



CURRICULUM VITAE



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Academic Qualifications

- Ph.D. in Wireless Communication Networks, The University of Sydney, Australia. (Thesis: Security Framework and Anomaly Detection for Interworked Heterogeneous Mobile Networks).
- M.Sc. in Computer Communications, Universiti Sains Malaysia. (Thesis: Performance Analysis of Ad hoc On-demand Distance Vector (AODV) Routing Protocol).
- B.Eng. in Computer and Communication Systems, Universiti Putra Malaysia.

Professional Qualification/ Membership/ Affiliation

- Member, Institute of Electrical and Electronics Engineers (IEEE)
- Member, IEEE Communication Society (ComSoc)
- Member, IEEE ComSoc Communications and Information Security Technical Committee (CISTC)
- Member, International Association of Engineers (IAENG)
- Member, Institute for Computer Sciences, Social-Informatics and Telecommunications Engineering (ICST)
- Member, Australian Research Council (ARC) Communication Research Network (ACORN)

Appointments

- Dec, 2001 . to date Tutor, Faculty of Engineering, UPM

Areas of Interest

- Heterogeneous Network Security (wired and wireless)
- IPv6 (mobile and fixed)
- 6LowPAN
- Cognitive Networks
- Wireless Sensor Networks and MANET

Publications

Journals

1. **Fazirulhisyam Hashim** and Abbas Jamalipour, % Generic Sampling Framework for Improving Anomaly Detection in the Next Generation Network,+to appear in Security and Communication Networks.
2. **Fazirulhisyam Hashim**, Kumudu S. Munasinghe and Abbas Jamalipour, %Biologically Inspired Anomaly Detection and Security Control Frameworks for Complex Heterogeneous Networks,+IEEE Transactions on Network and Service Management (TNSM), vol. 7, no. 4, pp. 1-14 December 2010.
3. **Fazirulhisyam Hashim**, Kumudu S. Munasinghe and Abbas Jamalipour, % Danger Theory Inspired Survivability Framework for the Next Generation Mobile Network,+IEEE Latin American Transactions (LAT), vol. 8, no. 4, pp. 358-369,



August 2010.

4. **Fazirulhisyam Hashim**, M. Rubaiyat Kibria, and Abbas Jamalipour, %Securing the Next Generation Mobile Network,+ Security and Communication Networks, vol: 1, no: 1, pp. 25-43, Feb 2008.
5. N. K. Nordin, J. Chong, **F. Hashim**, and S. Khatun, %Design and Simulation of Three-Tier Hierarchical Network for the 3rd Generation Mobile System+, Pertanika Journal of Science and Technology, Vol. 12 No.2, July 2004.
6. Sabira Khatun, **F. Hashim**, N. K. Noordin and B. M. Ali, %Optimal Three-Tier Cellular Network Design and Comparison+, Journal of the Institution of Engineers (IEM), Vol. 64, No. 4, pp. 29-36, December 2003.
7. **F. Hashim**, S. Khatun, B.M. Ali and N.K. Nordin, %Optimal Three-Tier Cellular Network Design and Comparison+, Annual Review of Communication, Volume 56, Section V, International Engineering Congress (IEC), November 2003

Conference Proceedings

1. **Fazirulhisyam Hashim**, Kumudu S. Munasinghe and Abbas Jamalipour, %Biologically Inspired Framework for Mitigating Epidemic and Pandemic Attacks in the NGMN,+ IEEE Wireless Communications and Networking Conference (WCNC), April 2010.
2. **Fazirulhisyam Hashim** and Abbas Jamalipour, %Forecasting-based sampling decision for accurate and scalable anomaly detection,+ IEEE Global Communications Conference (Globecom), December 2009.
3. **Fazirulhisyam Hashim**, Kumudu S. Munasinghe and Abbas Jamalipour, %Survivability Framework for the NGMN : Inspirations from the Human Immune System,+ IEEE Latin-America Conference on Communications (LATINCOM), September 2009.
4. **Fazirulhisyam Hashim** and Abbas Jamalipour, %On Accurate and Scalable Anomaly Detection in Next Generation Mobile Network,+International Conference on Communications (ICC), June 2009.
5. **Fazirulhisyam Hashim** and Abbas Jamalipour, %Adaptive Sampling Strategy for Accurate and Scalable Anomaly Detection in NGMN,+ International Conference on Signal Processing and Communication Systems (ICSPCS), December 2008.
6. **Fazirulhisyam Hashim**, M. Rubaiyat Kibria, and Abbas Jamalipour, %Detection of DoS and DDoS Attacks in NGMN Using Frequency Domain Analysis,+ Asia-Pacific Conference on Communications (APCC), pp. 1-5, October 2008.
7. **Fazirulhisyam Hashim**, M. Rubaiyat Kibria, and Abbas Jamalipour, %Detection and Recovery Architecture Against DoS and Worm Attacks in NGMN,+ International Conference on Communications (ICC), pp. 1675-1679, May 2008.
8. **Fazirulhisyam Hashim**, M. Rubaiyat Kibria, Damien Magoni, and Abbas Jamalipour, %Hierarchical Security Architecture for Next Generation Mobile Networks,+ International Conference on Signal Processing and Communication Systems (ICSPCS), December 2007.



9. W.M.A. Mamat, S.Z.M. Muji and **F. Hashim**, %Mobility Effect of Ad hoc Networks Performance+, National ICT Conference 2006 (NICTC 06), January 2006.
- 10 R.B. Ahmad, **F. Hashim**, S. Khatun, B.M. Ali and N.K. Nordin, %Local Connectivity Scheme Analysis in Ad hoc On-demand Distance Vector (AODV) Routing Protocol+, Conference on Information Technology in Asia 2005, CITA 05, December 2005.
- 11 R.B. Ahmad, **F. Hashim**, S. Khatun, B.M. Ali and N.K. Nordin, %Local Connectivity Management in Ad hoc Networks+, International Conference on Robotics, Vision, Information and Signal Processing (ROVISP05), July 2005.
- 12 R.B. Ahmad, **F. Hashim**, S. Khatun, B.M. Ali and N.K. Nordin , %Development of Ad hoc On-demand Distance Vector (AODV) Routing Protocol Model Using OMNeT+++, International Conference on Robotics, Vision, Information and Signal Processing (ROVISP05), July 2005.
- 13 R.B. Ahmad, **F. Hashim**, S. Khatun, B.M. Ali and N.K. Nordin, %The effects of MAC Protocols on Ad hoc On-demand Distance Vector (AODV) Routing Protocol+, 1st National Conference on Electronic Design (NCED05), May 2005.
- 14 **F. Hashim**, R.B. Ahmad, S. Khatun, B.M. Ali and N.K. Nordin, %A Simulation Model of Ad hoc On-demand Distance Vector (AODV) for Performance Analysis of Ad hoc Routing Protocols+, 3rd National Technical Postgraduate Symposium (TECHPOS04), December 2004.
- 15 **F. Hashim**, S. Khatun, B.M. Ali and N.K. Nordin, %Cost Comparison of Two-tier and Three-tier for Optimization+, World Engineering Congress (WEC2002), July 2002.
- 16 **F. Hashim**, S. Khatun, B.M. Ali and N.K. Nordin, %Cost Comparison of Single-tier and Two-tier for Optimization+, World Engineering Congress (WEC2002), July 2002.

Awards and Recognitions

1. 2 GOLD, 1 BRONZE, Special Award . Best Invention of the Pacific Rim, Korean Information Promotion Association (KIPA) Special Award, INPEX International Show 2006.
2. BRONZE, Pameran Rekacipta, Penyelidikan dan Inovasi (PRPI), Fakulti Kejuruteraan 2006 - Token-based Authentication Method using Bluetooth Enabled Mobile Phone.
3. BRONZE, Pameran Rekacipta, Penyelidikan dan Inovasi (PRPI) Fakulti Kejuruteraan 2006 - Enhanced Adhoc On-demand Distance Vector Routing Protocol for Mobile Ad hoc Networks Internet Connectivity.
4. BRONZE, Pameran Rekacipta, Penyelidikan dan Inovasi (PRPI) Univeriti Putra Malaysia 2002 - Remote Control Light Switch.
5. BRONZE, Pameran Rekacipta, Penyelidikan dan Inovasi (PRPI) Univeriti Putra Malaysia 2002 - Network Independent VOD Software.



6. BRONZE, Pameran Rekacipta, Penyelidikan dan Inovasi (PRPI) Fakulti Kejuruteraan 2002 - Remote Control Light Switch.
7. BRONZE, Pameran Rekacipta, Penyelidikan dan Inovasi (PRPI) Fakulti Kejuruteraan 2002 - Network Independent VOD Software.