

## MOHD SYAIFUL REDZWAN BIN MOHD SHAH

**Address :** DT-915, Jalan Perdana 3,  
Taman Cempaka 2,  
76100, Durian Tunggal,  
Melaka. MALAYSIA  
**Phone :** (Mobile) 013-6217924 or (Office) 06-5531917  
**Email :** syaifulredzwan@gmail.com



### PERSONAL DETAILS

**I/C Number :** 841110-01-5091  
**Date of Birth :** 10<sup>th</sup> November 1984  
**Place of Birth :** Johor Bahru  
**Age :** 25  
**Nationality :** Malaysian  
**Gender :** Male  
**Marital Status :** Single  
**Health condition :** Excellent  
**Height :** 160cm  
**Weight :** 50kg

### CAREER OBJECTIVE

- To obtain a challenging position that would improve my educational and personal qualities in the field as academician/researcher, and significantly contribute towards the prosperity of the organization.
- To develop professional skills in the respective and related areas and further enrich the learning experience within the organizational environment in order to be an integral part of the organizational excellence.

### EDUCATION BACKGROUND

2007- 2010 : **Master in Science- Telecommunication**  
Faculty of Electronics & Computer Engineering  
Universiti Teknikal Malaysia Melaka (UTeM)

2003-2007 : **Degree in Electronic Telecommunication Engineering (Hons)**  
**CGPA: 3.12/4.00**  
Faculty of Electronics & Computer Engineering  
Universiti Teknikal Malaysia Melaka (UTeM)

Final Year Project: Design, Fabricate, and Testing of Feed Network for 2x2 array antenna. Simulated and fabricated the feed network by using AWR 2006 and CorelDRAW Graphics Suite 12 software.

Relevant Subjects:

Electrical Technology, Computer Programming, Technical Communication, Logic Circuits, Electronic Engineering, Digital Systems, Microprocessor Technology, Signals and Systems, Telecommunication Electronics, Data Communication and Networking, Digital Communications Systems, Microwave and RF Techniques, Switching Systems, Antenna Engineering, Optoelectronic and Optical, Engineering Mathematics, Statistics, Engineering Management, Technopreneurship and etc.

## WORKING EXPERIENCE

- July 2007 – : **Research Assistant**, Fakulti Kejuruteraan Elektronik dan Kejuruteraan Komputer, UTeM, Melaka
- Get involved in data collection from measurement work (measurement campaign) of Receive Signal Strength Indicator (RSSI) at UTeM main campus.
  - Assist lecturer in preparing telecommunication laboratory equipment, material and lecture material
  - Prepared book chapter under telecommunication on “**Dual linearly Polarized microstrip array antenna**” for IN-TECH publication.
  - Presented technical paper related to antenna design for APACE 2007 at Melaka, NCCT-MCP 2008, ITST 2008 at Phuket, EuCAP 2009 at Berlin.
- Dec – April 2006 : **Industrial Trainee**, Telekom Malaysia (Kuala Lumpur)
- Carried out an experience at switching, transmission, fiber optic and customer network operation area.
- May– July 2003 : **Technician**, HBS Engineering Sdn Bhd, Seremban, Negeri Sembilan
- Streamyx installation, computer networking, computer hardware and software upgrading
  - Fitting, termination and installation of the speakers, antenna and CCTV. Lay the cables for speakers, TV, projector and antenna
  - Guided wiring job for the new houses such fitting the lamps and fans, plan the conduit path, lay the cables and do the electrical maintenance job at PULADA Army camp.

## PUBLICATIONS

1. M. S. R Mohd Shah, M. Z. A Abdul Aziz, M. K. Suaidi, M. K. A Rahim (2009) “**Dual linearly Polarized microstrip array antenna**” IN-TECH Book chapter Telecommunication, ISBN 978-953-7619-X-X.

Synopsis:

*The main motivation behind this work was for the development of an inexpensive, lightweight, low-cost, dual-polarized radiating element that could be easily integrated into an existing wireless communication system. This design was linearly polarized at angles of  $\pm 45^\circ$  using inset-fed method. The interest here is to design and develop a capable and aesthetic antenna. This antenna will be a single layer using corporate feed network.*

2. M. S. R Mohd Shah, M. K. Suaidi, M. Z. A Abdul Aziz, M.F. Abd. Kadir, M. K. A Rahim (2009), “**Dual Polarization Microstrip Patch Array Antenna for WLAN Application**”, 3<sup>rd</sup> European Conference on Antennas and Propagation, 23-27 March 2009.
3. M. S. R Mohd Shah, M. K. Suaidi, M. Z. A Abdul Aziz, M. K. A Rahim (2008), “**Dual Polarization Inset-Fed Microstrip Patch Antenna**”, International Symposium on Antennas and Propagation, ISAP 2008, 27<sup>th</sup> -30<sup>th</sup> October 2008.

Synopsis:

*The designs of 1x2, 1x4 and 2x2 array antennas yield a bandwidth of 4.5%, return loss  $\leq 10$ dB. The gain of the single element antenna almost 4.21 dBi, and the gain of 1x2 arrays is 5.33 dBi. By designing more patches, the enhancements of gain achieved were 8.734 dBi and 7.944 dBi, respectively.*

4. M. S. R. Mohd Shah, M. Z. A. Abdul Aziz, M. K Suaidi, M. K. A. Rahim (2008) “**Dual polarization inset-fed microstrip patch antenna**”, 8th International Conference on ITS Telecommunication, ITST 2008, 22<sup>th</sup> -24<sup>th</sup> October 2008.
5. M. S. R. Mohd Shah, M. F. Abdul Kadir, M. Z. A. Abd Aziz, M. K Suaidi, (2008) “**Design of 1x2, 1x4, and 2x2 Dual Polarization Microstrip Array Antenna**”, National Conference on Telecommunication Technologies and Malaysia Conference on Photonics, NCCT-MCP 2008, 26<sup>th</sup> -27<sup>th</sup> August 2008.

Synopsis:

*This paper present 3 design of array antenna from type of inset-fed microstrip patch antenna oriented at 45° and -45°. The antenna is capable to generate dual-polarization radiation pattern slanted at 45° and -45°. Combinations of two and more patches using quarter-wave impedance matching technique have been used to design the array antenna operate at 2.4 GHz. The design were simulated using Microwave Office 2006 and were fabricated on FR4 substrate with a dielectric constant  $\epsilon_r=4.7$ ,  $\tan \sigma =0.019$  and thickness =1.6mm. The simulation and measurement result have been compared.*

6. M. S. R. Mohd Shah, M. F Abdul Kadir, M. Z. A. Abdul Aziz, M. K Suaidi, “Dual Polarization Microstrip Patch Array Antenna” 4th International Symposium on Telecommunications, IST 2008, 27th – 28th August 2008.
7. M. S. R. Mohd Shah, M. Z. A. Abdul Aziz, M. K Suaidi, “**45° and -45° Polarization Inset-Fed Microstrip Patch Array Antenna**”, International conference on Knowledge Base Development (ICKBD 2008), 22<sup>th</sup> -24<sup>th</sup> June 2008, Madinah.
8. M. S. R. Mohd Shah, M. F Abdul Kadir, D. Misman, M. Z. A. Abdul Aziz, M. K Suaidi, (2007) “**Dual Polarization Inset-Fed Microstrip Patch Antenna**”, Asia-Pacific Conference on Applied Electromagnetic (APACE 2007), 4th – 6th Dis 2007. **Third Prize : Best paper silver award.**

#### COURSE/SEMINARS/ACTIVITIES ATTENDED

- 2009 : Joined Exhibition
- Ideas-Inventions-New Product (IENA 2009) Nuremberg, Germany  
**Project: X-Polarization Microstrip Patch Array Antenna (Gold Award)**
  - Invention, Innovation and Technology (ITEX 2009) Kuala Lumpur, Malaysia  
**Project: X- Microstrip Antenna (Gold Award)**
- 2008 : Joined Exhibition
- Invention New Product Exposition (INPEX 2008) Pittsburgh, USA  
**Project: Dual polarized antenna for WLAN application (Gold Award)**
  - Invention, Innovation and Technology (ITEX 2008) Kuala Lumpur, Malaysia  
**Project: Dual polarized microstrip antenna (Silver Award)**
  - UTeM Exhibition (UTeMEX 2008) Melaka, Malaysia  
**Project: Dual polarized microstrip antenna (Gold Award)**
- 2008 : Attend workshop on Radio Frequency and Microwave Quantities, Measurement Fundamentals, Techniques and Calibration organised by SPACE UTM
- 2007 : Attend Tutorial on EM-Fields Detectors, Calibration and RF Methodology by Alireza Kazemipour organised by Asia-Pacific Conference on Applied Electromagnetic 2007
- 2007 : Secteriat Committee at Asia-Pacific Conference on Applied Electromagnetic 2007
- 2007 : Joined Exhibition and Competition Project (INOTEK 2007) organized by Faculty of Electronic Engineering and Computer Engineering (FKEKK), UTeM
- 2006 : Joined Kursus Bina Negara Mahasiswa (Asas)
- 2003 : Attend 'Kursus Asas Keusahawanan siswa UTeM, organized by HEP, 12-17 Dec 2006

- 2005 : Committee of Sekretariat Rakan Muda
- Joined expedition Trans Gopeng-Cameron
  - Joined 'Program Explorasi 2005' – Gunung Dato', Tampin Negeri Sembilan,
  - Joined 'Ekspedisi Trans Gopeng-Cameron 2005', Perak, 9<sup>th</sup>-12<sup>th</sup> Feb.

### PERSONAL SKILLS

Computer Skills : **Microsoft Office** (Expert)  
**Microwave Office 2006** (Expert)  
**Computer Simulation Technology**-using for research purpose (Expert)  
**MATLAB software** (Good)  
 Troubleshooting and PC maintenance (Good)

Language skills : **Malay Language**

✓ Reading	Excellent
✓ Writing	Excellent
✓ speaking	Excellent

**English**

✓ Reading	Excellent
✓ Writing	Good
✓ speaking	Good

### PERSONAL STRENGTHS

- Leadership
- A team player.
- Hardworking and able to learn new knowledge within a short period of time.
- Self-driven and self-confident.
- Good interpersonal skill and able to relate with co-workers at all levels.
- Able to priorities assignments and meet dateline.
- Willing to work extra hours.
- Work best under pressure.
- Communication skills (savvy in writing a professional report and good at presenting individual and group seminar papers) resourceful in gathering information in order to produce a good report papers

### REFERENCES

Prof. Dr. Mohamad Kadim B. Suaidi  
 Professor,  
 Universiti Teknikal Malaysia Melaka,  
 Karung Berkunci 1200,  
 Ayer Keroh, 75450 Melaka.  
 Phone: +606-3316070/0192678998  
 kadim@utem.edu.my

En. Mohamad Zoinol Abidin B. Abd. Aziz  
 Lecturer,  
 Universiti Teknikal Malaysia Melaka,  
 Karung Berkunci 1200,  
 Ayer Keroh, 75450 Melaka.  
 Phone: +606-5552130 / 0137762543  
 mohamadzoinol@utem.edu.my