



Siti Nur Hidayah Binti Ab. Malek

No. 773, Persiaran SM 2J/17, Fasa 2J, 32040 Seri Manjung, Perak, Malaysia

Mobile: +6017-2491793/+6011-10371793 **E-mail:** sitinurhidayahmalek@gmail.com

Personal Profile

A motivated, adaptable and responsible in Bio-Medical graduate seeking a position which will utilize the professional and technical skills developed through research experiences in this field. I can work in challenging environment, demanding all my skills and efforts to contribute the development of the organization with impressive performance.

Education

2014 – Currently pursuing: Doctor of Philosophy (PhD) at UKM, Bangi Malaysia

- Bio-Medical Engineering and Electrical, Electronic Engineering (Stage: Thesis writing)

Relevant Modules:

- Data Acquisition - At PPUKM, Cheras, FKAB and Pusat Kesihatan, UKM (2015-2018)
- Signal Processing - Feature Extraction (Band Pass Filter, Dimension Reduction)
- Construct Data in Statistics - Data Significant, Classifier, SPSS and Matlab,
- Biomedical Signal and Image Processing in Cardiovascular Anatomy and Physiology
- Cardiovascular and Respiratory in Systematic, Pulmonary Circulation and Conduction System
- Healthcare Information System – Data Generation, Compilation, Analysis and Synthesis
- Biomedical Engineering Education - Design and Development in Medical Problems

2012 – 2013 Master of Electrical Engineering

UTHM, Johor, Malaysia

- Electrical Engineering (CGPA: 3.42)

Relevant Modules:

- Programmable in Microelectronics, Microprocessor Systems, Engineering Mechanics
- Advance Digital Signal Processing – Discrete, Continuous in Time Signal and System
- Advance Engineering Mathematics – Engineering Mathematics N,I,II,III,IV
- Computational Intelligence – Neural Network (NN), Fuzzy Logic, National Instrumentation
- Bioinstrumentation – Plan Preventive Maintenance, Therapeutic and Diagnostic Devices
- Biosensor – Medical Laser, Electromechanics of Driver and Actuator, Servo Motor Controller
- Nanoelectronics Technology

2009 – 2011 : Deg. Of Eng. Tech. (Hons) in Medical Electronics UNIKL BMI, Gombak

- Medical Electronic Engineering (CGPA : 2.79)

2006 – 2008 : Dip. of Eng. Tech. in Medical Electronics

UNIKL BMI, Gombak

- Medical Electronic Engineering (CGPA : 3.03)
-

Work Experience

2016-2018 Graduate Research Assistant (GRA) UKM, Bangi Malaysia

- Healthcare Specialist in NivarI, and Dolphine System for Vascular Age
- Data Acquisition and Analyzed of the Pre-processing Signal on Blood Volume Change
- Project in Collaborative Formal and Non-formal Education Re-engineering in Regenerating Youth Development in Marginalized Community towards Employability under Grant LRGS/2013/UMK-UKM/22/04

2013-2014 Research Assistant (RA) UKM, Bangi Malaysia

- Multitasking assistant for Healthcare Technology new Courses and Committee Member
- Data Acquisition and Analyzed of the Signal in Medical Research Project
- Medical Project Development in Elderly Fall Detection and Alarm System
- Project in Development of a Cuff-less Blood Pressure Measurement system using the Photoplethysmogram (PPG) at UKM Bangi under Grant PRGS/1/13/TK02/UKM/02/1

2011-2012 Research Assistant (RA) UNIKL BMI, Gombak

- Troubleshooting Hardware Circuit by trace and correct faults from the Electronic System
- Research Assistant for Project “Oscillometric Vascular Assessment with Time Varying Cuff Inflator” at Unikl BMI under Project Funded by STRG09020 Grant.

2011 Trainee Engineer Hospital Sungai Buloh

- Attachment at Biomedical Department of Radicare Sdn Bhd, (HSB)
- On job training in Plan Preventive Maintenance, Troubleshooting Medical devices and system, Management Services and Clinical Procedure for the Medical Equipment.

2008 Trainee Engineer Hospital TLDM, Lumut

- Attachment at Department of Maintenance Hospital and Produktif Kualiti Sdn. Bhd.
- On job training in Electrical and Electronic Maintenance also Air-conditioning system
- Troubleshooting and run the Clinical Procedure for Medical Equipment

Managerial Experience

2011 Program Manager of Operasi Khidmat Masyarakat (OPKIM) for Orphanage at Pertubuhan Anak Yatim Darul Aminan at Senawang, Negeri Sembilan by handling 65 student members of Unikl BMI and 123 of orphans.

2006 -2010 Team Manager of Netball Team for Sport Carnival Unikl Bmi
Player of Netball Team for Sport Carnival Unikl Bmi
Orientation Community for Induction Weeks New Student Unikl Bmi

Publication

1. Photoplethysmography Signal in Paroxysmal and Persistence Atrial Fibrillation Patients (Journal of Engineering and Applied Sciences, Malaysia Technical Scientist Association MALTESAL, UUM, Copthorne Orchid Hotel Penang, 2016 Medwell Journals 12(8): 1946-1951, 2007, DOI 10.3923/jeasci.2017.1946.1951)
2. 1Malaysia Clinic Rural Healthcare Management Reliability Increase through Technology Innovation Slide Presentation title: m-Health Monitoring Through SMS Gateway in Malaysian Rural Community (PHI-2015-001-Knowledge Technology Transfer Programme - KPT in 4th National Conference on Knowledge Transfer-NCKT'17 Acceptance)
3. Self-Monitoring Technique for Stroke Prevention among Atrial Fibrillation Patients (Poster Session Presentation on Prevention of Stroke in International Journal of Stroke 2016, Vol 11(3s) 4-288, Journal Abstract for the 10th World Stroke Congress-WSO 638, WSC 2016 DOI:10.1177/1747493016670567)
4. Short Review of Electrocardiogram (ECG) Technique Versus Optical Techniques for Monitoring Vascular Health (International Federation for Medical and Biological Engineering 2016 - International Conference for Innovation in Biomedical Engineering and Life Sciences, IFMBE Proceedings 56, DOI: 10.1007/978-981-10-0266-3_46)
5. Design and Development of Wireless Stethoscope with Data Logging Function (Conference-2013 IEEE International Conference of Control System, Computing and Enigneering, Penang 2013 ICCSCE 2013, Article 6719946, 132-135, DOI: 10.1109/ICCSCE.2013.6719946)

Master Final Project: “Design and Development of Wireless Stethoscope with Data Logging Functions” Universiti Tun Hussein Onn, UTHM 2013

Bachelor Final Project: “Digital Electronics Stethoscope” UniKL BMI 2011

Diploma Final Project: “Accessible Hospital Bed Back Angle Controller” UniKL BMI 2009

Community Membership

Board of Engineer Malaysia, (Eng. Tech : T10251)
The Institution of Engineers, Malaysia - IEM Bio-Medical (Incorporated Member: 87321)
Malaysia Board of Technologists - (Electrical and Electronics Technologist: GT17120078)
Institute of Electrical and Electronics Engineers – IEEE (93201622)
International Association of Engineer Membership (132680)
Cadet of Askar Wataniah - Military and Defense Member, No: 6168063
Alumni of Universiti Kuala Lumpur, British Malaysian Institute (UniKL BMI) 2012
Alumni of Universiti Tun Hussein Onn (UTHM) 2013

Programs and Training

1. Juri Pertandingan Tuntas Bicara STEM-IOT 2018: Pertanian Bandar (Aug 2018)
2. Poster on Hypertension Self-Care Karnival Keusahawanan UKM (Apr 2018)
3. Exploring ABCs of Raspberry PI 3 with Python Programming Workshop (Jan 2018)
4. Care and Concern in Dialysis Management Workshop (Dec 2017)
5. Healthcare Specialist (PPG) – STEM Health Centre (Nov 2017)
6. Facilitator of Women Entrepreneurship Workshop (Aug 2017)
7. Secretariat Explorasi Elektrik & Elektronik (May 2017)
8. Pelancaran Sekolah@UKM & Program Jom Membaca Bagan Datuk Perak (May 2017)
9. Interdisciplinary VS Multidisciplinary: A Qualitative Approach & Implementation (Oct 2016)
10. Bio-Signal & Medical Image Research Methodology Workshop (Sep 2016)
11. Data Processing & Management Workshop Series 1 (May 2016)
12. Bengkel Statistik – Analisis Data Sains (SADS) Siri 1,2,3 (Apr 2016)
13. 3 Minute Thesis (3MT) UKM 2016 Competition - Preliminary Round (Mac 2016)
14. Committee Member Program Inovasi Keusahawanan Wanita Fasa I & II (Mac 2015)
15. Hari Komuniti UKM4BANGI – Arduino Programming (June 2014)

Skills

Languages	Malay– Excellent Fluent (Writing and Speaking) English– Fluent (Writing and Speaking) Mandarin –Basic / Beginner (Writing and Speaking)
Computer Software	Microsoft Office, Microsoft Excel (Advanced Engineering Mathematics), Science Information Analysis (SADS), Data Acquisition for Statistical Analysis (SPSS).
Programming	Arduino, VHDL Code for Quartus II 9.1, Assembly, HTML, and C/C++, MPLAB, Matlab & Simulinks, Graphical User Interface (GUI), Neural Network (NN) Technique, and Fuzzy Logic, and Raspberry PI 3 with Python programming.
Communication	Protocol Network Communication (Zigbee), Wireless Communication Transmit (TX) and Receive (RX), Multi-platform Application (X-CTU) Controlled and Bluetooth Interconnection.

Hobbies and Interests

I enjoy solving puzzles, traveling and socializing with friends and family

Availability	Willing to Travel
Driving Licenses	D
Expected Salary	RM 3 500.00 (Negotiable)

Referees

1. Dr. Kalaivani Chellappan

Department of Electrical, Electronic and Systems Engineering,
Faculty of Engineering and Built Environment, UKM Bangi, Malaysia

Email: kckalai@ukm.edu.my

2. Dr. Rosmina Jaafar

Department of Electrical, Electronic and Systems Engineering,
Faculty of Engineering and Built Environment, UKM Bangi, Malaysia.

Email: rosmina@ukm.edu.my

3. Assoc. Prof. Dr. Muhammad Mahadi Bin Abdul Jamil

Department of Electronic Engineering Faculty of Electrical & Electronic Engineering
Universiti Tun Hussein Onn (UTHM), Malaysia

Email: mahadi@uthm.edu.my

4. Mr. Ariffuddin Bin Joret

Department of Communication Engineering,
Faculty of Electrical & Electronic Engineering
Universiti Tun Hussein Onn (UTHM),

Email: ariff@uthm.edu.my

5. Mr. Hisham Bin Mohamad Desa

Department of Medical Electronic Engineering,
Universiti Kuala Lumpur, British Malaysian Institute, UNIKL BMI Gombak,

Email: hishamdesa@bmi.unikl.edu.my