


## CURRICULUM VITAE

| 01. PERSONAL PARTICULARS    |   |
|-----------------------------|---|
| <b>Full Name</b>            | <br>Omar bin Zakaria                |
| <b>Current Position</b>     | Professor (VK7)   |
| <b>Faculty / Department</b> | Department of Computer Science<br>Faculty of Defence Science & Technology, UPNM                                       |
| <b>Nationality</b>          | Malaysian   |
| <b>Specialisation</b>       | Information Security Management   |
| <b>Date/Place of Birth</b>  | 28 September 1970 / Parit Buntar, Perak   |
| <b>Status</b>               | Married with seven children   |
| <b>E-mail Address</b>       | <a href="mailto:manafzack@gmail.com">manafzack@gmail.com</a> / <a href="mailto:omar@upnm.edu.my">omar@upnm.edu.my</a> |

## II. ACADEMIC AND PROFESSIONAL QUALIFICATIONS

(Please list all academic qualifications, from your first degree, in chronological order)

| Year | Degree  | Discipline   | University  |
|------|---|--|---|
| 2007 | Ph.D  | Information Security Management                      | Royal Holloway, University of London                                    |
| 1996 | MSc   | Information Security                                 | Royal Holloway, University of London                                    |
| 1994 | BComp Sc (Hons)   | Computer Science                                     | University of Malaya (UM)   |
|      |   |  |   |
| Year | Professional Qualifications   | Discipline   | Awarded by  |
| 2014 | PRINCE2 (Projects in Controlled Environment, Version 2)                       | Project Management                                   | Prestariang Sdn Bhd   |
| 2013 | Lead Assessor for ISO/IEC 27001 Information Security Management System (ISMS) | Information Security Management and Assurance        | Profesional Evaluation and Certification Board (PECB), Montreal, Canada |
| 2013 | Certified Ethical Hacker (CEH)  | Technical Aspects of Information Security Management | EC Council  |
| 2011 | Certificate on I-Citizen  | Information Security Awareness                       | Prestariang Sdn Bhd and Certiport USA                                   |
| 2010 | Lead Assessor for ISO 9001:2008 Quality Management System (QMS)               | Quality Management System                            | SIRIM QAS Sdn Bhd   |
| 2010 | Certified OpenOffice.org and Linux Desktop (COOOL)                            | Operating Systems                                    | Open Source Competency Centre, Cyberjaya                                |

| <b>III. TITLES OF POSTGRADUATE THESES WRITTEN</b>  |  |                         |  |
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| <b>No.</b>   | <b>TITLES OF POSTGRADUATE THESES</b>   |                         |  |
| 1.   | <b>Ph.D thesis: Investigating information security culture challenges in a public sector organisation: a Malaysia case</b> |                         |  |
| 2.   | <b>Master dissertation: Disaster Recovery Planning For Banks: Malaysian Scenario</b>                                       |                         |  |
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| <b>IV. WORK EXPERIENCE</b> (Please list your relevant experience in chronological order)         |  |                         |  |
| <b>Year</b>  | <b>Position</b>  | <b>Field of Work</b>    | <b>Place of Work</b>   |
| Oct 1994 – Jan 1995  | Analyst Programmer   | Programming             | Maybank, Menara Maybank, Jln Tun Perak, KL                               |
| Feb 1995 – Oct 1996  | SLAB Tutor   | Doing Master of Science | University of Malaya, 50603 KL   |
| Nov 1996 – Apr 2006  | Lecturer   | Academic works          | University of Malaya, 50603 KL   |
| Apr 2006 – Jun 2010  | Senior Lecturer  | Academic works          | University of Malaya, 50603 KL   |
| Jul 2010 – now<br>(Note: Offered as an AP since April 2009 but need to wait for UM's permission) | Associate Professor (AP)   | Academic works          | National Defence University of Malaysia (UPNM), Kem Sungai Besi 57000 KL |

## 1.0 RESEARCH AND PUBLICATION

### 1.1 Research Projects

(Please list in chronological order and state: title, list of researchers, grant/year, source/amount, date/duration and status) (Please bold your name)

|   | Title  | List of Rresearchers<br>• Principal<br>• Members | Grant Year | Source Amount                       | Status<br>• Completed<br>• In Progress |
|---|--|--|------------|-------------------------------------|--|
| 1 | Interactive Multimedia for Learning Trigonometry<br><b>Omar Zakaria</b> , Norrijah Husin and Siti Aishah Hashim Ali  | <b>Principal</b>                                 | 1996-1997  | RM 35,000 (UM Grant)                | Completed                              |
| 2 | Security Issues and Software Piracy: A Study of Use Attitude of Organisations in Malaysia<br><b>Omar Zakaria</b>   | <b>Principal</b>                                 | 1997-1998  | RM 25,000 (UM Grant)                | Completed                              |
| 3 | Attitude of Choosing a Good Password Amongst Students in FSKTM, UM<br><b>Omar Zakaria</b>  | <b>Principal</b>                                 | 1998-1999  | RM 11,000 (UM Grant)                | Completed                              |
| 4 | Customer Verification Using Query Directed Password in Call Centre Environment<br><b>Omar Zakaria</b>  | <b>Principal</b>                                 | 2007-2008  | RM 31,000 (UM Grant)                | Completed                              |
| 5 | Development of Quality Assurance Model for IT Implementation on SMEs in Malaysia<br>Mohd Hairul Nizam Md Nasir, Mustaffa Mohd Nor, <b>Omar Zakaria</b>                       | Member   | 2007-2008  | RM 50,000 (UM Grant)                | Completed                              |
| 6 | SMS/MMS Encryption for Secure Mobile Communication using Public Key Infrastructure: M-PKI<br><b>Omar Zakaria</b> , Nor Badrul Anuar Jumaat, Ainuddin Wahid, Amirrudin Kamsin | <b>Principal</b>                                 | 2007-2009  | RM 186,200 (E-Science Fund – MOSTI) | Completed                              |

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|----|---|------------------|-------------|---|-------------|
| 7  | An analytical Study of 4-Way Recognition Based Sequence Reproduction Scheme in Graphical Password<br>Samaneh Farmand, <b>Omar Zakaria</b>   | Member           | 2009-2010   | RM 2,500<br>(UM Grant)                                | Completed   |
| 8  | Implementing Encryption on H.264/AVC Video<br>Mohamed Abomhara, <b>Omar Zakaria</b>   | Member           | 2009-2010   | RM5,100<br>(UM Grant)                                 | Completed   |
| 9  | Devising An Artificial Immune System To Detect Computer Encrypted (Polymorphic) Viruses Using Genetic Algorithm. Saman Mirza Abdulla, <b>Omar Zakaria</b>   | Member           | 2010-2011   | RM5,350<br>(UM Grant)                                 | Completed   |
| 10 | Program Pembangunan Kepimpinan Tunas Akademia<br>Sazali Abdul Wahab, Ahmad Mujahid Ahmad Zaidi, <b>Omar Zakaria</b> , Hishamuddin Mat Som   | Member           | 2011        | RM298,800<br>(AKEPT Grant)                            | Completed   |
| 11 | Memupuk Kesedaran Keselamatan Di Kalangan Remaja Di Malaysia: Program di Sek Men Islam Al-Amin, Gombak, Selangor<br><b>Omar Zakaria</b> , Mohd Afizi Mohd Shukran, Kamarulzaman Maskat, Mohamad Adib Khairuddin, Azura Amid | <b>Principal</b> | 2012 – 2013 | RM 51,819<br>Knowledge Transfer Programme Grant (KPT) | Completed   |
| 12 | Establishing A Structured Information Security Awareness Framework<br><b>Omar Zakaria</b> , Mohd Afizi Mohd Shukran, Aini Sulaiman dan Abdullah Gani  | <b>Principal</b> | 2012-2014   | RM 47,500<br>RACE (KPT)                               | Completed   |
| 13 | A Novel Approach Network Intrusion Detection Using Data Pattern Recognition and Data Mining Techniques<br>Mohd Afizi Mohd Shukran,  | Member           | 2012-2015   | RM 50,000<br>RACE (KPT)                               | In progress |

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|----|---|------------------|---------------------------|--------------------|-------------|
|    | <b>Omar Zakaria</b> , Suzaimah Ramli, Aini Hussain & Abdullah Gani  |                  |                           |                    |             |
| 14 | Usability Model for Mobile Applications in Defence Training<br>Amalina Farhi Ahmad Fadzhiah, <b>Omar Zakaria</b> , Mohar Kassim, Aziz Deraman, Abdul Razak Hamdan, Jamaiah Yahaya & Yusmadi Yah Jusoh   | Member           | 1 Jun 2013-31 May 2015    | RM 74,800<br>ERGS  | In progress |
| 15 | Establishing A Framework On Controlling Rumours Propagation On Twitter: A Case of CNII Organisations.<br><b>Omar Zakaria</b> , Mohd Nazri Ismail, Mohd Afizi Mohd Shukran & Puteri Nor Ellyza Nohuddin  | <b>Principal</b> | 16 Dec 2013 - 15 Jun 2016 | RM76,000<br>FRGS   | In progress |
| 16 | Development of Knowledge-Based Software With Enhanced Situational Awareness Analysis For Infantry Personnel. <b>Omar Zakaria</b> , Mohd Nazri Ismail, Ungku Azly Ungku Zahar, Mohd Hazali Mohamed Halip, Mohd Afizi Mohd Shukran & Puteri Nor Ellyza Nohuddin | <b>Principal</b> | 16 Dec 2013 – 16 Dec 2018 | RM 981,940<br>NRGS | In progress |
| 17 | Cyber Forensic Analyser Tool for Smartphones To Secure Cloud Network from Malware Attack. Kamaruzaman Maskat, Zarina Shukor, <b>Omar Zakaria</b> , Mohd Nazri Ismail & Mohd Afizi Mohd Shukran  | Member           | 01 Feb 2014 – 31 Jan 2017 | RM 50,000<br>RACE  | In progress |
| 18 | Context-Based Keyword Pattern Cluster Analysis Technique on Tacit Knowledge of Military Tactics Centre of Expertise (CoE). Puteri Nor Ellyza Nohuddin, Abdullah Gani, <b>Omar Zakaria</b> , Zuraini Zainol & Mohd Afizi Mohd Shukran                          | Member           | 01 Feb 2014 – 31 Jan 2017 | RM 50,000<br>RACE  | In progress |
| 19 | Theoretical Analysis of Heave Buoy Wave Energy Converter (WEC). Mohamad Abu Ubaidah Amir bin Abu Zarim,   | Member           | 1 Sep 2013 – 31 Aug       | RM71,000<br>RAGS   | Completed   |

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|    | <b>Omar Zakaria</b> , Wan Baderul Hisan Wan Muda, Hardy Azmir Anuar, Mohd Afizi Mohd Shukran & Rina Mohd Sharip  |        | 2015                       |   |           |
| 20 | Impact on Environmental Assets: Development of Low Cost Mass Suppliable Water Purifier For Flood Disaster<br>Mohd Afizi bin Mohd Shukran, Zaharin bin Yusof, <b>Omar Zakaria</b> , Mohd Nazri Ismail, Wan Baderul Hisan Wan Muda, Mohamad Abu Ubaidah Amir Abu Zarim, Mohd Hakimi Ahmad Zainuddin & Nur Shazwani Abdul Latif | Member | 1 April 2015 – 31 Dec 2015 | RM 81,600<br>FRGS                                   | Completed |
| 21 | Proposing Information Security Policy at Hospital USIM. Noraini Abd Jalil, Waidah Ismail, Najwa Haayati Mohd Alwi, Mazlan Mohamad, Nora Ardilla Nordin & <b>Omar Zakaria</b>   | Member | 2015                       | RM10,000<br>PPP/GPTD/30/10315<br>USIM               | Completed |
| 22 | Mediating Effect of Industrial Revolution 4.0 and SMEs Willingness Index and its Impact on Technology, Cybersecurity, Human Capital and Society<br>Zailin Zainal Ariffin, Omar Zakaria, Mohd Hamran Mohamad, Mohamad Idham Md Razak, Hafizah Mat Nawi & Mohd Adib Ibrahim  | Member | 1 Okt 2022 – 30 Jun 2023   | RM20,000<br>UPNM/2022/<br>GPPP/SS/3<br>UPNM         | On going  |
| 23 | Malaysian SMEs Willingness Assessment Index to Industrial Revolution 4.0<br>Zailin Zainal Ariffin, Omar Zakaria, Wan Kalthom Yahya, Mohd Adib Ibrahim & Azizul Hadi Yaakop   | Member | 1 Jan 2019 – 30 Dis 2022   | RM75,000<br>FRGS/1/2018/SS03/UPN<br>M/02/04<br>FRGS | Completed |

## 1.2: Book/Chapter in Book:

(Please list in chronological order and state: authors, year, title, publisher/journal/conference, volume and number of pages (Please bold your name))

| No | Authors, year, title, publisher/journal/conference, volume and number of pages (Please bold your name)   | Level <ul style="list-style-type: none"><li>• International</li><li>• National</li><li>• University</li></ul> |
|----|--|---|
| 1  | <b>Omar Zakaria</b> et. al (2015), Kamus Teknologi Maklumat Perisian (Dictionary of Information Technology – Software), Dewan Bahasa & Pustaka, Kuala Lumpur   | National  |
| 2  | <b>Omar Zakaria</b> et. al (2014), Kamus Teknologi Maklumat Keselamatan Komputer (Dictionary of Information Technology – Computer Security), Dewan Bahasa & Pustaka, Kuala Lumpur  | National  |
| 3  | <b>Omar Zakaria</b> (2013), Information Security Culture: A Human Firewall Approach, Lambert Academic Publishing, Germany. ISBN: 978-3-659-35518-9 pp248   | International   |
| 4  | Mohamed Abomhara, <b>Omar Zakaria</b> & Othman O. Khalifa (2011), "Video Encryption Using Computation Between H.264/AVC and AES Encryption Algorithm, In Multimedia Encryption Transmission and Authentication", 2011 pp 28-38, IIUM Press ISBN: 967-418-160-4 | University / International  |



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| 5  | Mohamed Abomhara, <b>Omar Zakaria</b> & Othman O. Khalifa (2011), "Selective Video Encryption Algorithm Based on H.264/AVC and AES, In Multimedia Encryption Transmission and Authentication", 2011 pp 39-55, IIUM Press ISBN: 967-418-160-4   | University / International |
| 6  | Mohd Hazali Mohamed Halip, <b>Omar Zakaria</b> , Rosli Salleh (2007), "Sistem Sokongan Rangkaian Tingkatan 4 & 5" (Network Support System Form 4 & 5), Dewan Bahasa & Pustaka (DBP), Kuala Lumpur, 2007 pp248  | National                   |
| 7  | <b>Omar Zakaria</b> et. al.(Subject Matter Expert - SME)(2007), "Glossary of Information Technology - (Abbreviations & Acronyms) - English", Dewan Bahasa & Pustaka, Kuala Lumpur, 2007. ISBN: 978-983-62-6562-3   | National                   |
| 8  | <b>Omar Zakaria</b> , (2006), "Internalisation of Information Security Culture Amongst Employees Through Basic Security Knowledge", Proceedings of the IFIP TC-11 21st International Information Security Conference(SEC 2006), Springer Science & Business Media, 22- 24 May 2006, pp 437-441                   | International              |
| 9  | <b>Omar Zakaria</b> (2005),"Employee Security Perception in Cultivating Information Security Culture", IFIP TC11 WG11.1 AND WG11.5 Joint Working Conference on Security Management, Integrity and Internal Control in Information Systems, Springer Science and Business Media, Fairfax, Virginia (VA), pp 83-92 | International              |
| 10 | <b>Omar Zakaria</b> et. al. (Subject Matter Expert - SME) (2003)"Glossary of Information Technology - Volume 3: English - Description - Malay & Malay - English", Dewan Bahasa & Pustaka, Kuala Lumpur, 2003. ISBN: 983-62-8093-6  | National                   |
| 11 | <b>Omar Zakaria</b> and Miss Laiha Mat Kiah (2002), Pengenalan Kepada Keselamatan Komputer (An Introduction to Computer Security), McGraw Hill (M) Sdn Bhd, pp115  | National                   |
| 12 | <b>Omar Zakaria</b> et. al.(Subject Matter Expert - SME) (2000), "Glossary of Information Technology - Volume 2: English - Description - Malay & Malay - English", Publisher: Dewan Bahasa & Pustaka, Kuala Lumpur, 2003. ISBN: 983-62-6561-9  | National                   |
| 13 | Abdullah Gani, <b>Omar Zakaria</b> , Rodina Ahmad, Rohana Mahmud, Salimah Mokhtar, Sameem Abdul Kareem, Zarinah Mohd Kasirun (1997), "Microsoft Office 97 Professional: Step by Step (Langkahdemi Langkah Microsoft Office 97 Profesional)", Microsoft Press   | National                   |
| 14 | <b>Omar Zakaria</b> (1999), "Fundamentals of Internet and Web Publishing", UNITAR teaching module  | University                 |
| 15 | <b>Omar Zakaria</b> (1997), "Manual Pengajar untuk MS OFFICE PRO 97 STEP BY STEP 6 in 1 versi Bahasa Malaysia (Microsoft Outlook 97)   | University/ National       |

### 1.3 Journal Article

(Please list in chronological order and state: authors, year, title, publisher/journal/conference, volume and number of pages (Please bold your name))

| No | Authors, year, title, publisher/journal/conference, volume and number of pages (Please bold your name) :<br>Omar Zakaria<br><b>Scopus H-Index = 9 &amp; Citation = 409</b> (Author ID: 26025822100) (as at 20 Sep 2023)<br><b>Google Scholar H-Index = 24 &amp; Citation = 2444</b> (as at 20 Sep 2023)       | Level<br>• International<br>• National<br>• University |
|----|---|--|
| 1  | <b>Omar Zakaria</b> (2022), Proposing basic information security tasks as part of job specification for employee within an organisation. AIP Conference Proceedings 2617, <a href="https://doi.org/10.1063/5.0121315">https://doi.org/10.1063/5.0121315</a>   | International  |
| 2  | Zam Zarina Abdul Jabar, Muslihah Wook, <b>Omar Zakaria</b> , Suzaimah Ramli & Noor Afiza Mat Razali (2021) Establishment of Big Data Analytics Application Model for Malaysian Public Sector: An Expert Validation. The EDP Audit, Control and Security Newsletter. PP 1-20                                   | International  |
| 3  | Mohd Fahmi Mohamad Amran, Mohd Afizi Mohd Shukran, Mohd Sidek Fadhil Mohd Yunus, <b>Omar Zakaria</b> , et. al (2019), Testing Design for Pixel Value Graphical Password Scheme on Image Specimens, International Journal of Recent Technology & Engineering (IJRTE), Vol-8, Issue-2S8, August 2019: 1475-1478 | International  |
| 4  | Marzukhi, S., <b>Zakaria, O</b> et al (2018), Framework of Knowledge-Based System for United Nations Peacekeeping Operations Using Data Mining Technique. CAMP 2018: 18-23  | International  |
| 5  | Jazri, H., <b>Zakaria, O.</b> , & Chikohora, E. (2018, May). Measuring cybersecurity wellness index of critical organisations. Paper presented at 2018 IST-Africa Week Conference, IST-Africa 2018 (Botswana, Gaborone, May 2018), Institute of Electrical and Electronics Engineers Inc.                     | African Region   |
| 6  | Mohamed, H., Marzukhi, S., Zainol, Z., Tengku Sembok, T.M., and Zakaria, O (2018). Semantic-Based Social Media Threats Detection. ACM International Conference Proceeding Series 39   | International  |

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| 7  | Yusof, WSEY, <b>Zakaria, O</b> et al (2018), Establishment of user requirements handbook based on the situational awareness knowledge for Malaysia military observers. <i>International Journal of Engineering &amp; Technology</i> 7(4): 35-38  | International |
| 8  | Ismail, M. N, <b>Zakaria O</b> et al (2018), Development of mobile ad-hoc network (MANET) gateway for future soldier communications using Internet of Things (IoT) technology. <i>Journal of Engineering and Applied Sciences</i> 13(11), pp. 4120-4124  | International |
| 9  | Ismail. W, <b>Zakaria, O</b> et al (2018) Readiness of Information Security Management System (ISMS) policy on hospital staff using e-Patuh system. <i>Journal of Telecommunication, Electronic and Computer Engineering</i> 10(1- 11): 47-52  | International |
| 10 | <b>Omar Zakaria</b> , M.N. Zulhemay, R. M. Rashid & Ganapathy N N D F (2017), Engaging Information Security Awareness on Social Media; A Case Study of Secondary School Students <i>Advanced Science Letters</i> 23(8): 7601-7605  | International |
| 11 | Zainol,Z. Marzukhi, S. Nohuddin, P.N.E., Noormaanshah, W. M. U & <b>Zakaria, O</b> (2017), Document Clustering in Military Explicit Knowledge; A Study on Peacekeeping Documents. <i>Lecture Notes in Computer Science</i> 10645 LNCS, pp175-184   | International |
| 12 | Muhammad Noor, N. F, <b>Zakaria, O.</b> Nohuddin, P. N. E (2016), A Proposed Framework To Control Rumour Propagation on Twitter For Critical National Information Infrastructure (CNII) Organisations. <i>International Journal of Software Engineering &amp; Computer Systems (IJSECS)</i> , Vol 2:1-9                        | International |
| 13 | Muhammad Noor, N. F., <b>Zakaria, O</b> , Nohuddin, P. N. E, (2014), Semantic Attack Through Social Media: A Case Study of the Employees Provident Fund (EPF), <i>Zulfaqar International Journal of Defence Science, Engineering &amp; Technology</i> , Vol 1, Issue 2   | International |
| 14 | Rashid, R. M., <b>Zakaria, O.</b> , & Zulhemay, M. N. (2014). Determining critical success factors (CSF) of information security knowledge (ISK) towards organisations' information security effectiveness. <i>Australian Journal of Basic and Applied Sciences</i> , 8(23), 336-344 ( <b>Scopus/ISI Indexed</b> )             | International |
| 15 | Mohamad Abu Ubaidah Amir, Rina Mohd Sharip, Wan Baderul Hisan Wan Muda, Mohd Afizi Mohd Shukran, Hardy Azmir Anuar, <b>Omar Zakaria</b> (2014). <u>Heave Buoy Energy Converters; Simulation of Heave Buoy Response to Wave in Malaysian Water.</u> <i>Energy Procedia</i> . Elsevier. 62:101-111 ( <b>Scopus/ISI-Indexed</b> ) | International |
| 16 | Rashid, R. M., <b>O Zakaria</b> & Zulhamey, M. N, (2013), <u>The Relationship Between Information Security Knowledge and Human Factors: Challenges and Solution.</u> <i>Journal of Theoretical and Applied Information Technology</i> , Volume 57, Issue 1, November 2013, Pages 67-75 ( <b>Scopus-indexed</b> )               | International |

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|----|---|---|
| 17 | <b>Omar Zakaria</b> , Mohd Afizi Mohd Shukran, Toomaj Zangooei (2012), "Graphical Password Authentication: Review and Analysis" Advances in Information Sciences and Service Sciences (An International Journal of Research and Innovation) ( <b>Scopus-indexed</b> )   | International                             |
| 18 | <b>Omar Zakaria</b> , Mohd Afizi Mohd Shukran, Toomaj Zangooei (2012), "Enhancing Mixing Recognition-Based and Recall-Based Approach in Graphical Password Scheme", International Journal of Advancements in Computing Technology ( <b>Scopus-indexed</b> ) (accepted)  | International                             |
| 19 | Mohd Hazali Mohamed Halip, Mohd Afizi Mohd Shukran, <b>Omar Zakaria</b> , Syed Nasir Alsagoff Syed Zakaria (2012), "Detection of Steganographic Messages in Email Attachment", Modern Applied Science Vol 6. No 11:2012: 29-34 ( <b>Scopus-Indexed</b> )  | International                             |
| 20 | Masood Mansoori, <b>Omar Zakaria</b> , Abdullah Gani (2012), "Improving Exposure of Intrusion Deception System Through Implementation of Hybrid Honeypot", <b>International Arab Journal of Information Technology</b> , Vol. 9. No. 4 ( <b>ISI-Cited Publication</b> )   | International                             |
| 21 | Hamid Mohamadzadeh e.n., Roza Honarbakhsh, <b>Omar Zakaria</b> (2012), A Survey on Dynamic Honeypots. International Journal of Information and Electronics Engineering, Vol 2, No. 2. March 2012, pp233-237   | International                             |
| 22 | Mohd Afizi Mohd Shukran, <b>Omar Zakaria</b> , Noorhaniza Wahid, Ahmad Mujahid Ahmad Zaidi, "A CLASSIFICATION METHOD FOR DATA MINING USING SVM-WEIGHT AND EUCLIDEAN DISTANCE", Australian Journal of Basic and Applied, 5(9), pp.2053-2059, September 2011 ( <b>ISI/Scopus-indexed</b> )                              | International                             |
| 23 | <b>Omar Zakaria</b> , Mohamed Abomhara, Abdullah Gani, O.O. Khalifa, A.A Zaidan, B.B Zaidan, Rame. A, (2011), "An Experiment of Scalable Video Security Solution Using H.264/AVC and AES: Selective Cryptography ". <b>International Journal of the Physical Sciences</b> , ( <b>ISI-Cited Publication/Accepted</b> ) | International                             |
| 24 | Abdalla Medani, Abdullah Gani, <b>Omar Zakaria</b> , A. A. Zaidan and B. B. Zaidan (2011),"Review of Mobile SMS Security Issues and Techniques Towards The Solution. <b>Scientific Research and Essays</b> , Vol 6(6): 1147-1165. ( <b>ISI-Cited Publication</b> )  | International                             |
| 25 | Saman Mirza Abdulalla, Laiha Mat Kiah, <b>Omar Zakaria</b> (2010), "A Biological Model To Improve PE Malware Detection: Review", <b>International Journal of The Physical Sciences</b> , Vol 5(15): 2236-2247 18 November 2010 ( <b>ISI-Cited Publication</b> )   | International                             |
| 26 | <b>Omar Zakaria</b> (2011), "Kejuruteraan Sosial: Kaedah Bukan Teknikal Untuk Menerobos Sistem Pengkomputeran", Jurnal Rampak Serantau, Bil 18: 2011, pp302-312, Kementerian Pendidikan Nasional, Jakarta Timur, Indonesia. ISSN: 0853-8484   | Regional (Malaysia, Indonesia and Brunei) |
| 27 | A.A. Zaidan, B.B. Zaidan, Hamdan O.Alanazi, Abdullah Gani, <b>Omar Zakaria</b> (2010), "Novel Approach for High (Secure and Rate) Data Hidden within Triplex Space for Non Multimedia File, 2010, <b>Scientific Research and Essays</b> (SRE), ISSN 1992- 2248, Lagos, Nigeria. ( <b>ISI-Cited Publication</b> )      | International                             |
| 28 | M. Abomhara, <b>O. Zakaria</b> and Othman O. Khalifa (2010), "Suitability of Using Symmetric Key To Secure Multimedia Data: An Overview", Journal of Applied Sciences, Asian Network for Scientific Information. 1-6 ( <b>Scopus/ISI-Cited Publication</b> )  | International                             |

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| 29 | M. Abomhara, O. O. Khalifa, <b>O. Zakaria</b> , A. A. Zaidan, B.B. Zaidan and Rame. A (2010), "Video Compression Techniques: An Overview". Journal of Applied Sciences, Asian Network for Scientific Information. 1-7 ( <b>Scopus/ISI-Cited Publication</b> )                  | International |
| 30 | M. Abomhara, <b>Omar Zakaria</b> , Othman O. Khalifa, A.A Zaidan, B.B Zaidan (2010),"Enhancing Selective Encryption for H.264/AVC Using Advanced Encryption Standard", International Journal of Computer and Electrical Engineering, 2(2): 223-229                             | International |
| 31 | M. Abomhara, <b>Omar Zakaria</b> , Othman O. Khalifa (2010), "An Overview of Video Encryption Techniques", International Journal of Computer Theory and Engineering, 2(1): 103-110   | International |
| 32 | X. Li, R. Salleh and <b>Omar Zakaria</b> , (2009) "Wireless Spectrum Combination Protocol for 4G Networks", Journal of Applied Sciences, Issue 9, No. 2, pp 334-341 ( <b>Scopus/ISI-Cited Publication</b> )  | International |
| 33 | X.Li, R. Salleh and <b>Omar Zakaria</b> , (2009), "Mobile Multimedia Control Model for Fire Disaster of City Building", Journal of Applied Sciences, Issue 9, No. 2, pp304-311 ( <b>Scopus/ISI-Cited Publication</b> )   | International |
| 34 | Abdullah Gani, Xichun Li, Lina Yang, <b>Omar Zakaria</b> , Nor Badrul Anuar (2009),"Multi-Bandwidth Data Path Design for 5G Wireless Mobile Internets", Journal WSEAS Transactions on Information Science and Applications , Vol. 6, Issue 2, February 2009, pp 159-168        | International |
| 35 | Abdullah Gani, Qi Han, Nor Badrul Anuar, <b>Omar Zakaria</b> (2009), Enhancing DSR Protocol Performance in Mobile Ad Hoc Network Using ACK Reply. WSEAS TRANSACTIONS ON COMMUNICATIONS, Vol 8 (2)( <b>Scopus Indexed</b> )   | International |
| 36 | Abdullah Gani, Lina Yang, Nor Badrul Anuar, <b>Omar Zakaria</b> , Ros Surya Taher, Implementing Lightweight Reservation Protocol for Mobile Network Using Hybrid Schema. WSEAS TRANSACTIONS ON COMPUTERS. Vol 8(3), 2009. ( <b>Scopus indexed</b> )                            | International |
| 37 | Nor Badrul Anuar, Lai Ngan Kuen, <b>Omar Zakaria</b> , Abdullah Gani, Ainuddin Wahid Abdul Wahab (2009), "Usability and Performance of Secure Mobile Messaging: M-PKI", WSEAS Transactions on Information Science & Applications, Vol.6, Issue 2, February 2009, pp 179-189    | International |
| 38 | A. H. Lashkari, <b>O. Zakaria</b> , R. Salleh, S. Farmand, A wide-rangesurvey on Recall-Based Graphical User Authentications algorithmsbased on ISO and Attack Patterns, International Journal of Computer Science and Information Security (IJCSIS), Vol. 6, No. 3, 2009, USA | International |
| 39 | A. H. Lashkari, <b>O. Zakaria</b> , R. Salleh, S. Farmand, Shoulder Surfing Attack in Graphical Password Authentication, International Journal of Computer Science and Information Security (IJCSIS), Vol. 6, No. 2, 2009, USA   | International |
| 40 | X. Li, R. Salleh, <b>O. Zakaria</b> , Mobile Multimedia Control Model for Fire Disaster of City Building, Journal of Applied Sciences, ISSN 1812-5654, Issue 9, No. 2, pp. 304-311, 2009 ( <b>ISI/Scopus Indexed</b> )   | International |
| 41 | Nor Badrul Anuar, Lai Ngan Kuen, <b>Omar Zakaria</b> , Abdullah Gani, Ainuddin Wahid Abdul Wahab (2008), "GSM Mobile SMS/MMS using Public Key Infrastructure: m-PKI". WSEAS Transactions on Computers, Vol 7, Issue 8, August 2008, pp 1219-1229                               | International |

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| 42 | Nor Badrul Anuar, Hasimi Sallehudin, Abdullah Gani , <b>Omar Zakaria</b> (2008), "Identifying False Alarm for Network Intrusion Detection System Using Hybrid Data Mining and Decision Tree", <b>Malaysian Journal of Computer Science</b> , Vol. 21, Issue. 2, pp 101-115 ( <b>ISI-Cited Publication</b> )                      | International                             |
| 43 | Abdullah Gani, Xichun Li, Lina Yang, <b>Omar Zakaria</b> (2008) "Radio Frequency Combination for TCP/IP Suite Protocol Improvement in 4G Mobile Internet Networks", International Journal of Communications, Issue 1, Volume 2, 2008: 27-36  | International                             |
| 44 | Emran Mohd Tamil, Abdul Hamid Othman, Shadil Akimi Zainal Abidin, Mohd Yamani Idna Idris, <b>Omar Zakaria</b> (2007), "Password Practices: A Study on Attitudes towards Password Usage among Undergraduate Students in Klang Valley, Malaysia", Journal for the Advancement of Science & Art, Vol. 3. pp. 37-42 (ISSN 1823-903X) | National                                  |
| 45 | Nor Badrul Anuar, <b>Omar Zakaria</b> , and Chong Wei Yao (2006), "Honeypot through Web (Honeyd@WEB): The Emerging of Security Application Integration", Journal of Issues in Informing Science and Information Technology, Volume 3, 2006. pp 45 – 56   | International                             |
| 46 | <b>Omar Zakaria</b> ,(2006)"Budaya Perancangan Pemulihan Bencana" (Disaster Recovery Planning Culture), Jurnal Rampak Serantau, Brunei, Bil 13: 2006, pp350-359  | Regional (Malaysia, Indonesia and Brunei) |
| 47 | Abdullah Gani, <b>Omar Zakaria</b> , Nor Badrul Anuar Jumaat (2004), "A Markov Decision Process Model for Traffic Prioritisation Provisioning", Journal of Issues in Informing Science and Information Technology, Vol. 1 2004, pp 905-913   | International                             |
| 48 | <b>Omar Zakaria</b> (2003), "Program Budaya Keselamatan Maklumat", (Information Security Culture Programme), Jurnal Rampak Serantau (MABBIM), DBP Brunei. Vol.10 Mac 2003, pp 199-206  | Regional (Malaysia, Indonesia and Brunei) |
| 49 | Lim Boon Peng, <b>Omar Zakaria</b> and Mustaffa Kamal Mohd Nor (2001),"Role-Based Access Control in Kidney Dialysis Information System, <b>Malaysian Journal of Computer Science</b> , Vol.14, Issue: 2, December 2001, pp20-25 ( <b>ISI-Cited Publication</b> )   | International                             |
| 50 | <b>Omar Zakaria</b> (2000), "Keselamatan Komputer: Suatu Pengenalan" (Computer Security: An Introduction), Vol. 7, 10 Mac 2000, Jurnal Rampak Serantau, DBP Brunei, pp162-177  | Regional (Malaysia, Indonesia and Brunei) |

#### 1.4 Proceedings Articles:

(Please list in chronological order and state: authors, year, title, publisher/journal/conference, volume and number of pages (Please bold your name))

| No   | Authors, year, title, publisher/journal/conference, volume and number of pages (Please bold your name)   | Level<br><br>• International<br>• National<br>• University |
|--|--|--|
| 1  | Omar Zakaria (2020), Aspek Keselamatan Maklumat Dalam Laman Sesawang atau Sistem Dalam Talian Untuk Institusi Islam. <b>Pemeriksaan Institusi Islam di Malaysia: Melakar Kecemerlangan Masa Depan</b> , Persatuan Ulama Malaysia, ISBN 978-2306-43-6 pp 389-402  | National   |
| No publication on proceeding articles in year 2018 & 2019 due to taking cancer leave |  |  |
| 2  | WSEY Wan Yusof, Omar Zakaria, Zuraini Zainol & Ananthan (2017), Interpreting DIKW hierarchy into Knowledge Based Framework with Situationl Awareness Analysis for Gathering Military Observers' Tacit Knowledge. Protection & Survivability Symposium (PSS, 2017) National ACADEMIC CV 30 Protection & Survivability Symposium (PSS, 2017). Everly Hotel, Putrajaya  | National   |
| 3  | WSEY Wan Yusof, Omar Zakaria & Zuraini Zainol (2017), Establishing of Knowledge Based Framework for Situational Awareness using Nonaka's and Endsley's models. Proceedings of the 1st International Conference on Information and Communication Technology 7890775, pp.47-50 Proceedings of the 1st International Conference on Information and Communication Technology 7890775, pp.47-50. Kuala Lumpur           | International  |
| 4  | Zuraini Zainol, Nohuddin, P.N.E, Mohd, T. A. T & Omar Zakaria (2017), Text analytics of Unstructured Textual Data: A Study of Military Peacekeeping Document Using R Text Mining Package Text analytics of Unstructured Textual Data: A Study of Military Peacekeeping Document Using R Text Mining Package. Proceedings of the 6th International Conference on Computing and Informatics ICOCI 2017. Kuala Lumpur | International  |
| 5  | Wan Yusof, W.S.E.Y., Zakaria, O. And Zainol, Z. (2016), Exploring tacit knowledge on Malaysian Peacekeeping operations through strategising in-depth interviews. Proceedings of International Conference on Innovation in Business and Strategy, UTM, KL   | International  |

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| 6  | Mohammad Daud, N. H., Marzukhi, S., and Zakaria, O. (2016). Knowledge-based system with enhanced situational awareness analysis for Malaysian UN Military Observer (UNMO): A software development perspective. Proceeding of Defence Science & Technology Conference. Putrajaya  | National      |
| 7  | Wan Yusof, W.S.E.Y., Zakaria, O. And Zainol, Z. (2016). Establishing of Knowledge Based Framework for Situational Awareness Using Nonaka's And Endsley's Models. International Conference on Information Communication & Technology (ICICTM). UniKL, KL  | International |
| 8  | A. Ghani., A. K, Ismail., M.N, Zakaria, O., Nohuddin, P. N. (2016). Establishing Mesh Network Amongst Infantry Personnel During Military Operations: A Preliminary Study. International Conference on Information Communication & Technology (ICICTM). UniKL, KL   | International |
| 9  | Zulhamey. M. N., Mohamad Rashid, R. <b>Zakaria, O.</b> (2015). Towards A Structured Information Security Awareness Programme. Persidangan Antarabangsa Perpun ke-4, 11-12/8/2015. Avillion Legacy Htl, Melaka  | International |
| 10 | <b>Omar Zakaria</b> (2015). Establishing Human Firewall Within An Organisation. Malaysia Data Security Forum. 5/2/2015, Seri Pacific Hotel, Kuala Lumpur   | National      |
| 11 | Nor Faiz Muhammad Noor, <b>Omar Zakaria</b> & Puteri. N. E. Nohuddin (2014). Rumour Propagation on Twitter: A Case of Malaysian Critical National Information Infrastructure (CNII) Organisations, International Conference of Engineering, Information Technology and Science (ICEITS), IOI Hotel & Resort, Bandar Sunway, Selangor | International |
| 12 | Mohd Nabil Zulhamey, Rohana Mohamad Rashid & <b>Omar Zakaria</b> (2014). Towards A Structured Information Security Awareness Programme. International Online Conference on Advanced Information Technology for Human Science (AITHS), Bandung, Indonesia   | International |
| 13 | <b>Omar Zakaria</b> (2013), Looking Beyond Firewalls – Building E-Security Culture Within Organisation. E-Crime Conference, 17/5/2013, <b>Sunway Putra Hotel, Kuala Lumpur</b>   | National      |
| 14 | <b>Omar Zakaria</b> , Mohd Nabil Zulhamey & Rohana Mohamad Rashid (2013). Instilling Facebook Security Awareness In Secondary Students: A Case Study At SMIAAG. First National Conference on Knowledge Transfer. Equatorial Hotel, Bangi, Selangor. 21 Aug 2013  | National      |
| 15 | Omar Zakaria (2012) Navigating Security in The World of Emerging Technologies, InfoSec Asia 2013 Conference 20/3/2013, PWTC, KL  | National      |



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| 16 | Saman Mirza Abdulla, Miss Laiha Mat Kiah and <b>Omar Zakaria</b> . Minimizing Errors in Identifying Malicious API to Detect PE Malware Using Artificial Costimulation. International Conference on Emerging Trends in Computer and Electronics Engineering (ICETCEE'12), March 24-25, 2012, Dubai, UAE. 49-54  | International |
| 17 | <b>Omar Zakaria</b> and Mohd Hazali Mohamed Halip (2010). Information Security Culture Principles. Prosiding Kolokium Fakulti Sains dan Teknologi Pertahanan 2010. 12-20 ISBN 978-967-5985-10-2  | University    |
| 18 | Mohd Hazali Mohamed Halip, <b>Omar Zakaria</b> and Nor Fatimah Awang (2010). Detecting Steganographic Messages In Email Attachment. Prosiding Kolokium Fakulti Sains dan Teknologi Pertahanan 2010. 21-30. ISBN 978-967-5985-10-2  | University    |
| 19 | M. Abomhara, <b>Omar Zakaria</b> , Othman O. Khalifa, (2009, "Design a New Selective Video Encryption Using Computation Between H.264/AVC and AES Encryption Algorithm", Asia Pacific Defence & Security Technology Conference (DSTC) 6-7 October 2009 KL .  | Regional      |
| 20 | Saman Mirza Abdulla, <b>Omar Zakaria</b> , (2009), "Devising a Biological Model to Detect Polymorphic Computer Viruses Artificial Immune System (AIM): Review," ICCTD, vol. 1, 2009 International Conference on Computer Technology and Development, pp 300-304  | International |
| 21 | Ahmed.K.Hasan, A.A.Zaidan, Rosli Salleh, <b>Omar Zakaria</b> , B.B.Zaidan and S.M.Mohammed (2009), "Throughput Optimization of Unplanned Wireless Mesh Networks Deployment Using Partitioning Hierarchical Cluster (PHC)", Proceedings of the World Congress on Engineering 2009 Vol I, WCE 2009, July 1 – 3, 2009, London, U.K pp 907-911                 | International |
| 22 | Ahmed K. Hasan, A.A. Zaidan, Anas Majeed, B.B. Zaidan, Rosli Salleh, <b>Omar Zakaria</b> and Ali Zuheir (2009), Enhancement Throughput of Unplanned Wireless Mesh Networks Deployment Using Partitioning Hierarchical Cluster (PHC), Proceedings of the World Academy of Science, Engineering and Technology Congress on Engineering 2009, Vol 54: 480-484 | International |
| 23 | A. H. Lashkari, S. Farmand, R. Salleh, <b>O. Zakaria</b> , Recall-Based Graphical User Authentication Based On Attacks Patterns, The 13 <sup>th</sup> IEEE International Multitopic Conference (INMIC 2009), 14-15 Desember 2009, Islamabad, Pakistan.   | International |

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| 24 | Xichun Li, Rosli Salleh, Abdullah Gani and <b>Omar Zakaria</b> (2009), "Multi-Network Data Path for 5G Mobile Multimedia", 2009 International Conference on Communication Software and Networks (ICCSN 2009) (IEEE Proceedings), 27-28 Feb 2009, Macau, China   | International |
| 25 | Xichun Li, Abdullah Gani, Rosli Salleh, <b>Omar Zakaria</b> , "The Future of Mobile Wireless Communication Networks", 2009 International Conference on Communication Software and Networks (ICCSN 2009) (IEEE Proceedings), 27-28 February 2009, Macau, China   | International |
| 26 | Abdullah Gani, Xichun Li, Lina Yang, <b>Omar Zakaria</b> (2008), "TCP/IP Suite Enhancement for 4G Mobile Multimedia Internet Networks", 8 <sup>th</sup> WSEAS International Conference on Multimedia Systems and Signal Processing (MUSP'08), Hangzhou, China, April 6-8, 2008, pp 229-235  | International |
| 27 | Nor Badrul Anuar, Muhammad Azlan Ibrahim, Ainuddin Wahid Abdul Wahab and <b>Omar Zakaria</b> (2008), "SANAsms: Secure Short Messaging System for Secure GSM Mobile Communication", Proceedings of ECIW 2008 The 7 <sup>th</sup> European Conference on Information Warfare and Security, University of Plymouth, UK 30 June – 1 July 2008, pp1-6      | International |
| 28 | Xichun Li, Abdullah Gani, Lina Yang, <b>Omar Zakaria</b> & Nor Badrul Anuar (2008), "Mix-Bandwidth Data Path Design for 5G Real Wireless World", 12 <sup>th</sup> WSEAS International Conference on Communications, WSEAS Press, 23-25 July 2008, Heraklion, Crete, Greece, pp 316- 320   | International |
| 29 | Nor Badrul Anuar, Lai Ngan Kuen, <b>Omar Zakaria</b> , Abdullah Gani and Ainuddin Wahid Abdul Wahab, (2008)"Usability and Performance of Secure Mobile Messaging using Public Key Infrastructure", 7 <sup>th</sup> WSEAS International Conference on Data Networks, Communications & Computers (DNCOCO '08), WSEAS Press, Bucharest, Romania, pp29-42 | International |
| 30 | Nor Badrul Anuar, Lai Ngan Kuen, <b>Omar Zakaria</b> , Abdullah Gani (2008),"Secure Mobile Messaging using Public Key Infrastructure: m-PKI" 12 <sup>th</sup> WSEAS International Conference on Computers, WSEAS Press, 23-25 July 2008, Heraklion, Crete, Greece, pp 76-81   | International |

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| 31 | Abdullah Gani, <b>Omar Zakaria</b> , Nor Badrul Anuar, Zolkepli Buang, (2007),”Integrating Agent Technology in Teaching and Learning of Computer Security Course in Tertiary Level”, International Conference on Engineering and ICT 2007, Equatorial Hotel, Melaka, Malaysia 27-28 Nov 2007, pp 505-511.                   | International |
| 32 | Mustaffa Kamal Mohd Nor, <b>Omar Zakaria</b> , Abdul Razak Hamdan & Aziz Deraman (2007),” Using Success Factors for Evaluating IT Readiness Levels in Implementing IT for Malaysian’s SMEs”, International Conference on Electrical Engineering & Informatics (ICEEI), Bandung, Indonesia 17-19 June 2007, pp 360-363       | International |
| 33 | Mustaffa Kamal Mohd Nor, <b>Omar Zakaria</b> & Chang Sok Kin, (2007),”The development of critical undergraduate program selection system (CUPSS) for admission to Malaysian Public Universitie” , International Conference on Electrical Engineering and Informatics (ICEEI)Bandung, Indonesia, 17-19 June 2007, pp 649-653 | International |
| 34 | Abdullah Gani, Sapiyan Baba, Roziati Zainuddin, <b>Omar Zakaria</b> , (2007), “Proactive User Agent Towards Self-Regulated Network Resource Control”, International Conference on Electrical Engineering and Informatics, Bandung, Indonesia. 17-19 June 2007   | International |
| 35 | <b>Omar Zakaria</b> , Abdullah Gani, Mustaffa Mohd Nor, Nor Badrul Jumaat,(2007),”Reengineering Information Security Culture Through Management Perspective”, Intl Conference on Electrical Engineering and Informatics, Bandung, Indonesia. 17-19 June 2007, pp638-641   | International |
| 36 | Abdullah Gani, M. Sapiyan Baba, R. Zainuddin, <b>Omar Zakaria</b> ,(2006), “Online Skill-based Assessment of Network Technology Course Using Simulation Technique”, The 19 <sup>th</sup> Educational Technology Convention, Langkawi, Malaysia. 9-11 September 2006   | National      |
| 37 | Abdullah Gani, M. Sapiyan Baba, R. Zainuddin, <b>Omar Zakaria</b> (2006),”Network Resource Control”, International Conference on Science and Technology (ICSTIE2006): Applications in Industry and Education, Penang, Malaysia. 8-9 December 2006   | International |
| 38 | Abdullah Gani, <b>Omar Zakaria</b> , Sapiyan Baba, Roziati Zainuddin (2006),”Towards Internalisation Of Information Security Culture Using User Manager Agent System”, International Conference on ICT For The Muslim World ICT4M 2006, Kuala Lumpur,Malaysia. 21-23 November 2006  | International |

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| 39 | <b>Omar Zakaria</b> , Abdullah Ghani, Sapiyan Baba,(2006) "Integrating Information Security Course into Undergraduate Programmes: A UM's Experience", International Conference on Science and Technology (ICSTIE2006): Applications in Industry and Education, Penang, Malaysia. 8-9 December 2006 | International |
| 40 | <b>Omar Zakaria</b> (2005),"Information Security Culture and Leadership", 4 <sup>th</sup> European Conference on Information Warfare, Glamorgan, Wales, pp415-420  | International |
| 41 | Omar Zakaria (2004), "Understanding Challenges of Information Security Culture: A Methodology Issue", 2 <sup>nd</sup> Australian Information Security Management Conference (INFOSEC04), pp 83-93  | International |
| 42 | <b>Omar Zakaria</b> (2004), "Information Security Culture: A Taxonomy of Positive Security Behaviour", The 3 <sup>rd</sup> European Conference on Information Warfare and Security, Egham, Surrey, England, 2004, pp 379-386   | International |
| 43 | <b>Omar Zakaria</b> , Pita Jarupunphol and Abdullah Gani (2003), "Paradigm Mapping for Information Security Culture Approach", The 4 <sup>th</sup> Australian Information Warfare and IT Security Conference, Adelaide, Australia, 20-21 November 2003, pp417-426                                  | International |
| 44 | <b>Omar Zakaria</b> and Abdullah Gani (2003), "A Conceptual Checklist of Information Security Culture", Proceeding of the 2 <sup>nd</sup> European Conference on Information Warfare and Security. Reading, England, 30 June -1 July 2003, pp365-371   | International |
| 45 | <b>Omar Zakaria</b> and Pita Jarupunphol (2003), "Understanding The Role of Information Security Culture", Proceeding of International Conference on E-Society, Lisbon, Portugal, 3-6 June 2003, pp 1013-1014  | International |
| 46 | Mustafa Kamal Mohd Nor, N. L. Yong, F. Othman and <b>Omar Zakaria</b> (2002), In Eds J. Kassim et. Al "Web-Based New Renumeration Scheme (SSB) Evaluation System", Prosiding Seminar Kebangsaan Sains, Teknologi dan Sains Sosial, Kuantan, 2 May 2002, pp 122-129                                 | National      |
| 47 | <b>Omar Zakaria</b> (2002), "Information Security Acculturation Challenges in Malaysia: An Introduction", Proceeding od The European Conference on Information Warfare and Security, Uxbridge, England, 8-9 July 2002, pp187-190   | International |

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| 48 | <b>Omar Zakaria</b> , Khairul Nidzar Mohd Nasir and Mustaffa Kamal Mohd Nor (2001), "A Proposed Implementation of Linux-Based Thin Client System in Cyber Cafe", International Conference on Technology Education: Optimal Use of Resources, Cape Town, South Africa, 4-6 October 2001 | International |
| 49 | <b>Omar Zakaria</b> , Khairul Nidzar Mohd Nasir, Noorzaily Mohd Noor (2001), "Linux-Based Thin Client System Pilot test at FCSIT-UM", International Conference of Information Technology and Multimedia, UNITEN, Selangor, Malaysia, Vol. 2, 13-15 August 2001, pp 59-63               | International |
| 50 | <b>Omar Zakaria</b> and Hannyzura Pal (2000), "Perancangan Penyediaan Istilah Teknologi Maklumat Bagi Tahun 1998-2002", Seminar Antarabangsa Bahasa Melayu Alaf Baru, UITM, Shah Alam, Selangor, Malaysia, 25-27/9/2000.   | International |
| 51 | <b>Omar Zakaria</b> (1999), "Kaedah Memartabatkan Bahasa Melayu Dalam Teknologi Maklumat", Bahasa Melayu in Cyber Era Seminar, Hotel Istana, Kuala Lumpur, September 1999  | National      |
| 52 | <b>Omar Zakaria</b> , Norijah Hj Husin and Siti Aishah Hashim Ali (1998), "TRIGMET: An Interactive Multimedia Learning Package for Trigonometry", International Conference on Information Technology & Multimedia ICIMU), UNITEN, Selangor, 29/9/1998-1/10/1998. Pp PSA10-1-SA10-6     | International |
| 53 | S. A. Hashim Ali, N. Husin & <b>O. Zakaria</b> (1998), "Pembentukan 1 Sistem Pembelajaran Berinteraktif", Sem Sehari Pembelajaran Maths  | National      |

## 2.0 ACADEMIC RECOGNITION AND LEADERSHIP, CONSULTANCY, SERVICE TO THE UNIVERSITY AND SERVICE TO THE COMMUNITY

| No | Academic Recognition   | Year | Level         | Awarding Body / Name of Institution            |
|----|--|------|---------------|--|
| 1  | Distinguished Faculty Award – (teaching & learning recognition)  | 2016 | International | Venus International Foundation, Chennai, India |
| 2  | Invited Speaker:<br>From Policy design to breach Response: A Complete Look at Enterprise Security<br>Intel Security eGOV-CXO Mini Forum Malaysia | 2016 | National      | Questex Asia Ltd                               |

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|----|--|---------------|----------------------------|---|
| 3  | Invited Speaker:<br>Establishing Human Firewall Within An Organisation at Malaysia Data Security Forum     | 2015          | National                   | Asian Strategy & Leadership Institute (ASLI)  |
| 4  | External Examiner for PhD thesis   | 2015          | National                   | UKM   |
| 5  | PRINCE2 (Projects in Controlled Environment, Version 2) – Project Management                               | 2014          | National/<br>International | Prestariang Sdn Bhd   |
| 6  | Anugerah Perkhidmatan Cemerlang (Service Excellence Award) 2013  | 2014          | University                 | UPNM  |
| 7  | External Examiner for PhD Thesis   | 2014          | International              | University of Melbourne. Australia  |
| 8  | External Examiner for Bachelor of Computer Security programme  | 2014,<br>2015 | National                   | Faculty of Business and Information Technology, Unitar International University                                     |
| 9  | External Examiner for Diploma of Computer Security programme   | 2014,<br>2015 | National                   | Faculty of Business and Information Technology, Unitar International University                                     |
| 10 | Judge for PECIPTA 2013 for IT category   | 2013          | National                   | Pecipta committee   |
| 11 | Chief Security Officer (CSO) Award   | 2013          | Regional (South East Asia) | IDG Vietnam & ASEAN   |
| 12 | External Examiner for Master Programme   | 2013          | National                   | Faculty of Business and Information Technology, Unitar International U  |
| 13 | ISO/IEC 27001 Lead Auditor: Information Security Management System (ISMS)                                  | 2013          | International              | Profesional Evaluation and Certification Board, 7275 Sherbrooke East, Suite 32, CP 49060 Montreal QC H1N 1H0 Canada |
| 14 | Sijil Prestasi Cemerlang 2012 (Certificate for Excellence Performance)                                     | 2013          | University                 | UPNM  |
| 15 | Keynote Address: Navigating Security in the World of Emerging Technologies at InfoSec Asia 2013 Conference | 2013          | Regional                   | JFPS Group (M) Sdn Bhd, Malaysia  |
| 16 | Invited Speaker: Looking Beyond Firewalls – Building E-Security Culture Within Organisation                | 2013          | National                   | Asian Strategy & Leadership Institute (ASLI)  |

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|----|---|-----------------------------|--------------------------|--|
| 17 | Panel of Experts (POE) in Human Dimension for Network Centric Operation (NCO), ATM Phase 1A | Oktober 2011 – Oktober 2014 | National                 | Markas Angkatan Tentera Malaysia           |
| 18 | External Examiner for Master thesis   | 2014                        | National                 | Universiti Sains Islam Malaysia (USIM)     |
| 19 | Evaluator for new MSc in Information Security Programme                                     | 2013                        | National                 | University of Malaya (UM)                  |
| 20 | External Examiner for Ph.D thesis   | 2013                        | National                 | Universiti Sains Islam Malaysia (USIM)     |
| 21 | Certified Ethical Hacker (CEH)  | 28 Sept 2012                | International            | EC Council                                 |
| 22 | Penilai Kenaikan Pangkat Ke Jawatan Profesor Madya – Dr. Azlan bin Mohd Zain, UTM           | 15 May 2012                 | National                 | UTM  |
| 23 | Evaluator for Diploma of IT course  | 2012                        | National                 | UMTech                                     |
| 24 | Reviewer for paper submitted to Malaysian Journal of Computer Science (MJCS)                | 2012                        | National                 | Editorial Board of MJCS, UM                |
| 25 | External Examiner for Master Dissertation   | 2012                        | National                 | Universiti Teknikal Melaka Malaysia (UTEM) |
| 26 | External Examiner for Ph.D thesis   | 2011, 2012, 2013            | National                 | Univerisi Teknologi Malaysia (UTM)         |
| 27 | Certified on I Citizen  | 2011                        | International / National | Prestariang Bhd & Certiport (USA)          |
| 28 | External Examiner for Master Dissertation   | 2010,2011, 2012, 2013       | National                 | UTM  |
| 29 | External Examiner for Ph.D thesis   | 2011,2012, 2013             | National                 | Universiti Utara Malaysia (UUM)            |
| 30 | External Examiner for Master Dissertation   | 2011, 2012                  | National                 | Universiti Kebangsaan Malaysia (UKM)       |
| 31 | External Examiner for Master Dissertation   | 2011                        | National                 | MMU, Cyberjaya                             |
| 32 | Lead Assessor ISO 9001:2008   | 2010                        | National                 | SIRIM QAS International Sdn Bhd            |
| 33 | Evaluator for new undergraduate information security programme                              | 2010                        | National                 | UTEM                                       |
| 34 | Certified Openoffice.Org and Linux Desktop (COOOL)  | 2010                        | National                 | Open Source Competency Centre, Cyberjaya   |

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|----|---|-----------------------|---------------|--|
| 35 | External Examiner for PhD thesis  | 2010                  | International | Bharathiar University, Coimbatore, Tamil Nadu, India                 |
| 36 | External Examiner for Master Dissertation   | 2009                  | International | Nelson Mandela Metropolitan University, Port Elizabeth, South Africa |
| 37 | Internal Examiner for Master Dissertation   | 2001, 2006, 2008-2010 | National      | University of Malaya (UM)  |
| 38 | Reviewer for paper submitted to European Conference on Information Warfare and Security (ECIW)  | 2005-now              | International | ECIW organizer   |
| 39 | Member of IFIP WG 11.1 Information Security Management  | 2006 – now            | International | IFIP WG 11.1 Organiser   |
| 40 | 18 <sup>th</sup> International, Invention, Innovation and Technology Exhibition (ITEX 2011) – <b>1 Bronze Medal</b><br>Title: Graphical Password Resistant Shoulder Surfing   | 2007                  | International | MINDS (Malaysian Invention and Design Society)                       |
| 41 | 19 <sup>th</sup> International, Invention, Innovation and Technology Exhibition (ITEX 2008) – <b>1 Silver Medal</b><br>Title: Hacker Proof Graphical Password Using Digital Watermarks                                | 2008                  | International | MINDS (Malaysian Invention and Design Society)                       |
| 42 | Ekspo Penyelidikan, Rekacipta & Inovasi UM 2009 – <b>1 Silver Medal</b><br>Title: SANAsms: Secure Short Messaging System for Secure GSM Mobile Communication  | 2009                  | University    | University of Malaya (UM)  |
| 43 | 22 <sup>nd</sup> International, Invention, Innovation and Technology Exhibition (ITEX 2011) – <b>1 Silver Medal</b><br>Title: Improving Graphical Password Resistant To Shoulder Surfing Using Playing Cards Approach | 2011                  | International | MINDS (Malaysian Invention and Design Society)                       |



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|----|---|--|---------------|--|
| 44 | Pecipta 2013 – <b>1 Bronze Medal</b> . Title: Pixel Value Graphical Password  | 2013   | International | Kementerian Pendidikan Malaysia, UUM & UniMAP  |
| 45 | 25 <sup>th</sup> ITEX 2014 – <b>1 Gold Medal</b> . Title: Pixel Value Graphical Password Scheme   | 2014   | International | MINDS (Malaysian Invention and Design Society) |
| 46 | Malaysia Technology Expo (MTE) 2014<br><b>1 Bronze Medal</b><br>Title: QR Tag Scanner   | 2014   | National      | Malaysian Association of Research Scientists   |
| 47 | Pecipta 2015<br>1 Bronze Medal<br>Title: Crash Notification with Geographic Coordinator Using Android                                   | 2015   | International | Soaring Upwards MHE, KPT & UPSI                |
| 48 | 27 <sup>th</sup> ITEX 2016 – Silver Medal. Title: Car Crash Notifier with Geographic Coordinator using Android Application              | 2016   | International | MINDS (Malaysian Invention and Design Society) |
| 49 | Staff excellence award 1999   | 2000   | University    | University of Malaya (UM)                      |
| 50 | Intellectual Property: Patent: System for Establishing voice conference over IPV6 for infantry personnel in search and rescue operation | Filing: 31 Jan 2017<br><br>Date of Grant: 4 Jan 2023 | UPNM          | Deputy Registrar of Patents Malaysia           |
| 51 | Intellectual Property: Patent: Mesh network amongst infantry personnel  | Filing: 29 Nov 2016<br><br>Date of Grant: 9 Nov 2022 | UPNM          | Deputy Registrar of Patents Malaysia           |
| 52 | Penilai Kenaikan Pangkat ke Profesor Madya – Dr. Siti Rahayu binti Selamat, UTEM  | 2017   | National      | USIM   |
| 53 | Penilai Kenaikan Pangkat ke Profesor Madya – Dr Rozmie Razif bin Othman   | 2017   | National      | UniMAP   |
| 54 | Penilai Kenaikan Pangkat ke Profesor Madya – Dr. Rosli bin Mohamad  | 2020   | National      | UUM  |

|    |  |      |                           |                       |
|----|--|------|---------------------------|-----------------------|
| 55 | Penilai Kenaikan Pangkat ke Profesor Madya – Dr. Ku Maisarah binti Ku Bahador                    | 2020 | National                  | UUM                   |
| 56 | Penilai Kenaikan Pangkat ke Profesor Madya – Dr Azween bin Abdullah                              | 2018 | National                  | Taylor's University   |
| 57 | Penilai Kenaikan Pangkat ke Profesor Madya – Dr. Massudi bin Mahmuddin                           | 2020 | National                  | UUM                   |
| 58 | Chief of Security Officer (CSO) ASEAN Honoree  | 2013 | Regional                  | IDG Vietnam & Asia    |
| 59 | Member of Internet Society (International) and Malaysia Chapter                                  | 2018 | International<br>National | Malaysia Chapter, UUM |
| 60 | Certificate of Grant of a Patent Communication System for Military Operation Site (MY-1976294-A) | 2023 | National                  | Pro IP Sdn Bhd        |

### 3.0 Service to the University

#### (a) University

| No | Position/Membership   | Committee                                     | Duration                  |
|----|---|---|---------------------------|
| 1  | Head of Department  | Department of Computer Science, FSTP, UPNM    | 4 Feb 2016 – 3 Feb 2018   |
| 2  | Member of Board of Study (BOS) for Faculty of Creative Media & Innovative Technology, IUKL untuk subjek: Bachelor of Information Technology (Hons) in Computer Security | Infrastructure University Kuala Lumpur (IUKL) | 17 Jun 2016- 16 Jun 2018  |
| 3  | ICT Security Policy member  | PTMK  | 10 Mac 2016               |
| 4  | Deputy Dean   | Centre for Postgraduate Studies, UPNM         | 2 Jan 2014 – 1 Jan 2016   |
| 5  | Deputy Head of CAP Brains15   | iPMO, UPNM                                    | 14 April 2014             |
| 6  | Director  | Centre for Quality Assurance, UPNM            | 15 Oct 2010 – 14 Oct 2012 |

|    |  |                           |                                 |
|----|--|---------------------------|---------------------------------|
| 7  | ICT Policy Evaluator   | PTMK, UPNM                | 15 July 2010 – present          |
| 8  | Senate member  | UPNM senate               | 21 December 2010 – 18 July 2012 |
| 9  | University Management Meeting Member (Ahli Mesyuarat Pengurusan Universiti)                                  | UPNM's Management Meeting | 21 December 2010 – present      |
| 10 | Head of Committee of the Quotation for Wireless Project  | PTMK, UPNM                | 2011-2011                       |
| 11 | Head of CAPS Quality Assurance   | UPNM                      | 2011 – Nov 2012                 |
| 12 | Member of Internal Inspectorate  | UPNM                      | 2011 – 14 Oktober 2012          |
| 13 | Program Pembangunan Kepimpinan Tunas Akademia  | UPNM                      | Oct 2011 – Dec 2011             |
| 14 | Panel for Postgraduate Colloquium – Information Technology Cluster   | UPNM                      | 2012                            |
| 15 | Evaluator of Postgraduate Colloquium for Cluster of Science and Technology                                   | UPNM                      | 2012                            |
| 16 | Ketua Projek Agenda Kritikal (CAP) Bagi iPMO UPNM Jaminan Kualiti  | UPNM                      | 29 Mac 2012 – 29 Mac 2014       |
| 17 | AJK CAP Penyelidikan dan Pembangunan (Research & Development) Bagi iPMO UPNM                                 | UPNM                      | 1 Mei 2012 – 30 April 2014      |
| 18 | Penceramah Kursus Induksi UPNM 2012  | UPNM                      | 3 July 2012                     |
| 19 | Penceramah Bengkel Peningkatan Prestasi Pelajar Siswazah UPNM: How to Plan, Manage and Pass Your MSc or PhD? | UPNM                      | 12 July 2012                    |
| 20 | Ahli Jawatankuasa Cuti Belajar Fakulti   | UPNM                      | 2012 - sekarang                 |
| 21 | Pengerusi Kluster CyberSecurity FSTP   | UPNM                      | Until July 2013                 |
| 22 | Pengerusi Jawatankuasa Penerbitan Fakulti  | UPNM                      | 23 April 2013                   |
| 23 | Panel Temuduga Pemilihan Pelajar Baharu UPNM Sesi 2013/2014 di Kem Terendak, Sg Udang, Melaka                | UPNM                      | 24-25 April 2013                |
| 24 | Panel Temuduga Pemilihan Pelajar Baharu UPNM Dari Ambilan STPM dan Setaraf Sesi 14/15 FSTP, UPNM             | UPNM                      | 2 June 2014                     |

**(b) Service to the community**

(Please list in chronological order and state: level of involvement, activity, organiser, venue, date/ year/ duration)

| No | Level of involvement  | Activity  | Organiser                            | Venue                                  | Date/Year/ Duration                      |
|----|---|---|--------------------------------------|--|--|
| 1  | Chairman of PIBG  | 2 years programme of PIBG                               | PIBG                                 | Sek Ren Islam Al-Huda Km 11 Jln Gombak | 2011-2013, 2013-2015, 2015-2017          |
| 2  | Committee of Surau Al-Khafi   | 2 years programme conducted by surau                    | Surau Al-Khafi, Pinggiran Batu Caves | Pinggiran Batu Caves, Selangor         | 2010-2013<br>2020-2023                   |
| 3  | Deputy President of Information Security Professionals Malaysia (ISPA.my) | Activity of Information Security Professionals Malaysia | Cybersecurity Malaysia               | Cybersecurity, Malaysia                | 2010 – 2011, 2012 - 2014                 |
| 4  | Secretary of Astana Gemilang Resident Association (AGRA)                  | 1.5 years programme conducted by AGRA                   | AGRA                                 | Astana Gemilang, Pinggiran Batu Caves  | 2007-2008 (Secretary)<br>2017-2019 (AJK) |
| 5  | Ahli Rukun Tetangga Astana Gemilang                                       | Throughout the year                                     | Rukun Tetangga Astana Gemilang       | Astana Gemilang, Pinggiran Batu Caves  | 2018 - now                               |

**Referees:**

1. **Prof. Dr. Abdullah bin Gani**  
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**I declare that all the information in this form is true and correct. The University has the right to withdraw or reject the application if any information in this form found to be untrue.**

**Signature** : 

**Name** : **Omar bin Zakaria**

**Faculty/Department** : **Faculty of Defence Science and Technology,  
Department of Computer Science, UPNM**

**Date** : **20 September 2023**