback based prediction model for real-time workload in a cloud*. Journal of Theoretical and Applied Information Technology, 87(3), pp. 265-373.
29. Seifaddini, O., **Abdullah, A.**, Muhammed, A., Hussin, M. 2016. Great deluge and extended great deluge based job scheduling in grid computing using GridSim. Lecture Notes in Computer Science (including subseries Lecture Notes in Artificial Intelligence and Lecture Notes in Bioinformatics), 9787, pp. 292-302.
30. Ahmed, D.H., Hussin, M., **Abdullah, A.**, Mahmood, R.A.R. 2016. *Distributed defense scheme for managing dns reflection attack in network communication systems*. Journal of Telecommunication, Electronic and Computer Engineering, 8(6), pp. 71-75.
31. Maharazu, M., Hanapi, Z.M., **Abdullah, A.**, Muhammed, A. 2016. *High data rate scheduling algorithm for downlink LTE network*. International Journal on Communications Antenna and Propagation, 6(6), pp. 354-361
32. Maipan-Uku, J.Y., Muhammed, A., **Abdullah, A.**, Hussin, M. 2016. *Max-Average: An extended Max-Min scheduling algorithm for Grid computing environment*. Journal of Telecommunication, Electronic and Computer Engineering, 8(6), pp. 43-47.
33. Ibrahim, M., Ibrahim, H., **Abdullah, A.**, Latip, R. 2016. *A high performance UCON and semantic-based authorization framework for grid computing*. Journal of Information and Communication Technology, 15(1), pp. 183-202.
34. Khoshkholghi, M.A., **Abdullah, A.**, Subramaniam, S., Othman, M., Derahman, M.N. 2016. *A taxonomy and survey of power management strategies in cloud data centers*. International Journal on Communications Antenna and Propagation, 6(5), pp. 305-317.
35. Abd, S.K., Al-Haddad, S., Hashim, F., **Abdullah, A.** .B., Yussof, S. 2016. *Cloud computing concept, classifications, applications and challenges*. International Journal of Control Theory and Applications, 9 (30), pp. 261-288.
36. Ogunrinde, R.R., Jusoh, Y.Y., Pa, N.C., Wan Ab. Rahman, W.N., **Abdullah, A.** 2016. *Cloud enterprise resource planning selection model for small and medium enterprises*. Advanced Science Letters, 22 (8), pp. 1939-1943.
37. Abd, S.K., Al-Haddad, S., Hashim, F., **Abdullah, A.** .B., Yussof, S. 2016. An effective approach for managing power consumption in cloud computing infrastructure. Journal of Computational Science. In Press.
38. Olalere, M., Abdullah, M.T., Mahmood, R., Abdullah, A. 2016. *Proposed discriminative lexical features for real-time detection of malware uniform resource locator*. Indian Journal of Science and Technology, 9 (46), 107081.
39. Samian, N., Zukarnain, Z.A., Seah, W.K.G., **Abdullah, A.**, Hanapi, Z.M. 2015. *Cooperation stimulation mechanisms for wireless multihop networks: A survey*. Journal of Network and Computer Applications, 54, pp. 88-106.
40. Mohammed Nazeem Abdul Wahid and **Azizol Abdullah**. 2015. *Detecting an Anomaly Behavior through Enhancing the Mechanism of Packet Filtering*. Journal of Computer Science, 11(6): 784-793.
41. Radhwan Abdullah, Zuriati Zukarnain, Farzaneh Masoumiyan and **Azizol Abdullah**. 2015. *Mobility and Handover Technique in Heterogeneous Wireless Networks*. Journal of Computer Science, 11(3): 466-473.
42. Normalia Samian, Zuriati Ahmad Zukarnain, Winston K.G. Seah, **Azizol Abdullah**, Zurina Mohd Hanapi. 2015 *Cooperation stimulation mechanisms for wireless multihop networks: A survey*. Journal of Network and Computer Applications 54 (2015) 88–106.
43. Somayyeh Gholizadeh, **Azizol Abdullah**, Mohamed Othman, Zurina Mohd Hanapi, Mohsen Heydarian. *Optimized performance data transmission in Mobile IP networks*. Journal of Supercomputing. Vol.70, No.2 November 2014 Pp.906-929. (I.F: 0.917)
44. Masnida Hussin, **Azizol Abdullah**, and Rohaya Latip. *Agent-Based Pricing Determination for Cloud Services in Multi-Tenant Environment*. International Journal of Computer and Communication Engineering. Vol.3, No. 6. November 2014. Pp. 454 – 459.
45. Ameen M. Alkharasani, Mohamed Othman, **Azizol Abdullah**, Kweh Yeah Lun. *An Optimized Aggregate Marker Algorithm for Bandwidth Fairness Improvement in DiffServ Network*. Journal of Network and Computer Applications. 2014. (I.F: 1.467). In Press.
46. M.N. Derahman, M.A. Mohamed, A. Muhamed, **A. Abdullah**, M.N. Basery, S. Baharom, M.K. Abdullah. *Home Switch Automation System Based on Ultra Low Power Wireless Solution*. International Journal of Information Processing and Management. Vol 5. No. 2, May 2014. Pp. 58-69.
47. Mehdi Barati, **Azizol Abdullah**, Mostafa Behzadi, Ramlan Mahmood, Nur Izura Udzir, Norwati Mustapha. 2014. *Intrusion Detection System in Secure Shell Traffic In Cloud Environment*. Journal of Computer Science, 10: 2029-2036

48. Seifaddini, O., **A. Abdullah** and S. Subramaniam, 2014. *An event driven simulation for Adaptive Gentle Random Early Detection (AGRED) algorithm*. J. Comput. Sci., 10: 1939-1945
49. Radhwan M. Abdullah, **Azizol Abdullah**, Nor Asilah Wati Abdul Hamid, Shamala K. Subramaniam. *A Network Selection Algorithm Based on Enhanced Access Router Discovery in Heterogeneous Wireless Networks*. Wireless Personal Communications. Vol. 7, No. 3. 2014. Pp.1733-1750. (I.F: 0.503)
50. Behzadi, Mostafa; Mahmood, Ramlan; Barati, Mehdi; **Abdullah, Azizol**; Noura, Mahda. *A New Framework for Classification of Distributed Denial of Service (DDOS) Attack in Cloud Computing by Machine Learning Techniques*. Advanced Science Letters, Vol. 20, No. 1, January 2014 , pp. 175-178(4)
51. Mohd Hairiy Mohammaddiah, **Azizol Abdullah**, Shamala Subramaniam, and Masnida Hussin. *A Survey on Resource Allocation and Monitoring in Cloud Computing*. International Journal of Machine and Computing. Vol. 4, No.1. 2014.
52. Radhwan M. Abdullah, **Azizol Abdullah**, Nor Asilah Wati Abdul Hamid, Shamala K. Subramaniam. *The Rapid Vertical Handover for Efficient IPv6 Mobility Support in Heterogeneous Wireless Networks*. Arabian Journal for Science and Engineering. Vol. 39, No.2. 2014. Pp.851-860. (I.F: 0.39)

### Consultancy

1. AnyCast@MyDNS Project, MyNIC dan Kementerian Sains dan Inovasi, Malaysia (MOSTI), 2012
2. Projek Sistem Pengurusan Sukan Bersepadu, Kementerian Belia dan Sukan, Malaysia, 2014

### Community Service

None

### Other Relevant Information

Further information: [profile.upm.edu.my/azizol](http://profile.upm.edu.my/azizol)