



CHAN BUN SENG
LECTURER
FACULTY OF ENGINEERING AND
INFORMATION TECHNOLOGY
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1. Academic Qualification

No.	QUALIFICATION	FIELD OF SPECILIZATION	NAME OF AWARDING INSITUTION & COUNTRY	START DATE – END DATE
1.	Ph.D	3D Computer Vision	Curtin University Malaysia	2016-Present
2.	M. Eng.	Nanoelectronics	Universiti Malaysia Sabah	2012-2015
3.	B. Eng. (Hons)	Electrical and Electronics	Universiti Malaysia Sabah	2008-2012
4.	Dip. Eng.	Bio-Medical	Politeknik Shah Alam	2004-2007

2. PREVIOUS EMPLOYMENT RECORD

No.	START DATE – END DATE	POSITION	JOB NATURE	EMPLOYER / COMPANY
1.	July 2016 – July 2018	Teaching Assistant	Education	Curtin University Malaysia
2.	Feb 2013 – June 2018	Tutor	Education	Universiti Malaysia Sabah
3.	Sep 2012 – Sep 2015	Research Assistant	Research	Universiti Malaysia Sabah
4.	June 2011 – Aug 2011	Trainee	Environmental Engineering	LKS Sdn Bhd
5.	July 2007 – June 2008	Technician	Biomedical Engineering	Malaysian Healthcare Sdn Bhd
6.	June 2006 – July 2006	Part-time Technician	Biomedical Engineering	Malaysian Healthcare Sdn Bhd
7.	Jan 2006 – May 2006	Trainee	Biomedical Engineering	Malaysian Healthcare Sdn Bhd



3. PROFESSIONAL QUALIFICATION / MEMBERSHIP (NATIONAL / INTERNATIONAL)

No.	TYPE OF QUALIFICATIONS / MEMBERSHIP	GOVERNED BY WHICH BODY / COMPANY / ASSOCIATION / OTHERS	AWARDED YEAR / MEMBERSHIP DURATION
1.	Graduate Engineer	Board of Engineers Malaysia	2013 – Present
2.	Graduate Member	The Institution of Engineers, Malaysia	2013 – Present
3.	Member	Institute of Electrical and Electronics Engineers	2013 – Present
4.	Member	Institute of Electrical and Electronics Engineers Sabah Sub-Section	2017 – Present
5.	Member	Institute of Electrical and Electronics Engineers Young Professionals	2014 – Present
6.	Member	IEEE Computational Intelligence Society	2016 – Present
7.	Member	IEEE Electron Devices Society	2014 – Present
8.	Member	IEEE Signal Processing Society	2017 – Present
9.	Member	IEEE Biometrics Council	2014 – Present
10.	Member	IEEE Council on RFID	2014 – Present
11.	Member	IEEE Council on Superconductivity	2015 – Present
12.	Member	IEEE Nanotechnology Council	2015 – Present
13.	Member	IEEE Sensors Council	2014 – Present
14.	Member	Life Sciences Community, IEEE	2014 – Present
15.	Associate Member	Institute of Research Engineers and Doctors-UACEE	2015 – Present
16.	Member	International Association of Engineers (IAENG)	2015 – Present



4. CONSULTANCY SERVICES / COMMUNITY SERVICES

No.	ORGANIZATION / EVENT / PROJECT	DATE / DURATION	VENUE / COMPANY	ROLE / POSITION
1.	Imparting Pico Hydro Energy System Program to the Villagers of Kg. Long Pasia Asal, Sabah	01 January 2016 – 31 December 2017 (2 Years)	Kg. Long Pasia Asal, Sabah/ Universiti Malaysia Sabah and NGO	Graduate Intern

5. CONFERENCES AND TRAININGS

No.	TITLE OF THE CONFERENCES / TRAINING	DATE	TRAINING VENUE	ORGANIZE BY SPEAKER / TRAINER
1.	International Conference on Electrical, Electronic, Communication and Control Engineering 2017 (ICEEC2017)	05-06 December 2017	UTM (KL Campus)	UTM KL
2.	One Curtin International Postgraduate Conference	10-12 December 2017	Curtin University Malaysia	Curtin University Malaysia
3.	IEEE 10 th Asian Control Conference (ASCC2015)	31 May – 3 June 2015	Sutera Harbour, Sabah	UTM and UMS
4.	27 th Regional Conference on Solid State Science & Technology 2013 (RCSST27)	20-22 December 2013	Kota Kinabalu	UMS
5.	2013 IEEE Student Conference on Research & Development (SCORED)	16-17 December 2013	Palm Garden Hotel, Putrajaya	UKM
6.	IEEE First International Conference on Artificial Intelligence, Modelling, and Simulation (IEEE-AIMS2013)	3 – 5 December 2013	Le Meridian Hotel, Kota Kinabalu	UMS
7.	IEEE Regional Symposium on Micro and Nano Electronics (IEEE-RSM2013)	25 – 27 September 2013	Holiday Villa Beach Resort & Spa, Langkawi	UniMAP
8.	The 10 th Annual Seminar on Seminar on Science & Technology	1 – 2 December 2012	The Palace Hotel	UMS
9.	SLT – EAC/ ETAC Standard Expectation Workshop	02/05/2019	EAD, BEM	Directors of EAC/ETAC, BEM



10.	ETAC Training for IHL	23-25 April 2019	EAD, BEM	Directors of EAC/ETAC, BEM
11.	Arduino Workshop (Trainer)	02 May 2016	Universiti Malaysia Sabah	-
12.	AutoCAD Level 2	09 March 2012	AMC The School of Business	Lecturer of AMC
13.	AutoCAD Level 1	08 March 2012	AMC The School of Business	Lecturer of AMC

6. RESEARCH AND PUBLICATION

Journal Publications

- [1] **Bunseng Chan**, King Hann Lim, Lenin Gopal, Alpha Agape Gopalai, Darwin Gouwanda, 2018. Stereo Vision Human Motion Detection and Tracking in Uncontrolled Environment, *Telecommunication, Computing, Electronics and Control*, 16 (3), pp. 955-964. (<http://dx.doi.org/10.12928/telkomnika.v16i3.9033>) (IF:0.283)
- [2] Saad I., HM Zuhir, AHS Bacho, **CB Seng**, AM Khairul, B. Ghosh, N Bolong, 2017. Enhanced Reliability of Vertical Strained Impact Ionization MOSFET Incorporating Dielectric Pocket for Ultra-Sensitive Biosensor Applications, *Advanced Science Letters*, 23 (11), pp. 11247 - 11251. (<https://doi.org/10.1166/asl.2017.10260>) (IF: 0.18)
- [3] Saad I., B Syazana, **CB Seng**, HM Zuhir, N Bolong., 2017. Vertical Strained Impact Ionization MOSFET (VESIMOS) Technology Approach for Based Biosensor Applications Using Its Behavioral Model, *Advanced Science Letters*, 23 (11), pp. 11242 - 11246. (<https://doi.org/10.1166/asl.2017.10259>) (IF: 0.18)
- [4] Saad I., Bais H., **Bunseng C.**, Mohd Zuhir H., Nurmin B., 2016. Clinical Rehabilitation Application Using Non-Invasive Electromyography (EMG) Technique, *IJSSST V17*, 17(34) (IF: 0.109)
- [5] Saad I., Andee Hazwani B., Mohd Zuhir H., **Bunseng C.**, Nurmin B., 2016. Avalanche Characteristic of Vertical Impact Ionization MOSFET (IMOS) Equivalent Circuit Model, *IJSSST V17*, 17 (34) (IF: 0.109)
- [6] Saad I., **Bun Seng C.**, Mohd Zuhir H., Nurmin B., Khairul A.M., Bablu Ghosh, Ismail R. Hashim U., 2015. Breakdown Voltage Reduction Analysis with Adopting Dual Channel Vertical Strained SiGe Impact Ionization MOSFET (VESIMOS), *IJSSST V15*, 15(2). (IF: 0.109)
- [7] Saad I., Mohd Zuhir H., **Bun Seng C.**, Nurmin B., Khairul A.M., Bablu Ghosh, Ismail R. Hashim U., 2015. Doping Concentrations Analysis on the Performance of Vertical Strained – SiGe Impact Ionization MOSFET Incorporating Dielectric Pocket (VESIMOS – DP), *IJSSST V15*, 15(2). (IF: 0.109)
- [8] Saad I., Divya P., Mohd Zuhir H., **Bun Seng C.**, Nurmin B., 2015. In – Depth Design and Simulation Analysis of Vertical Strained Impact Ionization MOSFET (VESIMOS), *IJSSST V15*, 15(2). (IF: 0.109)
- [9] Saad I, **Bun Seng C.**, Mohd Zuhir H., Nurmin B., Khairul A.M., Bablu Ghosh, 2015. Effect of the Ge Mole Fraction on the Electrical Characteristics of Single and Dual Channel Vertical Strained SiGe Impact Ionization MOSFET (VESIMOS), *Advanced Materials Research, AMR V1107*, pp. 496 - 501. (<https://doi.org/10.4028/www.scientific.net/AMR.1107.496>) (IF: 0.121)
- [10] **B.S Chan**, C.L Sia, Farrah Wong, Renee Chin, Jamal A. Dargham, Yang Soo Siang, 2013. Analysis of Surface Electromyography for On-Off Control, *Advanced Materials Research, AMR V701*, pp. 435 - 439. (<https://doi.org/10.4028/www.scientific.net/AMR.701.435>) (IF: 0.121)

Proceeding Publications

- [1] Saad I., **Bun Seng C.**, Ngu War Hliang, Herwansyah Lago, 2019. Integrated Microprocessor and Computer Architecture Design Course Implementation for Enhancing Problem Solving and Design Outcomes, *8th Asian Conference on Engineering Education (ACEE2019) (Presented)*
- [2] Saad I., Andee Hazwani B., **Bun Seng C.**, Mohd Zuhir H., Bolong N., 2016. Enhancing Equivalent Circuit Model of Dual Channel Vertical Strained Impact Ionization MOSFET (DC-VESIMOS) for Biosensor Applications, *IEEE International Conference on Semiconductor Electronics (ICSE 2016)*, pp. 93 - 96.
- [3] Saad I., Andee Hazwani B., Mohd Zuhir H., **Bunseng C.**, Bolong N., 2016, Equivalent Circuit Model Implementation of Dual Channel Vertical Strained Impact Ionization MOSFET (DC-VESIMOS) in Biosensor Applications, *Micro and Nano Technologies, Modelling and Simulation 2016 (MNTMSim2016)*.



- [4] Saad I., Bais H., **Bun Seng C.**, Mohd Zuhir H., Bolong N., 2015. Electromyogram (EMG) Signal Processing Analysis for Clinical Rehabilitation Application. *Third International Conference of Artificial Intelligence, Modelling and Simulation 2015 (AIMS2015)*.
- [5] Saad I., Andee Hazwani B., Mohd Zuhir H., **Bun Seng C.**, Bolong N., 2015. Equivalent Circuit Model Analysis of Vertical Impact Ionization MOSFET (IMOS). *Third International Conference of Artificial Intelligence, Modelling and Simulation 2015 (AIMS2015)*.
- [6] Farrah Wong, Sia Chiew Lian, **Chan Bun Seng**, Lim Pei Yi, Renee Chin, Kenneth Teo, Ali Chekima, Khairul Anuar Mohamad, 2015. Model Cart Control Using EMG Signal, *IEEE 10th Asian Control Conference (ASCC2015)*, pp. 1882 – 1885.
- [7] Saad I., **Bun Seng C.**, Mohd Zuhir H., Andee Hazwani B., N. Bolong., 2015. Physics – Based Modelling of Vertical Strained Impact Ionization MOSFET (VESIMOS), *IEEE Regional Symposium on Micro and Nano Electronics (IEEE-RSM2015)*
- [8] Saad I., Andee Hazwani B., Mohd Zuhir H., **Bun Seng C.**, N. Bolong., 2015. The Vertical Strained Impact Ionization MOSFET (VESIMOS) for Ultra-Sensitive Biosensor Application, *IEEE Regional Symposium on Micro and Nano Electronics (IEEE-RSM2015)*
- [9] Saad I., Mohd Zuhir H., **Bun Seng C.**, Khairul A.M., Bablu Ghosh, Nurmin B., Ismail R., 2014. Characterization of Vertical Strained SiGe Impact Ionization MOSFET for Ultra – Sensitive Biosensor Application, *2014 IEEE International Conference on Semiconductor Electronics (IEEE-ICSE2014)*, pp. 154 – 157.
- [10] Saad I., Mohd Zuhir H., **Bun Seng C.**, Abu Bakar A.R., Nurmin B., Khairul A.M., Bablu Ghosh, Ismail R., 2014. Impact of Strained SiGe on the Performance of Vertical Strained SiGe Impact Ionization MOSFET Incorporating Dielectric Pocket (VESIMOS – DP), *2014, 2014 International Conference on Information Science, Electronics and Electrical Engineering (ISEEE 2014)*, pp. 1877 – 1881.
- [11] Saad I., **Bun Seng C.**, Mohd Zuhir H., Nurmin B., Khairul A.M., Bablu Ghosh, 2013. Effect of the Ge Mole Fraction on the Electrical Characteristics of Single and Dual Channel Vertical Strained SiGe Impact Ionization MOSFET (VESIMOS), *27th Regional Conference of Solid State Science and Technology (RCSSST2013)*.
- [12] Saad I., **Bun Seng C.**, Mohd Zuhir H., Nurmin B., Khairul A.M., Bablu Ghosh, Ismail R., 2013. Performance Analysis of Single and Dual Channel Vertical Strained SiGe Impact Ionization MOSFET (VESIMOS), *IEEE Student Conference on Research & Development (IEEE-SCORED2013)*.
- [13] Saad I., **Bun Seng C.**, Mohd Zuhir H., Nurmin B., Khairul A.M., Bablu Ghosh, Ismail R., 2013. Mitigating Breakdown Voltage with Dual Channel Vertical Strained SiGe Impact Ionization MOSFET (VESIMOS), *IEEE First International Conference on Artificial Intelligence, Modelling and Simulation (IEEE-AIMS2013)*, pp. 423– 427.
- [14] Saad I. Mohd Zuhir H., **Bun Seng C.**, Khairul A.M., Bablu Ghosh, Nurmin B., Ismail R., 2013. Effects of S/D Doping Concentrations on Vertical Strained SiGe Impact Ionization MOSFET Incorporating Dielectric Pocket (VESIMOS – DP), *IEEE First International Conference on Artificial Intelligence, Modelling and Simulation (IEEE-AIMS2013)*, pp. 428 – 432.
- [15] Saad I., Mohd Zuhir H., **Bun Seng C.**, Abu Bakar A.R., Nurmin B., Khairul A.M., Bablu Ghosh, Ismail R., 2013. Impact of Strained and DP Position on the Performance of Vertical Strained SiGe Impact Ionization MOSFET Incorporating Dielectric Pocket (VESIMOS – DP), *IEEE Region 10 International Conference 2013 (IEEE-TENCON2013)*, pp. 1 – 5.
- [16] Saad I., Mohd Zuhir H., **Bun Seng C.**, Abu Bakar A.R., Nurmin B., Khairul A.M., Bablu Ghosh, Ismail R., 2013. Mobility Enhancement on Vertical Strained SiGe Impact Ionization MOSFET Incorporating Dielectric Pocket (VESIMOS – DP), *IEEE Region 10 International Conference 2013 (IEEE-TENCON2013)*.
- [17] Saad I., Mohd Zuhir H., **Bun Seng C.**, Khairul A.M., Bablu Ghosh, Nurmin B., Ismail R., 2013. Performance Analysis of Vertical Strained SiGe Impact Ionization MOSFET Incorporating Dielectric Pocket (VESIMOS – DP), *IEEE 5th International Conference on Computational Intelligent, Modelling and Simulation (IEEE-CIMSiM2013)*, pp. 375 – 380.
- [18] Saad I., **Bun Seng C.**, Mohd Zuhir H., Abu Bakar A.R., Divya P., Nurmin B., Khairul A.M., Bablu Ghosh, 2013. Single and Dual Strained Channel Analysis of Vertical Strained SiGe Impact Ionization MOSFET (VESIMOS), *IEEE Regional Symposium on Micro and Nano Electronics (IEEE-RSM2013)*, pp. 335 - 338.
- [19] Saad I, Mohd Zuhir H., **Bun Seng C.**, Divya P., Abu Bakar A.R., Khairul A.M. Bablu Ghosh, Nurmin B., Ismail R., Hashim U., 2013. Body Doping Analysis of Vertical Strained SiGe Impact Ionization MOSFET Incorporating Dielectric Pocket (VESIMOS – DP), *IEEE Regional Symposium on Micro and Nano Electronics (IEEE-RSM2013)*, pp. 351 – 354.
- [20] **Chan Bun Seng**, Farrah Wong, 2012. Model Cart for On – Off Control, *Seminar of Science and Technology 2012 (SnT2012)*.
- [21] **Bun Seng C.**, Mohd Zuhir H., Saad I., 2012. Low Power High Performances Analysis of Impact Ionization MOSFET (IMOS) Device, *Seminar of Science and Technology 2012 (SnT2012)*.



7. OTHER ADDITIONAL ADMINISTRATIVE RESPONSIBILITIES

No.	POSITION (APPOINTMENT)	FACULTY / DIVISION / DEPARTMENT	START DATE – END DATE
1.	FEIT Internal Audit Committee	Faculty of Engineering and Information Technology/ Department of Electrical and Electronic Engineering	15 July 2019 - Present

8. OTHER RELEVANT INFORMATION

Innovation Competitions

- [1] Portable Real-Time Electromyography Test System for Clinical Rehabilitation Assessment (MYO-EMT), *Malaysia Technology Expo (MTE) 2016*, PWTC, 18th – 20th February 2016. (Bronze Award)
- [2] Intelligent Agility Test System for Fitness Assessment (i-Agile), *Malaysia Technology Expo (MTE) 2016*, PWTC, 18th – 20th February 2016. (Bronze Award)
- [3] Real Time Electromyogram Controller for Clinical Rehabilitation (MYORehab), *Pertandingan Penyelidikan & Rekacipta (PEREKA) 2015*, Universiti Malaysia Sabah, 9th – 10th December 2015. (Gold Award)
- [4] Sabah Geopolymer Ceramic Membrane Filter (SABAHCERA), *Pertandingan Penyelidikan & Rekacipta (PEREKA) 2015*, Universiti Malaysia Sabah, 9th – 10th December 2015.
- [5] Dual Channel EMG Signal for Multi Directional Maneuver System, *BioInnovation Awards 2014 (BioMalaysia)*, KLCC, 19th – 21st November 2014. (Bronze Award)
- [6] Real-Time Myogram Controller for Nominal Appliance Switching, *BioInnovation Awards 2014 (BioMalaysia)*, KLCC, 19th – 21st November 2014. (Bronze Award)
- [7] Myogram On/Off Controller, *Pertandingan Penyelidikan & Rekacipta (PEREKA) 2013*, Universiti Malaysia Sabah, 12nd – 13rd September 2013. (Gold Award)
- [8] Electromyogram Signal for Cart Control, *Pertandingan Penyelidikan & Rekacipta (PEREKA) 2013*, Universiti Malaysia Sabah, 12nd – 13rd September 2013. (Gold Award)

Intellectual Property

- [1] Portable Real-Time Electromyography Test System for Clinical Rehabilitation Assessment (MYO-EMTTM), MyIPO, 05 Feb 2016.(File No: TM2016001204)

Academic Excellent Recognitions

- [1] Best Session Presenter for Faculty of Engineering Postgraduate Seminar, 2015
- [2] Faculty Dean List's Award, 2012.
- [3] Scholarship of National Degree Program (PIDN) by Malaysia Public Service Department (JPA), 2008
- [4]Electrical Engineering Department Best Student Award, Polytechnic of Sultan Salahuddin Abdul Aziz Shah, 2007.
- [5] Anugerah Ketua Jabatan (Dean List's Award), 2004-2007.

Conference Technical Program Committee

- [1] 2014 World Symposium on Mechatronics Engineering & Applied Physics
- [2] 2015 IC Engineering & Computational Innovative Sciences (ENCINS 2015)
- [3] 2015 International Conference on Computer Applications & Aided Diagnosis (ICCAAD 2015)
- [4] 2015 International Conference on Computer Vision & Image Analysis (ICCVIA 2015)
- [5] 2015 International Conference on Mechanics & Applied Physics (ICMAPH 2015)
- [6] 2015 International Conference on Signal Processing & Data Mining (ICSPDM 2015)
- [7] 2015 International Conference on Solar Energy & Building (ICSoEB 2015)
- [8] 2015 World Symposium on Mechatronics Engineering & Applied Physics (WSMEAP 2015)
- [9] 2015 10th Asian Control Conference (ASCC 2015)
- [10]2016 International Conference on Architectural Research & Computer-Aided Design (ICARCAD 2016)
- [11] 2016 World Symposium on Mechatronics Engineering & Applied Physics (WSMEAP 2016)
- [12] 2017 IEEE International Symposium on Signal Processing and Information Technology (ISSPIT)