



# UNIVERSITI TEKNIKAL MALAYSIA MELAKA

## STAFF PROFILE

**NAME** PROFESOR MADYA DR WONG YAN CHIEW

**FACULTY / CENTRE** FAKULTI KEJURUTERAAN ELEKTRONIK & KEJ. KOMPUTER

**DESIGNATION** PENSYARAH UNIVERSITI

**CURRENT POSITION** PROFESOR MADYA - FAKULTI KEJURUTERAAN ELEKTRONIK & KEJ. KOMPUTER

**EMAIL** ycwong@utem.edu.my



### ACADEMIC QUALIFICATION

YEAR	QUALIFICATION	INSTITUTION
2014	KEDOKTORAN FALSAFAH (PH.D)	THE UNIVERSITY OF EDINBURGH
2008	SARJANA (MASTERS)	UTM
2005	SARJANA MUDA (BACHELOR)	UNIVERSITI TEKNOLOGI MALAYSIA

### FIELD OF INTEREST

CMOS CIRCUIT DESIGN

### TEACHING EXPERIENCE *(last 5 years)*

#### UNDERGRADUATES

SESSION	COURSE
2021/2022	BENC4473 - DIGITAL INTEGRATED CIRCUIT DESIGN
2021/2022	BENG4711 - ELECTRONIC ENGINEERING LAB 5
2020/2021	BENC2423 - MICROPROCESSOR TECHNOLOGY
2020/2021	BENC4473 - DIGITAL INTEGRATED CIRCUIT DESIGN
2020/2021	BENG2431 - ELECTRONIC ENGINEERING LAB2
2020/2021	BENG4711 - ELECTRONIC ENGINEERING LAB 5
2019/2020	BEEC3444 - MICROPROCESSOR & MICROCONTROLLER TECHNOLOGY
2019/2020	BENC2423 - MICROPROCESSOR TECHNOLOGY
2019/2020	BENC4473 - DIGITAL INTEGRATED CIRCUIT DESIGN
2019/2020	BENG2431 - ELECTRONIC ENGINEERING LAB2
2019/2020	BENG4711 - ELECTRONIC ENGINEERING LAB 5
2018/2019	BENC2423 - MICROPROCESSOR TECHNOLOGY
2018/2019	BENC4473 - DIGITAL INTEGRATED CIRCUIT DESIGN
2017/2018	BENC2423 - MICROPROCESSOR TECHNOLOGY
2017/2018	BENC4473 - DIGITAL INTEGRATED CIRCUIT DESIGN
2017/2018	BENG2211 - ELECTRONIC ENGINEERING LAB 1
2017/2018	BENG2431 - ELECTRONIC ENGINEERING LAB2
2017/2018	BENM2123 - MICROPROCESSOR TECHNOLOGY
2017/2018	BENT2713 - CIRCUIT THEORY 1

2016/2017	BENC2423 - MICROPROCESSOR TECHNOLOGY
2016/2017	BENE4781 - INDUSTRIAL ELECTRONICS LAB 4
2016/2017	BENG2431 - ELECTRONIC ENGINEERING LAB2
2016/2017	BENM3133 - INTEGRATED CIRCUIT DESIGN & PROCESS

**POSTGRADUATES**

SESSION	COURSE
2019/2020	MENC5233 - DIGITAL VLSI DESIGN
2018/2019	MENE5223 - ARTIFICIAL INTELLIGENCE
2017/2018	MENE5223 - ARTIFICIAL INTELLIGENCE

**LIST OF GRANTS (last 5 years)**

YEAR AWARDED	TITLE OF PROJECT	TYPE OF GRANT	AMOUNT (RM)	ROLE
2020	A NEW BRAIN-INSPIRED SPIKING NEURAL NETWORK FOR DEEP LEARNING IN HUMAN ACTIVITY RECOGNITION USING WIFI SIGNAL	GERAN FRGS (NATIONAL)	105500	MAIN RESEARCHER
2020	CILI-PADI DETECTION, LOCALIZATION AND MATURITY ESTIMATION FROM 3D IMAGE RECONSTRUCTION OF STEREO VISION USING DEEP LEARNING APPROACH	SHORT TERM (UTEM)	20000	CO-RESEARCHER
2019	A NEW LOCAL SEARCH ALGORITHM FOR MINIMUM SPAN FREQUENCY ASSIGNMENT IN MOBILE COMMUNICATION	GERAN FRGS (NATIONAL)	48800	CO-RESEARCHER
2019	A DEEP LEARNING ALGORITHM TO DIAGNOSE CHILDREN WITH AUTISM SPECTRUM DISORDER USING ELECTROENCEPHALOGRAPH SIGNAL	GERAN FRGS (NATIONAL)	87600	CO-RESEARCHER
2018	AUTOMATIC SURGICAL LIGHTING SYSTEM USING COLOR OBJECT TRACKING	SHORT TERM (UTEM)	20000	CO-RESEARCHER
2018	CLASSIFICATION OF AUTISM SPECTRUM DISORDER (ASD) USING CONVOLUTIONAL NEURAL NETWORK ON ELECTROENCEPHALOGRAPH (EEG) BRAIN CONNECTIVITY	SHORT TERM (UTEM)	20000	CO-RESEARCHER
2018	MONOLITHICALLY INTEGRATED OPTICAL RECEIVER WITH CMOS AVALANCHE PHOTODETECTOR FOR EMERGING HIGH-SPEED OPTOELECTRONIC INTEGRATED CIRCUIT APPLICATIONS	SHORT TERM (UTEM)	20000	CO-RESEARCHER
2018	MONOLITHICALLY INTEGRATED OPTICAL RECEIVER WITH CMOS AVALANCHE PHOTODETECTOR FOR EMERGING HIGH-SPEED OPTOELECTRONIC INTEGRATED CIRCUIT APPLICATIONS	SHORT TERM (UTEM)	20000	CO-RESEARCHER
2017	NOVEL HIGH PERFORMANCE AMBIENT RF ENERGY HARVESTING SYSTEM-ON-CHIP FOR EMERGING WIRELESS DEVICES AND MOBILE APPLICATIONS	GERAN SCIENCEFUND (NATIONAL)	246900	MAIN RESEARCHER

**PUBLICATIONS (last 5 years)****JOURNAL**

YEAR	TITLE	NAME OF JOURNAL	AUTHORS
2021	A COMPLETE DESIGN AND DEVELOPMENT OF A MINIATURE BATTERY-LESS POWER MANAGEMENT UNIT FOR POWERING BIOMEDICAL IMPLANT	JOURNAL OF ENGINEERING SCIENCE AND TECHNOLOGY JESTEC	
2020	LOW POWER WAKE-UP RECEIVER BASED ON ULTRASOUND COMMUNICATION FOR WIRELESS SENSOR NETWORK	BULETIN OF ELECTRICAL ENGINEERING AND INFORMATICS	YAN CHIEW WONG, SZI HUI TAN, RANJIT SINGH SARBAN SINGH, HAOUY ZHANG, A. R. SYAFEEZA, N. A. HAMID
2020	ON-CHIP ULTRA LOW POWER OPTICAL WAKE-UP RECEIVER FOR WIRELESS SENSOR NODES TARGETING STRUCTURAL HEALTH MONITORING	TELKOMNIKA TELECOMMUNICATION, COMPUTING, ELECTRONICS AND CONTROL	CHIA YEE SAW, YAN CHIEW WONG, SER LEE LOH, HAOUY ZHANG
2020	SPIKING NEURAL NETWORK FOR ENERGY EFFICIENT LEARNING AND RECOGNITION	INTERNATIONAL JOURNAL OF SCIENTIFIC AND TECHNOLOGY RESEARCH	WANG NING LO, YAN CHIEW WONG
2019	3.3V DC OUTPUT AT-16DBM SENSITIVITY AND 77% PCE RECTIFIER FOR RF ENERGY HARVESTING	INTERNATIONAL JOURNAL OF POWER ELECTRONICS AND DRIVE SYSTEM	ASTRIE NURASYEILA FIFIE ASLI, YAN CHIEW WONG
2019	A 30MV INPUT BATTERY-LESS POWER MANAGEMENT SYSTEM	BULLETIN OF ELECTRICAL ENGINEERING AND INFORMATICS	JIM HUI YAP, YAN CHIEW WONG
2019	A DESIGN OF LICENSE PLATE RECOGNITION SYSTEM USING CONVOLUTIONAL NEURAL NETWORK	INTERNATIONAL JOURNAL OF ELECTRICAL AND COMPUTER ENGINEERING	P MARZUKI, AR SYAFEEZA, YC WONG, NA HAMID, A NUR ALISA, MM IBRAHIM
2019	A NEW FAULT DETECTION SYSTEM USING WIRELESS COMMUNICATION ASSISTED WITH ANALOG RELAYS FOR GRID ELECTRICAL LAMP POLE NETWORK	JOURNAL OF THEORETICAL AND APPLIED INFORMATION TECHNOLOGY	RANJIT SINGH SARBAN SINGH, WONG YAN CHIEW, BALJIT SINGH SARBAN SINGH, MAYSAM ABBOD
2019	DESIGN CONSIDERATION IN LOW DROPOUT VOLTAGE REGULATOR FOR BATTERYLESS POWER MANAGEMENT UNIT	BULLETIN OF ELECTRICAL ENGINEERING AND INFORMATICS	MOHAMAD KHAIRUL BIN MOHD KAMEL, YAN CHIEW WONG
2019	INTEGRATED CMOS RECTIFIER FOR RF-POWERED WIRELESS SENSOR NETWORK NODES	BULLETIN OF ELECTRICAL ENGINEERING AND INFORMATICS	ALSELWI, M.A.R.E., WONG, Y.C., NAPIAH, Z.A.F.M.
2019	RASPBERRY PI ZERO WIRELESS MONITORING SYSTEM FOR ANALYZING SOLAR PHOTOVOLTAIC PANEL	INTERNATIONAL JOURNAL OF INNOVATIVE TECHNOLOGY AND EXPLORING ENGINEERING	RANJIT SINGH SARBAN SINGH, MUHAMMAD IZZAT BIN NURDIN, WONG YAN CHIEW
2019	VOLTAGE SENSING TECHNIQUE FOR RENEWABLE ENERGY SOURCES SELF-INTERVENTION	INTERNATIONAL JOURNAL OF RECENT TECHNOLOGY AND ENGINEERING	RANJIT SINGH SARBAN SINGH, MAYSAM ABBOD, WONG YAN CHIEW
2018	-31 DBM SENSITIVITY HIGH EFFICIENCY RECTIFIER FOR ENERGY SCAVENGING	AEU - INTERNATIONAL JOURNAL OF ELECTRONICS AND COMMUNICATIONS	ASTRIE NURASYEILA FIFIE ASLI, YAN CHIEW WONG
2018	DESIGN AND DEVELOPMENT OF DEEP LEARNING CONVOLUTIONAL NEURAL NETWORK ON AN FIELD PROGRAMMABLE GATE ARRAY	JOURNAL OF TELECOMMUNICATION, ELECTRONIC AND COMPUTER ENGINEERING (JTEC)	YAN CHIEW WONG, YI QING LEE
2018	IMPLEMENTATION OF CONTINUOUS WEARABLE LOW POWER BLOOD GLUCOSE LEVEL DETECTION USING GSR SENSOR	JOURNAL OF TELECOMMUNICATION, ELECTRONIC AND COMPUTER ENGINEERING	WIRA HIDAYAT BIN MOHD SAAD, MUHD. SHAH JEHAN ABD. RAZAK, TAN YUN SHENG, NURUL AKMAL BINTI ABD SALAM, FAUZIYAH BTE SALEHUDDIN1, WONG YAN CHIEW
2018	MINIATURE HIGH GAIN SLOT-FED RECTANGULAR DIELECTRIC RESONATOR ANTENNA FOR IOT RF ENERGY HARVESTING	AEU - INTERNATIONAL JOURNAL OF ELECTRONICS AND COMMUNICATIONS	MASIUS A.A., WONG Y.C., LAU K.T.
2017	A STACK BONDED THERMO-PNEUMATIC MICRO-PUMP UTILIZING POLYIMIDE BASED ACTUATOR MEMBRANE FOR BIOMEDICAL APPLICATIONS	SPRINGERLINK	
2017	DESIGN OF FINGER-VEIN CAPTURE DEVICE WITH QUALITY ASSESSMENT USING ARDUINO MICROCONTROLLER	JOURNAL OF TELECOMMUNICATION, ELECTRONIC AND COMPUTER ENGINEERING	
2017	EVALUATION OF CHARGE TRANSFER BLOCKS IN CP CIRCUIT TOPOLOGIES	JOURNAL OF TELECOMMUNICATION ELECTRONIC AND COMPUTER ENGINEERING	
2017	IMPLEMENTATION OF CONTINUOUS WEARABLE LOW POWER BLOOD GLUCOSE LEVEL DETECTION USING GSR SENSOR	JOURNAL OF TELECOMMUNICATION, ELECTRONIC AND COMPUTER ENGINEERING	
2017	MINIATURE HIGH GAIN SLOT-FED RECTANGULAR DIELECTRIC RESONATOR ANTENNA FOR IOT RF ENERGY HARVESTING	AEU - INTERNATIONAL JOURNAL OF ELECTRONICS AND COMMUNICATIONS	
2017	PARAMETER OPTIMIZATION OF STAIRCASE SHAPED COPLANAR WAVEGUIDE MONOPOLE ANTENNA WITH MODIFIED GROUND PLANE FOR RADIO-FREQUENCY ENERGY HARVESTING APPLICATION	JOURNAL OF TELECOMMUNICATION, ELECTRONIC AND COMPUTER ENGINEERING (JTEC)	MICRO AND NANO ELECTRONIC (MINE) RESEARCH GROUP, CENTRE FOR TELECOMMUNICATION RESEARCH AND INNOVATION, UNIVERSITI TEKNIKAL MALAYSIA MELAKA
2017	PARAMETER OPTIMIZATION OF STAIRCASE SHAPED COPLANAR WAVEGUIDE MONOPOLE ANTENNA WITH MODIFIED GROUND PLANE FOR RADIO-FREQUENCY ENERGY HARVESTING APPLICATION	JOURNAL OF TELECOMMUNICATION ELECTRONIC AND COMPUTER ENGINEERING	
2017	ROAD TRIANGLE DETECTION FOR NON-ROAD AREA ELIMINATION USING LANE DETECTION AND IMAGE MULTIPLICATION	JOURNAL OF TELECOMMUNICATION, ELECTRONIC AND COMPUTER ENGINEERING (JTEC)	
2017	TUNABLE IMPEDANCE MATCHING NETWORK WITH WIDE IMPEDANCE COVERAGE FOR MULTI FREQUENCY STANDARDS RF FRONT-END	INTERNATIONAL JOURNAL OF ELECTRONICS AND COMMUNICATIONS (AEU)	

**CONFERENCE**

YEAR	TITLE	NAME OF CONFERENCE	AUTHORS
2018	REVIEW OF COMMUNICATION METHODS AND SYSTEM DESIGN STRUCTURE FOR SOLAR MONITORING SYSTEM	THE 4TH INTERNATIONAL CONFERENCE ON GREEN DESIGN AND MANUFACTURE 2018	S. S. S. RANJIT, A. F. M. F. AQIL, S. S. S. BALJIT, AND Y. C. WONG
2018	A 1.2V MINIATURE ON-CHIP BATTERY-LESS POWER MANAGEMENT SYSTEM	ICEECC2018	JIM HUI YAP1, YAN CHIEW WONG1*
2018	HIGH VOLTAGE CONVERSION DIFFERENTIAL-DRIVE RECTIFIER FOR RF ENERGY HARVESTING SYSTEM	THE 3RD INTERNATIONAL CONFERENCE ON ELECTRICAL, ELECTRONIC, COMMUNICATION AND CONTROL ENGINEERING	ASTRIE NURASYEILA FIFIE ASLI, YAN CHIEW WONG
2018	HIGH POWER SUPPLY REJECTION RATIO (PSRR) AT HIGH FREQUENCY LOW DROPOUT REGULATOR	THE 3RD INTERNATIONAL CONFERENCE ON ELECTRICAL, ELECTRONIC, COMMUNICATION AND CONTROL ENGINEERING	ASTRIE NURASYEILA FIFIE ASLI, YAN CHIEW WONG
2018	NOISE AND PSRR DESIGN CONSIDERATION IN LOW DROPOUT LDO VOLTAGE REGULATOR FOR ENERGY HARVESTING POWER MANAGEMENT UNIT	THE 3RD INTERNATIONAL CONFERENCE ON ELECTRICAL, ELECTRONIC, COMMUNICATION AND CONTROL ENGINEERING	MOHAMAD KHAIRUL BIN MOHD KAMEL* AND YAN CHIEW WONG
2018	ON-CHIP RECTIFIER RECHARGES ENERGY TO RADIO FREQUENCY ENERGY HARVESTING APPLICATIONS	THE 3RD INTERNATIONAL CONFERENCE ON ELECTRICAL, ELECTRONIC, COMMUNICATION AND CONTROL ENGINEERING	MOHAMMED ABDUL RAHEEM ESMAIL ALSELWI, YAN CHIEW WONG*, ZUL ATFYI FAUZAN MOHAMMED NAPIAH
2018	ANTENNA DESIGN FOR RADIO-FREQUENCY ENERGY HARVESTING SYSTEM: A REVIEW ON DIFFERENT SHAPES AND TECHNIQUES	POSTGRADUATE RESEARCH CONFERENCE (PRECON)	ALPHONSOS A MASIUS AND YAN CHIEW WONG
2018	RECONFIGURABLE CMOS VOLTAGE-CONTROLLED-RING-OSCILLATOR DESIGN FOR ENERGY HARVESTING POWER MANAGEMENT UNIT	POSTGRADUATE RESEARCH CONFERENCE (PRECON)	MOHAMAD KHAIRUL BIN MOHD KAMEL AND YAN CHIEW WONG
2018	ON-CHIP RECTIFIER RECHARGES ENERGY TO RADIO FREQUENCY ENERGY HARVESTING APPLICATIONS	2018 INTERNATIONAL CONFERENCE ON ELECTRICAL, ELECTRONIC, COMMUNICATION AND CONTROL ENGINEERING	MOHAMMED ABDUL RAHEEM ESMAIL ALSELWI; YAN CHIEW WONG; ZUL ATFYI FAUZAN MOHAMMED NAPIAH;

**BOOK, BOOK CHAPTER, OTHER PUBLICATIONS**

YEAR	TITLE BOOK	TITLE CHAPTER BOOK	TYPE OF PUBLICATIONS	AUTHORS
2019	DESIGN OF AUTOMATED COMPUTER-AIDED CLASSIFICATION OF BRAIN TUMOR USING DEEP LEARNING	-	BOOK_CHAPTER	WONG YAN CHIEW

**POSTGRADUATE SUPERVISION** *(last 5 years)*

NO	NAME	LEVEL OF STUDY	ROLE	STATUS
1	NOR AMALIA DAYANA BINTI MOHAMAD NOOR	MASTERS	MAIN SUPERVISOR	ACTIVE
2	ASTRIE NURASYEILA FIFIE BINTI ASLI	MASTERS	MAIN SUPERVISOR	GRADUATED (2020)
3	NG CHOK TONG	MASTERS	MAIN SUPERVISOR	GRADUATED (2020)
4	MOHAMAD KHAIRUL BIN MOHD KAMEL	MASTERS	MAIN SUPERVISOR	GRADUATED (2019)
5	ALPHONSOS A MASIOUS	MASTERS	MAIN SUPERVISOR	GRADUATED (2019)
6	YAP JIM HUI	MASTERS	MAIN SUPERVISOR	ACTIVE
7	TAN YEE LEONG	MASTERS	MAIN SUPERVISOR	ACTIVE
8	SAW CHIA YEE	MASTERS	MAIN SUPERVISOR	ACTIVE
9	MOHAMMED ABDUL RAHEEM ESMAIL ALSSELWI	MASTERS	MAIN SUPERVISOR	ACTIVE
10	MOHD KHAIRI ZULKALNAIN	MASTERS	MAIN SUPERVISOR	ACTIVE
11	IVAN CHONG WEI YANG	MASTERS	MAIN SUPERVISOR	ACTIVE
12	MOHAMMAD HAZIQ BIN ISHAK	MASTERS	CO-SUPERVISOR	ACTIVE
13	ZARYATI BINTI ZAINI	MASTERS	CO-SUPERVISOR	ACTIVE

## STAFF PROFILE

KATEGORI MAKLUMAT	PEJABAT DIRUJUK
PERSONAL INFORMATION	BAHAGIAN SUMBER MANUSIA, PEJABAT PENDAFTAR
ACADEMIC QUALIFICATON	
PROFESSIONAL MEMBERSHIP / LEARNED SOCIETY	
TEACHING EXPERIENCE	BAHAGIAN PENGURUSAN AKADEMIK, PEJABAT PENDAFTAR
<ul style="list-style-type: none"> <li>• UNDERGRADUATES</li> </ul>	
<ul style="list-style-type: none"> <li>• POSTGRADUATES</li> </ul>	PUSAT PENGAJIAN SISWAZAH (PPS)
POSTGRADUATE SUPERVISION	PUSAT PENGAJIAN SISWAZAH (PPS)
FIELD OF INTEREST	PUSAT PENGURUSAN PENYELIDIKAN DAN INOVASI (CRIM)
LIST OF GRANTS	
LIST OF RESEARCH AWARDS	PUSAT PENGKOMERSILAN (UCC)
INTELLECTUAL PROPERTIES	
COMMERCIALIZATION	
PUBLICATIONS	PERPUSTAKAAN LAMAN HIKMAH
CONSULTANCY	PUSAT JARINGAN INDUSTRI DAN MASYARAKAT (PJIM)