E.N.M. Ehab Al-Khannaq

Academic Expertise

Lecturing and tutoring of undergraduates and graduate students, Supervise undergraduate students working on the research grant (maintaining records on assignment completion, acting as facilitator between the undergraduate students and the faculty researcher), Initiate publication of research results in top ranking journals and leading conferences, Assist in the supervision of post-graduate students working on related research grants, acting as a source of information and advice, Maintain accurate records of reports, safeguarding the confidentiality of subjects, as necessary.

Areas of Research

Cloud Computing, Optimization, Virtualization, Database, Application Engineer, Workflow Scheduling, Scientific Workflow, Meta-Heuristic Algorithms, Web-Application, UML, Logic Design, Parallel and Distributing Computing, Workflow Management System (WfMS), Service Oriented Architecture (SOA), Machine Learning, Massive Open Online Course (MOOC).

Education and Qualifications

Year	Major	University/College
2018	PhD. in Computer Science Software Engineering	University of Malaya
Area of Research		
• Cloud Computing	• Hyper-Heuristic Approach	
• Cost Optimization	• Workflow Management System	
• Workflow Scheduling	• Software Design	
• Scientific Workflow Applications		
Title of Thesis		
"Completion Time Driven Hyper-Heuristic Approach for Cost Optimisation of Scientific Workflow Scheduling in Cloud Environment"		
Studied Courses		
• Advanced Research Methodology		
• Bahasa Malaysia		

Year	Major	University/College
2009	Master of Computer Science	University of Malaya
Area of Research		
• Service Oriented Architecture (SOA)		
• Higher Education Management System		
• Web-based Applications		
Title of Dissertation		
"Delivery of Service Oriented Architecture Web-Services for Post-Graduate Students"		
Studied Courses		

• Advanced network technology	• Research foundation in computer sciences
• Database technology	• Information system development practices
• Information systems planning	
• Data warehousing and data mining	• Object-oriented techniques
	• Advanced topics in programming

Year	Major	University/College
2005	Bachelor of Computer Science	Al-Mansour University College

Studied Courses

• Computer programming	• Numerical analysis	• Computer graphics
• Logic design	• Microprocessors	• Operations research
• Computer organization	• C–language	• Distributed DB system
• Discrete mathematics	• Introduction to data base	• Computational theory
• Mathematics I	• Mathematics II	• Artificial intelligence
• Introduction to electronics	• Multimedia and internet	• Computer network
• National education	• Statistics	• Compiler design
• Data structure	• Computer architecture	• Image processing
• Computer security		• Expert systems
		• Operating systems

Work Experiences

Position: *Lecturer*	
Industry: Education	
Duration	**Company/Institute/Project**
June 2018 - November 2018	HELP University - School of ICT

Responsibilities

- Lecture/teach the courses assigned.
- Cover the syllabi outlined for the assigned courses in a logical and readily understood sequence, and in accordance with students' assignment requirements.
- Assist students in the understanding of assignment requirements.
- Answer student queries on academic matters relating to the unit promptly.
- Set and mark assignments for students.
- Set and mark term and trial examination scripts.
- Writing student term reports.
- Invigilate examinations.
- Attend staff meetings as deemed necessary by the Head of the Department.
- Give students regular guidance to assist the progress of their academic achievement.
- Counsel students on appropriate career/academic direction on completion of their course.
- Counsel at exhibition fairs which HELP participates.
- Conduct research in areas as per discussion with Head of Department.
- Publish papers and present papers at conference.

Position: *Network Operations Center (NOC) Engineer*	
Industry: Outsourcing	
Duration	**Company/Institute/Project**
February 2016 - May 2018	Scicom (MSC) Berhad, ICT Department

Responsibilities
- To accomplish the primary goal of monitoring and troubleshooting computer and telecommunication networks and systems.
- Planning and managing the ICT infrastructure for Scicom group.
- Provide monitoring and 24×7 ICT support for infrastructure, networks and security on day to day operations.
- Analyze several job listings to identify these core NOC Engineer duties and responsibilities.
- Monitor the performance and capacity of computer systems using a variety of tools.
- Look for hardware, software, and environmental alerts or malfunctions. When an issue is identified, NOC Engineers work to determine the cause of the problem.
- Work to triage or troubleshoot the problem, if possible.
- Have standard operating procedures that the closely follow. This include coordinating with third-party vendors, customer contacts, or other IT teams.
- Carefully track and document all issues and resolutions in detail, and responsible to update the ticketing system.
- Escalate the issue to management, other IT resources or 3rd party vendors for assistance in reaching a resolution, when problems are too large or complex for quick troubleshooting.
- Maintain ongoing communication within the team and externally, to keep all stakeholders aware of relevant, known issues and the steps being taken.

Position: *Research Assistant and Research Lab Manager*
Industry: Education

Duration	Company/Institute/Project
November 2012 – September 2016	University of Malaya, Software Engineering Department

Responsibilities
- Lecturing and tutoring of undergraduates and graduate students.
- Supervise undergraduate students working on the research grant (maintaining records on assignment completion, acting as facilitator between the undergraduate students and the faculty researcher).
- Facilitate discussions for supervisors.
- Prepare lectures for supervisors.
- Prepare review materials for supervisors.
- Prepare materials for submission to granting agencies and foundations.
- Initiate publication of research results in top ranking journals and leading conferences.
- Assist in the supervision of post-graduate students working on related research grants, acting as a source of information and advice.
- Maintain accurate records of reports, safeguarding the confidentiality of subjects, as necessary.
- Provide ready access to all documents for the faculty researcher and/or supervisor.
- Request or acquire equipment or supplies necessary for the research grant.
- Manage and respond to research grant related email.
- Develop, prepare, maintain, and update website materials.
- Attend research grant meetings.
- Attend area seminars and other meetings as necessary.

- Prepare articles for high impact journals (ISI), reports, and presentations.
- Monitor the research grant budget.
- Seek funding for the research grant from external and internal sources.
- Lead pilot research grants/feasibility studies if required.
- Present findings to peers at conferences or in published articles.
- Keep records and accounts of the management of the research grant.
- Manage the academic research and administrative activities to meet deadlines.
- Collaborate in the preparation of journal articles and occasionally present papers and posters.
- Provide leadership in the relevant research aspects of the research grant, developing research questions, generating original ideas, and conducting individual research to meet deadlines.
- Responsible for writing articles/reports, coordinating research activities, participating in the definition of research directions and any other research activities as required.
- Develop ideas for generating research income, and present detailed research proposals to senior researchers.
- Contribute ideas for new research grants.
- Prepare webpage for course materials.
- Prepare progress reports for the PI and funding institutes.
- Managing a research lab by providing a technical and application support.
- Facilitating the documentation requirement for researchers.
- Manage the system and application for the research lab.
- Maintain researcher attendance records.

Position: *Technical Support and Knowledge Base Engineer*	
Industry: Outsourcing	
Duration	**Company/Institute/Project**
August 2010 -April 2012	Scicom (MSC) Berhad, SingTel Project

Responsibilities
- Support incoming sell and technical issues from Singaporeans in relation to MioTV, MioV and SNBB products and services.
- Responds to incoming customer calls concerning new and existing customer accounts within a call centre environment.
- Receives and remedies customer complaints and grievances.
- Records all calls in detail.
- Maintains company standards during recorded calls in order to ensure high quality service.
- Design Knowledge Base (KB) System for KB Department.
- Creating the work instruction (ISO documentation) for Management Toolkits.
- Receiving and acting upon feedback from clients, agents and management for the purposes of updating and improving of the Knowledge Base and Systems.
- Providing briefings to agents on new information updates in the Knowledge Base.
- Communication with clients to clarify information and feedback on information gaps in order to ensure information integrity.
- Administer monthly quiz and ensure Quiz Database is updated.

- Housekeeping of System IDs for new agents and resigned agents to ensure information is up to date based on headcount and team listing.
- Resolving agent login enquiries for systems.
- Innovate and come up with creative ways to improve the Knowledge Base System for agents.
- Receiving communication updates from clients and filtering information to agents in a clear manner through email communications.
- Facilitating conference calls involving KB Support Team Members.

Position: *Freelance Programmer*	
Industry: Education	
Duration	**Company/Institute/Project**
December 2009 - January 2011	University of Malaya, Faculty of Education

Responsibilities
- Implementing project by using Java, PHP and MySQL programming.
- Facilitating the documentation requirement for the other researchers.
- Publishing papers in conferences.
- Managing and facilitating the system.

Position: *Research Assistant*	
Industry: Education	
Duration	**Company/Institute/Project**
June 2009 - June 2010	University of Malaya, Department of Information Science

Responsibilities
- Lecturing and tutoring of graduate students
- Conduct literature reviews.
- Collect and analyze data.
- Summarize research grant results.
- Prepare progress reports for the PI and funding institutes.
- Record findings.
- Attend lectures.
- Manage and respond to course-related e-mail.
- Prepare assignments.
- Grade assignments.
- Help supervisor to prepare test questions.
- Maintain grading records.
- Maintain researcher attendance records.
- Calculate quarter grades.
- Attend instructor meetings.
- Act as facilitator between student and professor.
- Prepare and present lecture materials.
- Contribute ideas for new research grants.
- Contribute to software development in the area of research.
- Act as a source of information and advice to other members of the group.
- Assist the supervisor in carrying out the research grant.

- Represent the research group at external meetings/seminars, either with other members of the group or alone.
- Implementing project by using Java, PHP and MySQL programming.
- Publishing papers in conferences.
- Managing and facilitating the system.
- Assist in the supervision of post-graduate students working on related research grants.

Position: *MIS Executive*
Industry: Security Printing

Duration	Company/Institute/Project
June 2006 - June 2007	Pedoman Maju SDN BHD, MIS Department.

Responsibilities
- Network, System and Database administration.
- Facilitate, developing and manage systems for the other manufacturing units.
- Develop and suggest the system features based on the user requirements.
- Enhance the web-site of the company.

Position: *IT Executive*
Industry: Banking

Duration	Company/Institute/Project
June 2005 - October 2005	Alwarka'a Investment Bank, Credit Card Department

Responsibilities
- Network, System and Database administration.
- Analysis, and Report Design for the ICT department.
- Installing, and maintaining the ATM and POS machines in different locations.
- Facilitate, developing and manage systems for the other Finance Departments.

Publications and Papers Presented

Journal Papers:

Ehab Nabiel Alkhanak, Sai Peck Lee, Saif Ur Rehman Khan, Cost-aware challenges for workflow scheduling approaches in cloud computing environments: Taxonomy and opportunities, *Future Generation Computer Systems* (2015), Volume 50, September 2015, Pages 3-21, ISSN 0167-739X, (ISI Paper).

Ehab Nabiel Alkhanak, Sai Peck Lee, Reza Rezaei, Reza Meimandi Parizi. "Cost optimization approaches for scientific workflow scheduling in cloud and grid computing: A review, classifications, and open issues", *Journal of Systems and Software* (2016), Volume 113, Pages 1-26, ISSN 0164-1212 (ISI Paper).

Ehab Nabiel Alkhanak, Sai Peck Lee, A Hyper-Heuristic Cost Optimisation Approach for Scientific Workflow Scheduling in Cloud Computing, Future Generation Computer Systems (2018) (ISI Paper).

Conference Papers:

Ehab Nabiel Alkhanak, Sai Peck Lee, and Teck Chaw Ling. "*A Hyper-Heuristic Approach using a Prioritized Selection Strategy for Workflow Scheduling in Cloud Computing*", The 4th International Conference on Computer Science and Computational Mathematics (ICCSCM 2015), SandKRS (Science and Knowledge Research Society), Pages 601-608, 2015.

Ehab Nabiel Alkhanak, and Salimah Mokhtar. "Using Services Oriented Architecture to Improve Efficient Web-Services for Postgraduate Students."*Proceeding of the WASET* (2009), Page 68-71.

Nasaruddin, Fariza Hanum, Maizatul Akmar Ismail, and Ehab Nabiel Mohammed. "Proposed database system to integrate patient information and research data for maxillofacial and craniofacial domain." *Proceedings of the 9th WSEAS international conference on Applications of computer engineering*. World Scientific and Engineering Academy and Society (WSEAS), 2010.

Papers Presented:

Presenter in Postgraduate *Research Excellence Symposium (PGReS) 2012*, 26th September 2012, Organised by Faculty of Computer Science and Information Technology, University of Malaya.

Presenter in *Postgraduate Research Excellence Symposium (PGReS) 2014*, 15th May 2014, Organised by Faculty of Computer Science and Information Technology, University of Malaya.

Books:

Ehab Nabiel Alkhanak, and Salimah Mokhtar. "Delivery of Service Oriented Architecture with Web Services.", Amazon (2012).

Technical Skills and Duties

- Ability to explain technical issues clearly to non-technical colleagues.
- Experience of performance measurement, capacity and tuning issues.
- Design, deploy and maintain virtual infrastructure solutions based on VMware Virtual Infrastructure.
- Analytical problem-solving and root cause analysis skills.
- Good knowledge of parallel and distribution computing, grid computing, and cloud computing.
- Good knowledge of workflow scheduling, scientific workflow application.
- VMware administration with Linux or Windows server background.
- Design, deploy and maintain virtual infrastructure solutions based on VMware Virtual Infrastructure.
- Implementation, configuration and support of latest blade and cloud technologies.
- Expert on VMware Virtual Infrastructure including architecture, design, deployment, and backup.
- Provide configuration, accounting, performance, and management.
- Participate in projects, working closely with various IT functions and vendors.
- Experience in a technical support position in a large client/server environment.
- Review existing technology implementations and suggest and implement improvements and upgrades.
- Maintain awareness of the foundation that virtual infrastructure provides for the delivery of IT services.
- Use and evaluate the most advanced tools, technology, and product design solutions that support enterprise-wide Server applications.
- Housekeeping of System IDs for new agents and resigned agents to ensure information is up to date based on headcount and team listing.
- Resolving agent login enquiries for systems.
- Implementing project by using Java, PHP and MySQL programming.
- Analysis, database admin and networking.
- Creating the work instruction (ISO documentation) for Management Toolkits.

Principal applications and tools

- **VMware:** vCenter server, ESXi hypervisor server, vSphere client, Workstation, Fusion.
- **Cloud Infrastructures:** private, public and hybrid.
- **Operating System:** Windows, Linux – Debian, Ubuntu Server, Apache HTTP Server, and Unix.
- **Programming Languages:** Java, Bash, UML, MySQL, PHP, R and C.
- **Application Tools:** Microsoft Office, Latex, Endnote and Visual Paradigm.
- **Data analysis tool:** SPSS v.21, SPSS Clementine 11, Hdoop Distributed File System (HDFS) and POWER BI.
- **Voice System Applications:** AVAYA, GENESYS, VERINT, and CISCO voice and networking tools.
- **Hardware:** Workstation configuration and software installations, Upgrading and troubleshooting, Hubs, Switches, Email Servers, Application Servers and Routers.
- Good knowledge of networking – TCP/IP, DNS, DHCP, VLANs, VoIP, PACKET TRACER.

Language Skills

Fluent in Arabic, English (9 years studied in English) and understand of Malay.

Industry Lines

Education, Outsourcing, Banking, Automotive, Services.

Special Skills

- Multitasking and experience of performance measurement, capacity and tuning issues.
- Optimistic, confident, adaptable, resourceful, good team player and a successful planner.
- Energetic, innovative, sincere and hard working.
- Strong desire to achieve results, extremely responsible and capacity to work under extreme pressure.

Strengths

- Able to work with diverse groups of people with different skill sets and culture.
- Very passionate in delivering training to all levels of staff.
- Able to work independently, under pressure and long working hours.
- Wide knowledge of Strategic Partnerships and Development, Strategic Planning and Analysis, Cross-Functional Skills, Product Development, and International Relations.

Hobbies

Traveling and create business plans for SME projects.

Interest

Learning new things and try new challenge.