

## CURRICULUM VITAE



Associate Professor Dr. Siti Azfanizam Ahmad  
Department of Mechanical and Manufacturing Engineering,  
Faculty of Engineering, Universiti Putra Malaysia  
43400 UPM Serdang, Selangor

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### Education

PhD. Manufacturing Engineering, 2012, Cardiff University, UK  
BS. Systems Engineering, 2006, University of Arizona, USA

### Areas of Interest

Swarm-based Algorithm  
Optimization  
TRIZ

### Professional Qualification/ Membership/ Affiliation

Graduate Member, Board of Engineers Malaysia (BEM)  
Graduate, Institution of Engineers Malaysia (IEM)  
Member, Malaysian Society for Engineering and Technology (MySET)  
Member, Institute for Operations Research and the Management Sciences (INFORMS)  
Secretary, ModTech Iasi-Romania (Malaysia Branch)

### Appointments

Position	Duration
Associate Professor, Department of Mechanical and Manufacturing Engineering, Faculty of Engineering, UPM	August 2019 - date
Senior Lecturer, Department of Mechanical and Manufacturing Engineering, Faculty of Engineering, UPM	March 2012 – July 2019
Tutor, Department of Mechanical and Manufacturing Engineering, Faculty of Engineering, UPM	August 2006 – February 2012

### Administrative Posts

1. Coordinator of Final Year Project	2016 - 2019
2. Coordinator of Industry and Community Relations	2013 - 2015
3. Committee of EAC SAR Preparation	2018
4. Committee of Faculty PutraMOOC	2016 - 2017
5. Secretary I of ICAM <sup>2</sup> E2019	2018 - 2019
6. Technical Committee of ICAM <sup>2</sup> E2013	2012 - 2013

### Professional Certifications

1. AutoCAD Certified Professional	2017
2. TRIZ Level 2 Practitioner	2015
3. TRIZ Level I Certified Instructor	2015

### Excellence

Awards	Level	Year
1. Certificate of Excellence in Service Award	University	2018
2. Certificate of Excellence in Service Award	University	2017
3. Certificate of Excellence in Service Award	University	2016
4. Certificate of Excellence in Service Award	University	2015
5. Certificate of Excellence in Service Award	University	2014

6.	Certificate of Excellence in Service Award	University	2013
7.	Certificate of Excellence in Teaching	Faculty	2018
8.	Certificate of Excellence in Teaching	Faculty	2017
9.	Certificate of Excellence in Teaching	Faculty	2016

## Publications

Q1 -1, Q2 – 2, Q3 - 2

Scopus h-index: 5

Google Scholar h-index: 7

Senior Author in Journal: 14

Conference presented: 6

## Citation-Indexed Journals

1. Parnianifard, A., **Azfanizam, A.S.**, Ariffin, M.K.A., Ismail, M.I.S., Comparative study of metamodeling and sampling design for expensive and semi-expensive simulation models under uncertainty, *Simulation*, 2019, *in press*.
2. Parnianifard, A., **Azfanizam, A.S.**, Ariffin, M.K.A., Ismail, M.I.S., Crossing Weighted Uncertainty Scenarios Assisted Distribution-Free Metamodel-Based Robust Simulation Optimization, *Engineering with Computers*, 2019, Pages 1-12. – **Q2**
3. Kamil, F., Hong, T.S., Khaksar, W., Zulkifli, N., **Ahmad, S. A.**, An ANFIS-based Optimized Fuzzy-multilayer Decision Approach for a Mobile Robotic System in Ever-changing Environment, *International Journal of Control, Automation and Systems*, Volume 17, Issue 1, 2019, Pages 253-266. – **Q2**
4. Parnianifard, A., **Azfanizam, A.S.**, Ariffin, M.K.A., Ismail, M.I.S., Trade-off in robustness, cost and performance by a multi-objective robust production optimization method, *International Journal of Industrial Engineering Computations*, Volume 10, Issue 1, 2019, Pages 133-148.
5. Parnianifard, A., **Azfanizam, A.S.**, Ariffin, M.K.A., Ismail, M.I.S., Ale E., N., Recent developments in metamodel based robust black-box simulation optimization: An overview, *Decision Science Letters*, Volume 8, Issue 1, 2019, Pages 17-44.
6. Aziz, A. R. A., Yusoff, R. M., **Azfanizam, A. S.**, Ahmad, S. A., Shokshk, A. A., Kinesiology Investigation of Elbow Flexion Postures using Human Digital Modelling Simulation for Potential Energy Expenditure, *Journal of Engineering Science and Technology*, Special Issue, 2018, Pages 9-16.
7. Parnianifard, A., **Azfanizam, A.S.**, Ariffin, M.K.A., Ismail, M.I.S., Maghami, M.R., Gomes, C., Kriging and Latin hypercube sampling assisted simulation optimization in optimal design of PID controller for speed control of DC motor, *Journal of Computational and Theoretical Nanoscience*, Volume 15, Issue 5, 2018, Pages 1471-1479.
8. Parnianifard, A., **Azfanizam, A.S.**, Ariffin, M.K.A., Ismail, M.I.S., Kriging-Assisted Robust Black-Box Simulation Optimization in Direct Speed Control of DC Motor under Uncertainty, *IEEE Transactions on Magnetics*, Volume 54, Issue 7, 2018. - **Q3**
9. Parnianifard, A., **Azfanizam, A.S.**, Ariffin, M.K.A., Ismail, M.I.S. An overview on robust design hybrid metamodeling: Advanced methodology in process optimization under uncertainty, *International Journal of Industrial Engineering Computations*, Volume 9, Issue 1, 2018, Pages 1-32.
10. Kamil, F., Hong, T.S., Khaksar, W., Moghrabiah, M. Y., Zulkifli, N., **Ahmad, S. A.**, New Robot Navigation Algorithm for Arbitrary Unknown Dynamic Environments based on Future Prediction and Priority Behaviour, *Expert Systems with Applications*, Volume 86, 2017, Pages 274-291. – **Q1**
11. S. Mojtaba Zabihinpour, M. K. A. Ariffin, T. Sai Hong, **A. S. Azfanizam**, Construction of fuzzy X-S control charts with an unbiased estimation of standard deviation for a triangular fuzzy random variable, *Journal of Intelligent and Fuzzy Systems*, Volume 28, Issue 6, 2015, Pages 2735-2747. - **Q3**
12. **Azfanizam, A.S.**, Ang, M. C., Ng, K. W., Wahab, A. N. A., Reducing Home Energy Usage based on TRIZ Concept, *Journal of Advances in Environmental Biology*, Volume 9, Issue 1, Special 2015, Pages 6-11.
13. Ang, M.C., Ng, K.W., **Ahmad, S. A.**, Wahab, A.N.A. Using TRIZ to generate ideas to solve the problem of the shortage of ICT workers, *Journal Applied Mechanics and Materials*, Volume 564,

2014, Pages 733-739.

14. **A.S. Azfanizam**, D. T. Pham, A. A. Faieza, Combination of Adaptive Enlargement and Reduction in the Search Neighbourhood in the Bees Algorithm, *Journal of Applied Mechanics and Materials*, Volume 564, 2014, Pages 614-618.

#### Non Citation-Indexed Journals

1. A. Parnianifard, **A.S. Azfanizam**, M.K.A. Ariffin, M.I.S. Ismail, Design and Analysis of Computer Experiments Using Polynomial Regression and Latin Hypercube Sampling in Optimal Design of PID Controller, *Journal of Applied Research on Industrial Engineering*, Volume 5, Issue 2, 2018, Pages 156-168.
2. A. A. Shokshk, R. M. Yusuff, **S. A. Ahmad**, A. R. Abd Aziz, H. H. Harith, THE EFFECT OF LOAD ON WHOLE BODY MUSCLE ACTIVITY DURING NEUTRAL POSTURE FOR MALAYSIAN POPULATION, *International Journal of Engineering and Technology*, Volume 14, Issue 2, 2017, Pages 62-67.
3. A. Parnianifard, **A.S. Azfanizam**, M.K.A. Ariffin, M.I.S. Ismail, Robust Product Design: A Modern View of Quality Engineering in Manufacturing Systems, *International Journal of Recent Advances in Multidisciplinary Research*, Volume 4, Issue 12, 2017, Pages 3220-3225.
4. M. Askarizadeh, F. A. Aziz, M. K. A. Ariffin, **S. A. Ahmad**, Operating Rooms Planning and Scheduling with Mix Integer Programming and Meta-Heuristic Method, *International Journal of Mechanical Engineering and Applications* 2017; 5(4-1), Pages 14-19.
5. I. Rahimi, S. H. Tang, A. Ahmadi, **S. A. Ahmad**, L. S. Lee, A. M. Sharaf, Evaluating the Effectiveness of Integrated Benders Decomposition Algorithm and Epsilon Constraint Method for Multi-Objective Facility Location Problem under Demand Uncertainty, *Iranian Journal of Management Studies (IJMS)* Volume 10, No. 3, 2017, Pages 551- 576.
6. Farah, K., S. H. Tang, W. Khaksar, N., Zulkifli, **Ahmad, S.A**, Obstacles Avoidance Mobile Robot System in Uncertain and EverChanging Surroundings, *Pertanika Journal of Scholarly Research Reviews*, Volume 2, Issue 3, 2016, Pages 103-120.
7. I. Rahimi, M. T. Askari, S. H. Tang, L. S. Lee, **S. A. Ahmad**, A. M. Sharaf, Development Model for Supply Chain Network Design by Demand Uncertainty and Mode Selection, *International Journal of Applied Operational Research*, Volume 6, No. 1, 2016, Pages 51-64.
8. Ng, T. C., Tang, S. H., Lee, K. H., **Siti, A. A.**, Mohd, I. S. I., Morteza, G., The analysis of lean manufacturing tools in Malaysia's manufacturing industry, *Journal of Scientific Research and Development*, Volume 2, 2015, Pages 95-100.
9. A. A. Faieza, A.M. Nawawi, S.R. Hamzeh, M.W. Rohidatun, **S. A. Ahmad**, Responsiveness of Reconfigurable Manufacturing System (RMS) Scheduling Decision to System Performance, *Australian Journal of Basic and Applied Sciences*, Volume 9, 2015, Pages 74-78.
10. Kamil, F., Tang, S.H., Khaksar, W., Zulkifli, N., **Ahmad, S.A.**, A Review on Motion Planning and Obstacle Avoidance Approaches in Dynamic Environments, *Advances in Robotics & Automation*, Volume 4, 2015, Pages 1-8.
11. Mojtaba Zabihinpour S., Ariffin M. K. A, Tang S. H., **Azfanizam A.S.**, Fuzzy Based Approach for Monitoring the Mean and Range of the Products Quality, *Journal of Applied Environmental and Biological Sciences*, Volume 4, Issue 9, Special 2015, Pages 1-7.

#### Chapter in Book

1. A. R. A. Aziz, **A. S. Azfanizam**, A. A. Faieza, S. A. Ahmad, A. A. Shokshk, S. B. Suliano, Wrist Twist Working Posture's Muscles Activity and Potential Energy Analysis via Human Digital Modelling, *Lecture Notes in Mechanical Engineering - Advances in Material Sciences and Engineering*, Volume \* LNCS, 2019, Pages 169-175. - Scopus
2. A. A. Shokshk, **A. S. Azfanizam**, A. A. Faieza, H. H. Harith, A. R. Abd Aziz, S. B. Suliano, Effects of Non-neutral Posture and Anthropometry on Heart Rate in Hand Tools Tasks, *Lecture Notes in Mechanical Engineering - Advances in Material Sciences and Engineering*, Volume \* LNCS, 2019, Pages 75-80. - Scopus
3. S. B. Suliano, **A. S. Azfanizam**, A. As'arry, A. A. Faieza, A. R. A. Aziz, A. A. Shokshk, Limbs Disabled Needs for an Ergonomics Assistive Technologies and Car Modification, *Lecture Notes in Mechanical Engineering - Advances in Material Sciences and Engineering*, Volume \* LNCS, 2019, Pages 67-73. - Scopus
4. Ang, M.C., Ng, K.W., **Ahmad, S.A.**, Wahab, A.N.A., Ruzzakiah J., A Sustainable Smart Autonomous Visual Design System in Product Development in 4 IR for Societal Well-Being,

Sustainable Smart Technologies in Visual Informatics in the Fourth Industrial Revolution for Societal Well Being, UKM Press.

5. A. N. A. Wahab, A. M. Choo, **S. A. Ahmad**, Inovasi Bersistematik dengan TRIZ dalam Matriks Percanggahan Teknikal untuk Pengguna Malaysia, Aplikasi Mudah Alih dan Sistem dalam Industri, ISBN 978-967-08-2962-3, 2017, Pages 107-117, UKM Press.
6. Ang, M.C., Ng, K.W., **Ahmad, S.A.**, Wahab, A.N.A. An engineering design support tool based on TRIZ, Lecture Notes in Computer Science (including subseries Lecture Notes in Artificial Intelligence and Lecture Notes in Bioinformatics) Volume 8237 LNCS, 2013, Pages 115-127. - Scopus

## Conferences

1. S. B. Suliano, **A. S. Azfanizam**, A. As'array, A. A. Faieza, A. R. A. Aziz, A. A. Shokshk, Limbs Disabled Needs for an Ergonomics Assistive Technologies and Car Modification, 4<sup>th</sup> International Conference on Mechanical, Manufacturing and Plant Engineering (ICMMPE2018), 14-15 November 2018, Melaka.
2. A. R. A. Aziz, **A. S. Azfanizam**, A. A. Faieza, S. A. Ahmad, A. A. Shokshk, S. B. Suliano, Wrist Twist Working Posture's Muscles Activity and Potential Energy Analysis via Human Digital Modelling, 4th International Conference on Mechanical, Manufacturing and Plant Engineering (ICMMPE2018), 14-15 November 2018, Melaka.
3. A. A. Shokshk, **A. S. Azfanizam**, A. A. Faieza, H. H. Harith, A. R. Abd Aziz, S. B. Suliano, Effects of Non-neutral Posture and Anthropometry on Heart Rate in Hand Tools Tasks, 4th International Conference on Mechanical, Manufacturing and Plant Engineering (ICMMPE2018), 14-15 November 2018, Melaka.
4. **A. S. Azfanizam**, S. Devaraj, Optimization of Diesel Engine Performance by the Bees Algorithm, The 4th Asia-Pacific Conference on Manufacturing Systems and 3rd International Manufacturing engineering Conference (APCOMSiMEC2017), 7 - 8 December 2017, Yogyakarta. – IOP, Scopus
5. A. Parnianifard, **A. S. Azfanizam**, M. I. S. Ismail, M. K. A. Ariffin, Surrogate-Assisted Robust Optimization for Expensive Simulation Modeling: The Case of DC Motor Control under Uncertainty, The 3rd International Materials, Industrial, and Manufacturing Engineering Conference (MIMEC2017), 6 - 8 December 2017, Miri.
6. A. Parnianifard, **A. S. Azfanizam**, M. I. S. Ismail, M. K. A. Ariffin, Hybrid Polynomial Regression and Latin Hypercube Sampling in Optimal Design of PID Controller for Speed Control of DC Motor, The 3rd International Materials, Industrial, and Manufacturing Engineering Conference (MIMEC2017), 6 - 8 December 2017, Miri.
7. **Ahmad, S. A.**, Mazli, M. N. I., Ariffin, M. K. A. M., A Mechanical Design of Power Generator using Door Openings for Household Use, International Conference on Advances in Electrical, Electronic and System Engineering (ICAEESE2016), 14 - 16 November 2016, Putrajaya. – IEEE, Scopus
8. A. R. A. Aziz, R. M. Yusuff, **S. A. Ahmad**, S. A. Ahmad, A. A. Shokshk, Kinesiology Investigation of Elbow Flexion Postures using Human Digital Modelling Simulation for Potential Energy and Muscles Activity, World Research & Innovation Convention on Engineering & Technology (WRICET2016), 24-25 October 2016, Langkawi.
9. A. A. Shokshk, R. M. Yusuff, **S. A. Ahmad**, A. R. A. Aziz, H. H. Harith, The Effect of Load on Whole Body Muscle Activity during Neutral Posture for Malaysian Population, World Research & Innovation Convention on Engineering & Technology (WRICET2016), 24-25 October 2016, Langkawi.
10. Farah, K., S. H. Tang, W. Khaksar, N., Zulkifli, **Ahmad, S.A**, Robotic Motion Planning in Unknown Dynamic Environments: Existing Approaches and Challenges, IEEE International Symposium on Robotics and Intelligent Sensors (IRIS2015), 18-20 October 2015, Langkawi – IEEE, Scopus
11. **A.S. Azfanizam**, Ang, M. C. Ng, K. W., Wahab, A. N. A., Reducing Home Energy Usage based on TRIZ Concept, International Conference on Green Technology (ICGT2015), 9-10 January 2015, Kota Kinabalu.
12. **A.S. Azfanizam**, Razak, M. N. A. A, Wahab, A. N. A, Ang, M. C. Ng, K. W., A Review on House Energy Saving using TRIZ and Eco-Innovation Concept, Annual Conference on Engineering and Information Technology (ACEAIT2014), 28-30 March 2014, Tokyo.
13. S. Mojtaba Zabihinpour, M. K. A. Ariffin, T. Sai Hong, **A. S. Azfanizam**, Designing of Fuzzy Cumulative Sum (FCUSUM) Control Chart, International Conference on Advances In Materials & Processing Technologies 2013 (AMPT2013), September 2013, Taiwan. – IEEE, Scopus
14. **A.S. Azfanizam**, D. T. Pham, A. A. Faieza, Combination of Adaptive Enlargement and Reduction in the Search Neighbourhood in the Bees Algorithm, International Conference on Advances in

Mechanical and Manufacturing Engineering (ICAM2E2013), 26-28 November 2013, Kuala Lumpur.

15. Ang, M.C., Ng, K.W., **Ahmad, S.A.**, Wahab, A.N.A., Using TRIZ to generate ideas to solve the shortage of skilled ICT workers, International Conference on Advances in Mechanical and Manufacturing Engineering (ICAM2E2013), 26-28 November 2013, Kuala Lumpur.
16. K. Zeti, A. A. Faieza, **A. S. Azfanizam**, Skills Improvement for Technical Training Instructor to Provide Technical Consultation to Industries, International Conference on Advances in Mechanical and Manufacturing Engineering (ICAM2E2013), 26-28 November 2013, Kuala Lumpur.
17. **Ahmad, S.A.**, Pham, D.T., Ng, K.W., Ang, M.C., TRIZ-inspired Asymmetrical Search Neighborhood in the Bees Algorithm, The Asian Modelling Symposium: The 6th Asia International Conference on Mathematical Modelling and Computer Simulation (AMS2012), 28 May 2012 Kuala Lumpur. -IEEE, Scopus

#### Others

1. Co-editor of Manufacturing System, Intech, 2012, ISBN 978-953-51-0530-5

#### Teaching

##### Undergraduate

1.	Engineering Mathematics I (ECC3001)	3
2.	Engineering Mathematics II (ECC3002)	3
3.	Engineering Mathematics III (ECC3003)	3
4.	Applied Engineering Mathematics and Statistics (EMM3132)	3
5.	Industrial Management I (EMM3602)	3
6.	Industrial Management II (EMM4602)	3
7.	Manufacturing Planning and Control Systems (EMM4604)	3
8.	Engineering Project Management (EMM3612)	3

##### Postgraduate

9.	Industrial Organization Management (EMM5608)	3
10.	Design of Manufacturing Systems (EMM5706)	3
11.	Manufacturing Operation Management (EMM5606)	3

Cumulative Credit Hour: **69**

Average Teaching Evaluation: **4.59/ 5.00**

#### Student Supervision

##### PhD (Main Supervisor)

No.	Name	Title	Status
1.	Amir Parnianifard (GS46398)	Development of Metamodel Based Robust Simulation Optimization for Complex Systems under Uncertainty	Graduated (2019)
2.	Azizul Rahman bin Abd Aziz (GS43628)	Evaluation of Upper Limb Postures Across Range of Motion through Muscles Activity and Energy Expenditure using Simulation	Graduated (2019)
3.	Ali Ahmed Shokshk (GS41980)	Work Efficiency Model of Tools Handling Task based on Posture and Energy Expenditure	Ongoing
4.	Salami Bahariah binti Suliano (GS44322)	Redesigning Car Interior for Mobility Disabled using TRIZ-based Tools	Ongoing



#### PhD (Co-Supervisor)

No.	Name	Title	Status
1.	Seyed Mojtaba Zabihinpour Jahromi (GS31076)	Development of Fuzzy Control Charts for Monitoring Manufacturing Process with Uncertain and Vague Observations	Graduated (2015)
2.	Ng Tan Ching (GS35595)	Determining Lean Manufacturing Effectiveness in Malaysia using Hybrid Interpretive Structural and Structural Equation Models	Graduated (2016)
3.	Farah Kamil Abid Muslim (GS38691)	Development of a Motion Planning and Obstacle Avoidance Approach for Mobile Robot Navigation in Unknown Dynamic Environments	Graduated (2017)
4.	Iman Rahimi (GS36053)	A Development Bi-objective Model for Supply Chain Network Design Considering Data Envelopment Analysis	Graduated (2017)
5.	Mehdi Askarizadeh (GS44831)	Multi-Objective Simulation for Planning and Scheduling In Operating Rooms	Ongoing
6.	Jamhuri Bin Jamaluddin (GS50772)	Timber Operation Transportation Planning Problem Under Reduce Impact Logging in Hilly Forest of Peninsular Malaysia	Ongoing
7.	Nadia Abdul Rani (GS53369)	Development of Augmented Reality (AR) Model for Tool Length Offset in CNC Milling Machining	Ongoing

#### MSc. (Main Supervisor)

No.	Name	Title	Status
1.	Yang Liengheng (GS48565)	Development of Hybrid Bees Algorithm on Travelling Salesman Problem	Ongoing

#### MSc. (Co-Supervisor)

No.	Name	Title	Status
1.	Maedeh Ghahremani Meymandi (GS29406)	Monitoring Customer Satisfaction Based on Fuzzy Logic	Viva
2.	Siti Nurani Binti Hassan (GS37319)	Development of Static Standing Workstation Design Dimensions for Malaysian Workers	Graduated (2019)
3.	Chhuon Raksmei (GS48564)	Design and Development of Electroencephalography controlled Underwater Robot with Obstacles Avoidance Capability	Ongoing
4.	Thum Guan Wei (GS52844)	Development of Underwater Cable Tracking using Neural Network	Ongoing

#### MS Course Work (Supervisor)

No.	Name	Title	Status
1.	Nurshakirin Zulkefli (GS35525)	Evaluation of Service Quality Satisfaction in Faculty of Engineering UPM	Graduated
2.	Amin Teyfour (GS37611)	The Selection of Safe Machinery in Construction Industry Based on AHP	Graduated

No.	Name	Title	Status
3.	Amir Farspour (GS35360)	Investigation of Relationship Between Supply Chain Vulnerability and Different Classes of Supply Chain Risk	Graduated
4.	Mohd Ruzaimi Mohd Ariffin (GS38824)	Value Engineering Application in Construction Project Management	Graduated
5.	Faizura Ismail (GS38644)	Implementation of Value Engineering in Small and Medium Size Contractor Company	Graduated
6.	Nor Amira Farhana binti Harun (GS39390)	Improvement of Wastewater Treatment Plant in Food Processing	Graduated
7.	Sarah Kanaan Hamzah (GS44687)	The Effect of Motivation on Employee Productivity: A Comparison between Two Different Working Environment	Graduated
8.	Muhammad Ali Ismail (GS41156)	Solar Based Low Intensity Aviation Light with Day/Night Switching Sensor	Graduated
9.	Muhammad Hanafi Jalani (GS42678)	Measuring Service Quality of the Universiti Putra Malaysia Main Library using SERQUAL Gap Analysis Model	Graduated
10.	Roselina Md. Zaini (GS46682)	Development of Research Management Framework for a Research Management Center using TRIZ	Graduated
11.	Massarah Mat Sharif (GS48167)	Development of a Modular Robotic using 3D CAD	Graduated
12.	Adhe Rizky Anugerah (GS49438)	Risk Management in Sustainable Supply Chain in Indonesia Palm Oil Industry	Graduated

#### Final Year Project (Supervisor)

No.	Name	Title	Status
1.	Mah Choon Wai (151547)	TRIZ Tools Application to Solve the Problem of Public Transportation System	Graduated
2.	Chong Zhi Pin (154208)	Optimizing Location of a Living Place by using the Bees Algorithm	Graduated
3.	Muhamad Shahziman Ab. Ghani (157491)	Bridge Design Optimization and Application of Value Engineering (VE)	Graduated
4.	Mohd Noor Arif Abdul Razak (158424)	TRIZ Application for House Energy Saving	Graduated
5.	Farah Syahida Ramli (162131)	Determining Daily Nutrient Intake of Sedentary Female Mechanical Engineering Students	Graduated

No.	Name	Title	Status
6.	Chew Farn Yeong (164048)	Mechanical Design of Power Generator for Household Use Based on TRIZ Methodology	Graduated
7.	Muhammad Nur Ikhwan Bin Mazli (168699)	Mechanical Design of Power Generator using Door Openings for Household Use	Graduated
8.	Siti Hajar Binti Airdzaman (168796)	Solving Queuing Problem at Cafeteria of Faculty of Engineering using Arena	Graduated
9.	Chua Han Chong (171805)	Application of the Bees Algorithm to Improve the Performance of FESS for Satellite	Graduated
10.	Devaraj A/L Sunthiram (174356)	Optimization of Diesel Engine Performance using the Bees Algorithm	Graduated
11.	Amirul Ashraf Aiman Bin Mohamed Nizam (183185)	Optimization of Cutting Parameters in Turning Using the Bees Algorithm	Graduated
12.	Muhamad Firdaus Bin Yussof (184335)	Design an Ergonomic Car Interior for Disabled Based on TRIZ Analysis	Graduated

#### **Industrial Training (Visiting Lecturer)**

No.	Name	Placement	Year
1.	Muhammad Ikhwan Bin Ayub (153657)	Recron (M) Sdn. Bhd., Nilai, N. Sembilan	2012
2.	Wan Muhammad Hafiz Bin Wan Rani (153909)	Recron (M) Sdn. Bhd., Nilai, N. Sembilan	2012
3.	Kong Mui Fun (153200)	Genetec Technology Berhad, B.B. Bangi, Selangor	2012
4.	Tan Weng Lam (159247)	CapitaMalls Malaysia Trust, Seri Kembangan, Selangor	2013
5.	Isma Zul Ilhamd Bin Bakhari (164382)	AKTY Technologies Sdn Bhd, Prai, Penang	2014
6.	Mohamad Afnan Hazim Bin Che Saad (162729)	Alpha Precision Turning & Engineering Sdn Bhd, Kulim, Kedah	2014
7.	Muhammad Nur Ikhwan Bin Mazli (168699)	Kejuruteraan Broad-way Sdn. Bhd., 29, Cheras, Kuala Lumpur	2015
8.	Zainul Arif Bin Sumadin (168725)	Kejuruteraan Broad-way Sdn. Bhd., 29, Cheras, Kuala Lumpur	2015
9.	Siti Hajar Binti Airdzaman (168796)	Kejuruteraan Broad-way Sdn. Bhd., 29, Cheras, Kuala Lumpur	2015



No.	Name	Placement	Year
10.	Faiz Haziq Bin Abdul Rahim (174876)	Global Facilities Management Sdn Bhd, Johor Bahru, Johor	2016
11.	Muhammad Syafiq Aizat Bin Alhasamuhdin (171994)	Seiko Electric Asia (M) Sdn Bhd, Pasir Gudang, Johor	2016
12.	Siti Amalina Binti Ayar (174319)	Seagate International (J) Sdn. Bhd., Senai, Johor	2016
13.	Pang Qi De (178230)	Industrial Concrete Products Sdn Bhd, Sitiawan, Perak	2017
14.	Siti Norsaadah Binti Baghowi (176717)	Tenaga Nasional Berhad, Teluk Intan, Perak	2017
15.	Satish Varma A/L Ananthan (178934)	Carsem (M) Sdn Bhd, Ipoh, Perak	2017
16.	Arshvini A/P Ravindran (184183)	Denso (M) Sdn. Bhd., Bandar Baru Bangi, Selangor	2018
17.	Waritsa Intratep A/P Phon Thip (183748)	Sony EMCS (M) Sdn. Bhd., Bandar Baru Bangi, Selangor	2018
18.	Mohammad Syarafi Bin Shahrarum (190411)	Malaysia Airlines Berhad Site Office, Sepang, Selangor	2019

### Research Grants

#### Leader

No.	Project Title	Level	Amount (RM)	Year	Source
1.	Development of The Hybrid Bees Algorithm on a Travelling Salesman Problem	International	17435	2017- 2018	AUN/SEED- Net
2.	Redesigning the Car Interior for Mobility Impaired Persons using TRIZ-based Tools	National	14000	2017- 2019	Putra Grant- IPS
3.	Expanding Robust Metamodeling Methodology in Advanced management's Process Optimization to Comprehensive Systems Engineering Techniques	National	15000	2017- 2019	Putra Grant- IPS
4.	TRIZ Model for House Energy Saving	National	32000	2014- 2015	Putra Grant- IPM
Total			<b>78435</b>		

#### Member

1.	Design and Development of Electroencephalographic Controlled Autonomous Underwater Vehicle with Obstacle Avoidance Capability in Navigation	International	14765	2017- 2018	AUN/SEED- Net
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2.	Technology Forecasting Model based on Trends of Engineering System Evolution (TESE) and Big Data for 4IR	National	51300	2019-2020	FRGS
3.	A Framework for Sustainable Product Innovation based on TRIZ	National	60000	2018-2020	GUP-UKM
4.	Development and Evaluation on the Use of Engineering Mathematics as One of the PutraMOOC Among the 1st Year Engineering Students	National	20000	2017-2018	GIIP
5.	Innovative Design Support Model based on TRIZ and Design Patent Information	National	101000	2011-2013	ERGS
6.	TRIZ Inspired Operators for Intelligent Algorithm Development	National	65700	2010-2013	FRGS
7.	Development of a Risk Management Evaluation Tool for Reverse Logistic Organizations based on Fuzzy Multi Criteria Decision Making Method	National	155200	2013-2015	Putra Grant - IBT
Total			<b>467965</b>		
Grand Total			<b>546400</b>		

## Involvements/ Recognitions/ Awards

### International

1.	Editorial Board Member in Artificial Intelligence Advances	2019-2020
2.	Citation-Indexed Journals Reviewer (worldwide)	2012 - date
3.	Advisor of AUN/SEED- Net Scholar (Institute of Technology of Cambodia)	2017-2019
4.	Accompanying Lecturer to Student Formula Japan Competition, Japan	2017
5.	Management of Technology Course by JICA (Japan)	2016
6.	Leader of SAKURA Exchange Program in Science (SEPS) (Japan)	2015
7.	Session Chair in ICGT2015	2015
8.	Session Chair in ICAM <sup>2</sup> E2013	2013

### National

9.	Silver in K-Novasi 'Pengajaran & Pembelajaran' (UKM)	2019
10.	Silver in International STEM Olympiad ISTEMO Project (Facilitator)	2018
11.	Silver in Global I-Lead STEM Camp 1Malaysia Project (Facilitator)	2017
12.	Second Runner Up in IDEFOL 2014 Competition (Advisor)	2014
13.	Finalist MyTRIZ 2012 Competition	2012

### University

14.	Chairman Assistant and Examiner for PhD Viva	2019
15.	Graduate on Time (GOT) for Amir Parnianifard (GS46398)	2019
16.	Silver in Putra InnoCreative Competition (PICTL2018)	2018
17.	Best PutraMOOC in Putra InnoCreative Award (PICTL2018)	2018
18.	Best Innovation Practice in Teaching and Learning Competition	2017

### Faculty

19.	FYP Open Day Committee	2019
20.	PutraMOOC Committee	2017
21.	FYP Open Day Committee	2018
22.	FYP Open Day Committee	2017
23.	FYP Open Day Judging Committee	2017
24.	FYP Open Day Committee	2014

### Department

25.	EAC SAR Preparation Committee	2018
26.	Best Final Year Project (Supervisor)	2017



27.	Silver in Final Year Project Showcase (Supervisor)	2017
28.	Supply Chain Management Workshop Committee	2016