

# MOHD NOOR DERAHMAN

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## Education

- 2002 **Master of Computer Science(Computer Communication Engineering)**, *Faculty of Engineering*, University Putra Malaysia, Malaysia.
- 1997 **Bachelor of Computer Science**, *Faculty of Science*, University Putra Malaysia, Malaysia.

## Research Interest

Computer Network, Distributed Heterogeneous Systems and Networking

## Dissertation/Thesis

### Master Thesis

Title *Fiber to the Home Architecture*

Supervisor Professor Mohamad Khazani Abdullah

### Degree Thesis

Title *Request Driven Information for Software Engineering*

Supervisor Professor Dr Abdul Azim Abd Ghani

## Experience

- July 2003 - **Lecturer**, *Department of Computer Communication*, UPM.
- Jul 1999 - **Tutor**, *Department of Computer Communication*, UPM.
- Jun 2003
- May 1997 - **Associate Network Engineer**, *Accurate Network System Integration Sdn Bhd*, Seri Kembangan.
- Jun 1999 Installation, commissioning and maintenance of network system and operating system such as CISCO and Sun Micro system Server
- July 1995 - **Demonstrator**, *Universiti Pertanian Malaysia*, Malaysia, Demonstrator of
- April 1997 Networking Class; Teaching how to install Linux operating system.

## Teaching Experience

Operating System

Computer Communication And Network  
Network Analysis And Design  
Data Structure  
Distributed System  
Advanced Distributed System

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## Computer skills

Programming Languages Python, Advanced JAVA  
Web Technologies HTML 5, PHP, JSP, Javascript  
Database SQL, MySQL, Apache  
Others LaTeX, WinEdt, Microsoft Visio

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## Publications

### Journal Articles

**S. S. Murad, R. Badeel, N. Salih, A. Alsandi, R. Faraj, A. R. Ahmed, A. Muhammed, M. Derahman, N. Alsandi**, 2022, Optimized Min-Min task scheduling algorithm for scientific workflows in a cloud environment, Vol 100.

pp. 480-506

**R. Linsheng, M. N. Derahman, M. F. A. Kadir, M. A. Mohamed, S. Kamarudin**, 2022, The performance effect due to varying network topologies on a software- defined network employing the k-shortest path, International Journal of Advanced and Applied Sciences, 9(6) 2022, Pages: 134-14.

**Shafinah Kamarudin, Christopher Punzalan, Mohd Noor Derahman**, *The Students' Self Perception on Learning C++ Programming via the Cryptography Project: A Case Study*, 2022, International Journal of Academic Research in Progressive Education and Development.

Issue 2 Pages 1534 - 1544 Publisher Human Resource Management Academic Research Society

**M. N. Derahman**, 2020, Conzone: Congestion Control in Mobile Ad-Hoc Network for Reliable Crowdsourcing, International Journal of Advanced Research in Engineering and Technology (IJARET).

Vol 11 Issue 12

**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.

Vol 5

**R. Hussin, M., Derahman, M.N., Jalal, S.F., Latip, 2017**, Trust-aware scheduling for tasks with precedence constraints in heterogeneous distributed computing, *Journal of Engineering and Applied Sciences*.

Vol 12 Issue 13

**Mohd Noor Derahman, Ahmad Shakir Roslan, Fahrul Hakim Ayob, 2016**, Quantum Time Task Scheduling Technique in Novel Hybrid Shortest Job First and Round Robin.

**Mohammad A Khoshkholghi, Azizol Abdullah, Shamala Subramaniam, Mohamed Othman, Mohd N Derahman, 2016**, A taxonomy and survey of power management strategies in cloud data centers, *Int J Commun Antenna Propag.*

Vol 6 Issue 5

**Mohamed Afendee Mohamed, MN Derahman, A Muhammed, 2015**, On the Improved Distance Vector Routing Protocol for UDP Traffic, *Contemporary Engineering Sciences*.

Vol 8 Issue 15 pp. 653-666

**M. N. Derahman, A. Malekmohammadi, G. Gnanagurunathan, M. K. Abdullah, K. Dimyati, K. A. Noordin, 2015**, Performance Improvement of Duty-Cycle Division Multiplexing System Utilizing Symbol Coding Customization, *WSEAS TRANSACTIONS on COMMUNICATIONS*.

Vol 14

**M. N. Derahman, M. A. Mohamed, A. Muhamed, A. Abdullah, M. N. Basery, S. Baharom, Mohamad Khazani Abdullah, 2015**, *Home Switch Automation System Based on Ultra Low Power Wireless Solution*, *International Journal of Information Processing and Management*, Vol 5 Issue 2 pp 58.

**Faten A. Saif, M. N. Derahman, Ali A. Alwan, Rohaya Latip, 2019**, Performance Evaluation of Task Scheduling using Hybrid Meta-heuristic in Heterogeneous Cloud Environment, *International Journal of Advanced Trends in Computer Science and Engineering*.

Vol 8 Issue 6

**M. N. Derahman, A. Abdullah, M. F. Azmi, 2016**, Robust Reputation Based Trust Management Framework for Federated-Cloud Environments, Vol 11 Issue 21.

**M. N. Derahman, M. K. Abdullah, K. Dimyati, K. A. Noordin, A. Malekmohammadi, 2013**, Symbol coding customization for BER reduction in Duty-cycle Division Multiplexing Systems, *Latest Trends on Communications*.

**Liw J Seng, Mohd N Derahman, Azizol Abdullah, 2011**, Loss Discrimination Algorithm for Wired/Wireless Networks, *Journal of Computer Science*.

Vol 7. Issue 12

**A. Abdullah, N. Ramly, A. Muhammed and M.N. Derahman, 2009**, Performance Comparison Study on Routing Protocols for Mobile Grid Environment, *International Journal of Computer Science and Network Security*.

Vol. 8 No. 2

**Azizol Abdullah, Norlida Ramly, Abdullah Muhammed, Mohd Noor Derahman**, 2008, Performance comparison study of routing protocols for mobile grid environment, IJCSNS International Journal of Computer science and Network security.

Vol 8 Issue 2

**M. N. Derahman, W. Salman, M.K. Abdullah and M. Othman**, 2007, Performance and Cost Comparisons fo A-PON and S-PON FTTH Systems, Journal of ICT, Vol. 6.

pp 51-58

#### In Conference Proceedings

**Mohd Noor Derahman, Kaharudin Dimyati, Amin Malek Mohammadi, Mohamad Khazani Abdullah**, 2010, Improvement of decision making protocol for Duty Cycle Division Multiplexing (DCDM) system, 2010 Second International Conference on Future Networks.

IEEE 155-158

**M. N. Derahman, M. Othman and A. Ghani**, 2004, Open Source Software to facilitate in ICT Education: A Case Study of FSKTM , Majlis Dekan ICT. 20-21 Mei 2004

**Ibrahim Aref, Abd Rahman Ramli, Mohamed Derahman, Syed Al-Haddad**, 2003, Audio-on-Demand System using RTP Protocol Based on JMF API, WSEAS, Transaction on Communication .

issue 3, vol. 2

**Ibrahim Asaad Aref, Abd Rahman Ramli, Mohamed Noor Derahman, Syed AbdulRahman Al-Haddad**, 2003, A Study and Implementation of Java Media Framework Player, MSTC.

**M.N. Derahman, M.K. Abdullah, B.M. Ali**, *Optimization of A-PON FTTH Architecture Using Numerical Simulation*, 2003, Brunei International Conference on Engineering and Technology.

Gadong Brunei, pp. 335- 345.

**M. N. Derahman, S. Khatun and N. K. Noordin**, *MAC Protocol for Token-Ring Optical Network*, 2001, Proceedings of IEEE 5th Malaysian International Conference on Communications MICC2001.

21st-24th Oct 2001, KL pp. 114 - 117

**Said, M. N., Derahman, M. N. , 2020**, Virtual Kiosk: Taman Herba, nternational Conference on Computer Science and Its Application in Agriculture (ICOSICA).

**Rahiman, A. R., Islam, M. A., Derahman, M. N**, 2019, Resourceful Residual Energy Consumption in TDMA Scheduling for IoT-based Wireless Sensor Network, Advances in Science, Technology and Engineering Systems Journal (ASTESJ).

Volume 4, Issue 3, Page No 31-37, 2019

### Master

**Rafi Faraj Shamoon**, 2022, Improved Approximate Message Passing Algorithm To Estimate Beamspace Channel in Millimeter-wave Massive MIMO Systems.

**Haijal Amer Ayyash**, 2020, Enhancement of Glow Worm Swarm Optimization for Load Balancing in Edge Computing.

**Omotayo Patrick Oke**, 2019, Modified Workflow Scheduling Using Hybrid PSO-GA Algorithm in Cloud Computing.

**Ahmad Shakir Bin Roslan**, 2018, Performance evaluation of hybrid algorithm with modified time quantum for task scheduling in cloud computing environment.

**Faten Ameen Saif**, 2018, Scientific Workflow Scheduling using modified cloud workflow scheduling Algorithm in Cloud Computing.

**Rozin Badeel Abdal**, 2018, Performance Comparison of Min-Min Scheduling Algorithm for Scientific Workflows in Cloud Eng.

**Mohd Khusyairi Nakhouda bin Mohd Khalil**, 2018, Load Balancing using Hybrid GA-PSO Algorithm in Multiple Cloud Data Centers.

**Hasmira Binti Musa**, 2018, Trust Evaluation Model for Cloud Computing Environment.

**Taha Saad**, 2017, Performance Evaluation of Collaborative Blackhole Attack for AODV in Vanet.

**Ahmed Shakir Al-HitiRohaya Latip, Rohaya Latip, Mohd Noor Der-ahman**, 2017, Modeling and Analysis of Multicast Protocols Over IPV6, Journal of Engineering and Applied Sciences 12(3):542-547.

**Abdullah Esmail Mohammed Altareb**, 2013, Performance Analysis of MPLS Protocol Over Conventional Network.

**Ibrahim Aref**, 2004, Audio Streaming System Using Real-Time Transport Protocol Based on Java Media Framework. Masters thesis, Universiti Putra Malaysia.

**Bushra Abdul Momen Haza'a**, *The Effect of Using Longer Key Size on the Quality of Encryption for DES and 3DES Algorithm.*

**Mohd Fared Abdul Khir**, *An Analysis of MPLS Traffic Engineering.*

**Masnida**, 2012, An analysis of Hierarchical Job Scheduling in Grid Computing.

**Bavani Ramayah**, *Anaysis on External Scheduling in Grid Computing Environment.*

**Mazlinah Brahim**, *Packet Delivering Technique in LAN.*

**Mohd Nizar Mokhtar**, *Deadlock Prevention Using Lossless Back-Preassured Packet Network.*

**Mohamad Said El-Bashir**, *Implementation of Data Encoding Techniques.*

**Syarulakma Bin Abd Azis, MASTER (DENGAN TESIS), 2014**, Internal Member Bandwidth Improvement by Optimizing Layer 2 System Parameters in VDSL2 Digital Subscriber Line Access Multiplexer (DSLAM) for Cable Impairments in Malaysia Copper Access Network Scenario.

### Undergraduate

**Anis Shahira Binti Azry, 2022**, Intelligent Irrigation System in Mobile Application.

**Mohammad Nazmi Bin Mohd Nordin, 2022**, Paddy Diseases and Pests Identification using Deep Learning.

**Ahmad Auzaie Bin Hilmi, 2022**, A Blockchain-Based Honey Authenticity Traceability System.

**Hanis Suraya Binti Hassan, 2021**, Arduino-Based Detection for Bradykinesia and Tremor in Parkinson Disease.

**Ran LinSheng, 2021**, Implementation of Traffic Forwarding Based on Shortest Path in Software Defined Network.

**Nursyahira Binti Mohd Razali, 2019**, Education Formative Evaluation System.

**Nurfarah Nabilah Binti Fuat, 2019**, Automated Lobsters Pond Management System.

**Jalaluddin Abu Zarin, 2018**, Arduino-based System Monitoring for Fish Pond.

**Mohd Farid Azman, 2018**, Arduino-based Hydroponic Farm Monitoring System.

**Norrazedah binti Asri, 2018**, Performance Evaluation of Artificial Bee Colony Algorithm Scheduling in Cloud Computing.

**Lee Jun Kit, 2018**, Interaction Classroom-Based Assessment System(iCAS).

**Mohamad Azeem Bin Abdul Kalam, 2018**, Implementing and Analysing Different Streaming Protocols on Video Transmission Over Network.

**Muhammad hasif Aiman Bin Daud, 2018**, Arduino-Based Drip Irrigation Farm Monitoring System.

**Noris Husna Binti Che Mahadi, 2017**, Proud Shopper System.

**Fatin Fatiha Binti Harun, 2017**, Health Management System for SMEs Company .

**Kevin Yap, 2016**, Implementation and Evaluation of Snort Network Intrusion Detection System in Local Area Network.

**Mohammad Amirul Bin Aziz, 2016**, Real-Time Parcel Delivery Tracking System.

**Nur Ahtikar Binti Mohd Yusof, 2016**, Pre-Natal Development Monitoring System.

**Che Ku Nor Shakilla Binti Che Ku Adnan, 2016**, Toddler's Monitoring Development System.

**Ahmad Radhi Zikri B Aziz**, 2016, Analysis of Attack on Secure Shell (SSH) Protocol Using Kippo-SH.

**Anna Raihan Binti Mohd Ali**, 2016, Infant Development Monitoring System.

**Zulkarnain bin Zainal**, 2015, OpenFlow SDN Switching Management using Raspberry Pi Computing Devices.

**Raezah Binti Sayed Farook**.

**Athimahendran a/l Panneerselvam**, 2015, Secured VPN Cloud Using Raspberry Pi.

**Muhammad Atha bin Suhaili** , 2015, Implementation of Network and Host Intrusion Detection System in Cloud Environment.

**Lai Sher Jeen**, 2014, Performance Evaluation for Cloud Computing by Using Aneka Platform.

**Anis Fahimah Binti Abd Fatah**, 2014, Online Bookstore Management System.

**Mazni Ashikin Binti Mo'min**, 2014, DoctorMe Clinic Appointment Mobile Application.

**Soo Jie Cong**, 2013, Embedded Mobile Security Surveillance System with Face Detection for Indoor Area.

**Chong Ken Keong**, 2013, Controlling Embedded System Through Wireless System.

**Mohamad Najib Basery**, 2012, Home Automation System Based on NRF24L01 Wireless Approach.

**Lee Ling Ling**, 110818, Random Early Detection Active Queue Management (RED AQM).

## Award

**Anugerah Pengajaran Pensyarah Cemerlang**, 2019.

**Anugerah Pengajaran Pensyarah Cemerlang**, 2020.

**Anugerah Penerbitan Cemerlang**, 2021.

**BRONZE MEDAL**, YADIM, 2021.

**Best Paper Award**, *Anugerah Bukan Penyelidikan Antarabangsa IJCC2020*, 2020.

Anugerah Penerbitan Cemerlang, 2018.  
Anugerah Pengajaran Gemilang, 2018.  
Anugerah Khidmat Komuniti dan Masyarakat Cemerlang, 2017.  
Sijil Khidmat Cemerlang, 2003.

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## Grant

**Adaptive Dynamic Data Replication and Placement Algorithms for Optimal Data Access and Storage Service Cost in Heterogenous Multi-Cloud Environment**, *Member*, On going.

**A secure resource provisioning mechanism for high reliability using trust and recovery methods in intercloud environment**, *Principle*, Complete - KPI Achieved RMC 17/07/2019.

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## Training Attended

**RpIot.**

**Penetration Testing and Ethical Hacking**, 2-4 Nov 2015, Makmal Forensik FSKTM, UPM.

**Kursus Induksi modul Umum dan Khusus Kumpulan Pengurusan dan Profesional 3/2004**, *Bilik Seminar Fakulti Kejuruteraan UPM*, 23 Mac - 10 April 2004.

**Industrial Training**, *Pusat Komputer, Universiti Pertanian Malaysia*, 6th Nov-9 Dis 1995.

**Darwin Training**, *Sun Microsystem(Malaysia)*, Hyatt Saujana Hotel Subang.

**Fundamental Training**, *Sun Microsystem Pte Ltd*, 1st Magazine Street, Singapore.

**Senggaraan dan Membaiki Komputer**, *Institut Perdagangan MARA & Akademi Infotech MARA*, Bangunan MARA, Kuala Lumpur, 24 Mei - 17 Jue 1995.

**National Grid Workshop**, *University Sains Malaysia*, 29 June – 30 June 2005.

**Basic IT for IT Engineers (MYFE)**, *The Association for Overseas Technical Scholarship (AOTS) Japan and Multimedia Technology Enhancement Operation (METEOR) Sdn. Bhd.* , 31 January – 18 March 2005.

**2524 Developing XML Web Services Using Microsoft ASP.Net**, *Petal-ing Jaya*, 21-23 Jun 2004.

**.NET curriculum Workshop 2004** , *Marriot Putrajaya* , 28-29 Jun 2004.

**MCMC Next generation Networks Workshop 2003 for IDS**, *Putra World Trade Center*, September, 2003.

**Fluke Network Training**, *FSKTM, UPM.*, January, 2003.

**Opnet**, *4 Days Opnet Training Course*, Meridian System.

**Pengaturcaraan Java (SL-275)**, *Sun Microsystem Sdn Bhd*, 25 April-1 March 2002.

**Sun Hardware Essential II**, *Sun Microsytems Pte Ltd*, 1st Magazine Street Singapore, 8th-10th Feb 1999.

Cert Num s605284

**Network Security with Firewall-I (SA 388)**, *Sun Microsyterns Pte Ltd*, 1st Magazine Street Singapore, 2th - 6th March 1998.

**Fundamentals Training**, *Sun Microsytems Pte Ltd*, 1st Magazine Street Singapore.

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## Technical Experience

**Installing , commissioning Cisco Router Solution at Pusat Pungutan Zakat.**

**Maintaining and servicing Sun Sparc Center 2000E for Universiti Kebangsaan Malaysia.**

**Maintaining and servicing 100 Sun Workstation for Institut Teknologi Mara.**

**Maintaining and servicing Sun Ultra Enterprise 3000, Ultra and SS20 system at MIMOS Berhad.**

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## Membership

**Research Associate**, *for Pervasive Computing Laboratory, Institute of Multi-media and Software, UPM*, 15th April 2005 – 15th April 2007.

**Member**, *of Network, Parallel and Distributed Research Group, Faculty of Computer Science and Information Technology, UPM since 2001 until now.*

**IEEE Student Member**, *on 2000 until 2002.*