



# Mohd Fauzi Bin Ismail

*Senior Lecturer*

Faculty of Mechanical Engineering,  
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## PERSONAL PROFILE

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## ACADEMIC QUALIFICATIONS

- Doctor of Engineering, Information Science and Control Engineering (2011)  
Nagaoka University of Technology, Japan
- Master of Engineering, Mechanical System Engineering (2000)  
Nagaoka University of Technology, Japan
- Bachelor of Engineering, Mechanical Design and Production Engineering (1995),  
Nagaoka University of Technology, Japan

## CURRENT PROFESSIONAL MEMBERSHIP

- Board of Engineers Malaysia (BEM), Graduate Engineer

## WORKING EXPERIENCE

- Process Engineer, Malaysia Pioneer Technology (1995 – 1998)
  - Leading new product introduction activity for car stereo and CD player products. Product trouble shooting and improvement. Assist other departments for technical expertise including design and fabrication tools/kits for
- Senior Production Engineer, Malaysia Pioneer Technology (2000 – 2000)
  - Person in-charge for jig, fixture and equipment for car stereo production line.
- Factory Manager, Hiro Food Packages Manufacturing Pvt Ltd (2000 – 2004)
- Lecturer, Universiti Teknologi MARA (2004 – to date)

## TEACHING AND ADMINISTRATIVE RESPONSIBILITIES

### Teaching Responsibilities

- Mechanical Engineering Programs, UiTM
  - Occupational Safety and Health, Total Quality Management, Integrated Product Design, Mechanic Laboratory, Metrology, Operation Management, Machine Element Design, Statics, Workshop Practices, Automation and Instrumentation

### Administrative Responsibilities

- Coordinator for Safety and Health (2017 - 2019)
- Coordinator for Risk Management (2017 - 2019)
- Academic Advisor (2016 – to date)
- Coordinator for Research Management Unit (2011 to 2016)
- Head of Mechanical Engineering Academic Centre (July 2018 – Jun 2020)

## RESEARCH AND DEVELOPMENT ACTIVITIES

File No	Project Title	Start Date	End Date	Role	Grant Type	Level	Total Value (RM)
100-RMC 5/3/SRP PRI (025/2020)	BLOOD BAG WELDING SYSTEM	21-12-2020	20-06-2022	Project Leader	Private	NATIONAL	50,000.00
600-RMC/GIP 5/3 (170/2021)	REVERSAL METHOD ALGORITHM FOR AREAL SURFACE METROLOGY	15-12-2021	14-12-2022	Project Leader	GIP	UNIVERSITY	18,000.00
600-IRMI/FRGS 5/3 (088/2019)	EFFECT OF FEATURES SEGMENTATION PROCEDURES TO DEFINED SURFACE FEATURE BOUNDARY IDENTIFICATION	01-01-2019	31-12-2021	Project Leader	FUNDAMENTAL RESEARCH GRANT SCHEME (FRGS)	NATIONAL	89,600.00
100-IRMI/PRI 16/6/2 (0020/2016)	IN-LINE AUTO-MONITORING SYSTEM FOR BROWN SUGAR PRODUCTION	15-03-2016	15-03-2017	Project Leader	PRIVATE	NATIONAL	36,000.00
100-RMI/SF 16/6/2 (11/2015)	CONCURRENT BRAKE ACTUATOR WITH NONLINEAR FORCE DISTRIBUTION CONTROL FOR MOTORCYCLE APPLICATIONS	01-04-2015	30-09-2017	Member	eScienceFund (eScienceFund)	NATIONAL	199,000.00
600-RMI/FRGS 5/3 (152/2014)	CHARACTERIZATION OF WING TIP VORTICES FORMATION DUE TO MORPHING MOBILITY	01-12-2014	31-08-2017	Member	FUNDAMENTAL RESEARCH GRANT SCHEME (FRGS)	NATIONAL	111,200.00
600-RMI/RAGS 5/3 (158/2014)	VORTEX FORMATION EFFECT IN CROSS-FLOW SYNTHETIC JET COOLING FOR HEAT DISSIPATION	01-12-2014	30-05-2017	Member	RESEARCH ACCULTURATION GRANT SCHEME (RAGS)	NATIONAL	80,000.00
600-RMI/RAGS 5/3 (240/2014)	THE AERODYNAMIC CHARACTERISTICS OF COMPLIANT MECHANISM-ACTIVE MORPHING MAV WING MODEL	01-12-2014	31-05-2017	Member	RESEARCH ACCULTURATION GRANT SCHEME (RAGS)	NATIONAL	80,000.00
600-RMI/FRGS 5/3 (79/2014)	CAUSAL ANALYSIS OF ISOMETRIC SURFACE FEATURES TO HYDRODYNAMIC EFFECT OF PARALLEL SURFACES	01-07-2014	31-12-2016	Project Leader	FUNDAMENTAL RESEARCH GRANT SCHEME (FRGS)	NATIONAL	96,800.00
600-RMI/RAGS 5/3 (43/2012)	GEOMETRIC DEFORMATION OF CYLINDRICAL STRUCTURE UNDER HIGH FREQUENCY INTERMITTENT LOAD	15-12-2012	14-12-2014	Member	RESEARCH ACCULTURATION GRANT SCHEME (RAGS)	NATIONAL	60,000.00
600-RMI/ERGS 5/3 (37/2012)	CHARACTERIZATION OF ERRONEOUS COMPONENT IN AREAL SURFACE TOPOGRAPHY DATA	01-07-2012	30-06-2015	Project Leader	EXPLORATORY RESEARCH GRANT SCHEME (ERGS)	NATIONAL	50,000.00

600-IRDC/ST 5/3/1232	A STUDY ON A PRODUCT DEFECTS PREVENTING SYSTEM IN PLASTIC INJECTION MOULDING	26-02-2007	26-02-2007	Project Leader	SELF-FUNDED (SELF FUNDED)	SELF-FUNDED	0.00
600- IRDC/ST/5/3/1084	EFFECT OF SURFACE TEXTURE TOWARDS PRODUCT PERFORMANCE	01-03-2006	01-03-2007	Project Leader	INTERNAL GRANT (INT GRANT)	NATIONAL	8,200.00

### POSTGRADUATE SUPERVISION

No	Name	Title	Institution	Level	Start Year	End Year	Status
1	Nuraini Che Pin	Modified Marker Based Segmentation For Structured Surface Characterization	UiTM	MSc	2014	2017	Completed
2	Norhidayawati Mohd Zaini	Hi Minima Transform Assisted Surface Topography Characterization	UiTM	MSc	2014	2018	Completed
3	Muhamad Zaim Mohamed Pauzi	Otto-Cycle Engine Misfire Detection (EMD) Using Zirconia Oxygen Sensor	USM (Co)	MSc	2014	2016	Completed
4	Ainaa Farhana Mohd Razali	FEATURE IDENTIFICATION IN AREAL SURFACE METROLOGY ANALYSIS BY MEANS OF DOUBLE ITERATION SOBEL (DIS)	UiTM	MSc	2020	2022	Completed
5	Nor Athirah Roslan	DEVELOPMENT OF SURFACE REVERSAL METHOD ALGORITHM	UiTM	MSc	2020	2021	On-Going
6	Fatiha Naziera Yusof	AREAL SURFACE ROUGHNESS SIMULATION MODEL FOR END-MILLING PROCESS	UiTM	MSc	2020	2021	On-Going

### INNOVATION AWARDS

1. Silver Medal in Penang International Invention, Innovation, and Design (PIID) 2021 for Surface Analysis System (SurfSuite)
2. Bronze Medal in Penang International Invention, Innovation, and Design (PIID) 2021 for End Milling Simulation Model
3. Gold Award in International Industrial Revolution 4.0 Exposition (IREX) 2019 for Tandem Wing Dragonfly for Smart Flapping Wing System
4. Gold Medal in Invention, Innovation & Design (Competition & Exhibition) (IID Perak) 2012 for Datum Definition for Cylinder End Surface Topography Characterization of Multi-Point Tool.
5. Silver Medal in Penang International Invention, Innovation, and Design (PIID) 2015 for INNOVARS 1.0: A comprehensive online registration system
6. Anugerah Inovasi Kaedah Pembelajaran dan Pengajaran (Emas) di UiTM Mini Konvensyen KIK Peringkat Zon Utara 2014 (Kumpulan Mechy Mutiara)

### PUBLICATIONS

#### ARTICLE AND JOURNAL

Surface reversal method algorithm development

Roslan, N.A., Ismail, M.F.

	<p><a href="#">Annals of Emerging Technologies in Computing, 2021, 5(Special issue 5), pp. 170–177</a></p>
	<p>Application of gradient-based edge detection on defined surface feature boundary</p> <p>Mohd Razali, A.F., Ismail, M.F.</p> <p><a href="#">Annals of Emerging Technologies in Computing, 2021, 5(Special issue 5), pp. 129–136</a></p>
	<p>Critical factors for implementation of occupational safety and health management system in Malaysian petrochemical based manufacturing companies</p> <p>Murad, M., Jamian, R., Leman, A.M., Rhaffor, K.A., Ismail, M.F.</p> <p><a href="#">International Journal of Emerging Trends in Engineering Research, 2020, 8(1 Special Issue 2), pp. 1–6</a></p>
	<p>CFD simulation on ventilation of an indoor atrium space</p> <p>Fohimi, N.A.M., Asror, M.H., Rabilah, R., ...Ismail, M.F., Ani, F.N.</p> <p><a href="#">CFD Letters, 2020, 12(5), pp. 52–59</a></p>
	<p>Influence Of Steel Fibres On Friction Behaviours With Respect To Speed, Pressure And Temperature</p> <p><a href="#">Talib Bin Ria Jaafar (dr.), N.i. Ismail, Mohd Fauzi Bin Ismail, 2017, Influence Of Steel Fibres On Friction Behaviours With Respect To Speed, Pressure And Temperature, Industrial Lubrication And Tribology, 69, 3, 420-424</a></p>
	<p>Demonstration Of Watershed Segmentation On Simulated Surface Topography Data</p> <p><a href="#">Mohd Fauzi Bin Ismail, Talib Bin Ria Jaafar (dr.), Nor Hidayawati Mohd Zaini, Nuraini Che Pin, 2015, Demonstration Of Watershed Segmentation On Simulated Surface Topography Data, Jurnal Teknologi, 76, 10, 49-52</a></p>
	<p>Sobel Operator For Edges Detection In Surface Texture Analysis</p> <p><a href="#">Mohd Fauzi Bin Ismail, Talib Bin Ria Jaafar (dr.), Nuraini Che Pin, Nor Hidayawati Zaini, 2015, Sobel Operator For Edges Detection In Surface Texture Analysis, Jurnal Teknologi, 76, 10, 71-74</a></p>
	<p>The Analysis Of Intake Manifold Air Stream Velocity On Different Material Roughness</p> <p><a href="#">Muhammad Arif Bin Ab Hamid Pahmi, Sharzali Bin Che Mat, Mohd Fauzi Bin Ismail, Mohd Najib Bin Yusoff, Ahmad Nazri Bin Nasruddin, 2014, The Analysis Of Intake Manifold Air Stream Velocity On Different Material Roughness, Applied Mechanics And Materials, 661, 2014, 143-147</a></p>
	<p>Friction And Wear Characteristics Cu-based P/m Brake Friction Materials With Addition Of Fe And C</p> <p><a href="#">Talib Bin Ria Jaafar (dr.), Mohd Fauzi Bin Ismail, M.a. Selamat, Z. J. Rusila, 2014, Friction And Wear Characteristics Cu-based P/m Brake Friction Materials With Addition Of Fe And C, Applied Mechanics And Materials, 661, 2014, 21-26</a></p>
	<p>Evaluation Of Outlier Specific Correction Procedure For Areal Surface Texture</p> <p><a href="#">Mohd Fauzi Bin Ismail, Talib Bin Ria Jaafar (dr.), Sharzali Bin Che Mat, Muhammad Arif Bin Ab Hamid Pahmi, 2014,</a></p>

	<p><a href="#">Evaluation Of Outlier Specific Correction Procedure For Areal Surface Texture,Applied Mechanics And Materials,661,2014,137-142</a></p>
	<p>Characterization Of Diamond Electrodeposited Tool For Vibration Assisted Grinding Diagnostic  <a href="#">Mohd Fauzi Bin Ismail,2014, Characterization Of Diamond Electrodeposited Tool For Vibration Assisted Grinding Diagnostic,Advanced Materials Research ,980,2014,203-207</a></p>
	<p>Surface Reversal Method For Cylindrical Tool Characterization  <a href="#">Mohd Fauzi Bin Ismail,Kazuhisa Yanagi, Hiromi Isobe,2013, Surface Reversal Method For Cylindrical Tool Characterization,Applied Mechanics And Materials,393,2013,266-271</a></p>
	<p>Ultrasonically Assisted Machining For Mirror Finishing Of Die (3rd Report) -a Research Of Effects Of Cutting Edge Truncation On Grinding Phenomenon-  <a href="#">Mohd Fauzi Bin Ismail,Keisuke Hara, Hiromi Isobe,2012, Ultrasonically Assisted Machining For Mirror Finishing Of Die (3rd Report) -a Research Of Effects Of Cutting Edge Truncation On Grinding Phenomenon-.Journal Of The Japan Society Of Precision Engineering,78,7,641 - 645</a></p>
	<p>Geometrical Transcription Of Diamond Electroplated Tool In Ultrasonic Vibration Assisted Grinding Of Steel  <a href="#">Mohd Fauzi Bin Ismail,Kazuhisa Yanagi, Hiromi Isobe,2012, Geometrical Transcription Of Diamond Electroplated Tool In Ultrasonic Vibration Assisted Grinding Of Steel,International Journal Of Machine Tools &amp; Manufacture,62,2012,24-31</a></p>
	<p>Effects Of Cutting Edge Truncation On Ultrasonically Assisted Grinding  <a href="#">Mohd Fauzi Bin Ismail,Keisuke Hara, Hiromi Isobe,sho-ichi Kaihotsu,2011, Effects Of Cutting Edge Truncation On Ultrasonically Assisted Grinding,Advanced Materials Research,325,1,97-102</a></p>
	<p>Characterization Of Geometrical Properties Of Electroplated Diamond Tools And Estimation Of Its Grinding Performance  <a href="#">Mohd Fauzi Bin Ismail,Kazuhisa Yanagi, Hiromi Isobe,2011, Characterization Of Geometrical Properties Of Electroplated Diamond Tools And Estimation Of Its Grinding Performance,Wear,271,3,559-564</a></p>
	<p>An Outlier Correction Procedure And Its Application To Areal Surface Data Measured By Optical Instruments  <a href="#">Mohd Fauzi Bin Ismail,Kazuhisa Yanagi, Akihiro Fujii,2010, An Outlier Correction Procedure And Its Application To Areal Surface Data Measured By Optical Instruments,Measurement Science And Technology,21,2010,105105 (11pp)</a></p>
	<p>Surface Wavelength Partitioning Technique In Surface Texture Analysis  <a href="#">Mohd Fauzi Bin Ismail,2008, Surface Wavelength Partitioning Technique In Surface Texture Analysis,Estem Academic Journal Uitm Pulau Pinang,4,1,161-174</a></p>
<b>PROCEEDING PAPER</b>	
	<p>Effect of features segmentation procedures on 3D simulated surface topography</p>

	<p>Razali, Ainaa Farhanah Mohd; Ismail, Mohd Fauzi</p> <p>2020 in Proceedings of Mechanical Engineering Research Day (merd)</p>
	<p>Bamboo Fibre-reinforced Semi-metallic Brake Materials For Automotive Applications</p> <p><a href="#">Talib Bin Ria Jaafar (dr.), Ramlan Bin Kasiran, N.i. Ismail, Mohd Fauzi Bin Ismail, Eliasidi, A. O. , 2016,bamboo fibre-reinforced semi-metallic brake materials for automotive applications</a></p>
	<p>H-minima Transform For Segmentation Of Structured Surface</p> <p><a href="#">Mohd Fauzi Bin Ismail, Talib Bin Ria Jaafar (dr.) , 2016,h-minima transform for segmentation of structured surface</a></p>
	<p>Effect Of Steel Fibres On The Tribological Behaviours Of Brake Friction Materials Prepared By Powder Metallurgy Route</p> <p><a href="#">Talib Bin Ria Jaafar (dr.), N.i. Ismail, Mohd Fauzi Bin Ismail , 2016,effect of steel fibres on the tribological behaviours of brake friction materials prepared by powder metallurgy route</a></p>
	<p>The Importance Of H-minima Transforms For Watershed Segmentation In Areal Surface Metrology</p> <p><a href="#">Nor Hidayawati Zaini, Mohd Fauzi Bin Ismail, Talib Bin Ria Jaafar (dr.) , 2016,the importance of h-minima transforms for watershed segmentation in areal surface metrology</a></p>
	<p>The Application Of Marker Based Segmentation For Surface Texture Characterization</p> <p><a href="#">Mohd Fauzi Bin Ismail, S.n. Sulaiman, Siti Noraini Sulaiman , 2016,the application of marker based segmentation for surface texture characterization</a></p>
	<p>Feature Identification And Filtering For Engine Misfire Detection (emd) Using Zirconia Oxygen Sensor</p> <p><a href="#">Mohd Fauzi Bin Ismail , 2015, feature identification and filtering for engine misfire detection (emd) using zirconia oxygen sensor</a></p>
	<p>Development Of Surface Texture Analysis And Characterization Application Package</p> <p><a href="#">Mohd Fauzi Bin Ismail, Azman Bin Ahmad Bakir, Talib Bin Ria Jaafar (dr.) , 2014,development of surface texture analysis and characterization application package</a></p>
	<p>Fabrication Of Nano Zirconia Ceramics</p> <p><a href="#">Rizal Bin Mohamed Noor, Mohd Fauzi Bin Ismail, Azmi Bin Mohamed Yusof, Muhamad Bin Othman, Azman Bin Ahmad Bakir , 2012,fabrication of nano zirconia ceramics</a></p>
	<p>Surface Reversal Method For Multi Point Tool Cutting Edge Characterization</p> <p><a href="#">Mohd Fauzi Bin Ismail, Rizal Bin Mohamed Noor, Mohd Rozalee B Abu Hassan , 2012,surface reversal method for multi point tool cutting edge characterization</a></p>

	<p>Datum Definition For Cylinder End Surface Topography Characterization Of Multi Point Tool</p> <p><a href="#">Mohd Fauzi Bin Ismail, Mahamad Hisyam Bin Mahamad Basri, N.i. Ismail, Muhammad Arif Bin Ab Hamid Pahmi, Sharzali Bin Che Mat , 2012.datum definition for cylinder end surface topography characterization of multi point tool</a></p>
<b>CHAPTER(s) IN RESEARCH BOOK &amp; CHAPTER(s) IN BOOK</b>	
	<p>Evaluation Of Outlier Specific Correction Procedure For Areal Surface Texture</p> <p><a href="#">Mohd Fauzi Bin Ismail, Sharzali Bin Che Mat, Muhammad Arif Bin Ab Hamid Pahmi, 2014, evaluation of outlier specific correction procedure for areal surfacetexture.Applied Solutions of Engineering Science: International Conference of Applied Physics and Engineering 2014, 137-142</a></p>
<b>GENERAL PUBLICATION</b>	
	<p>Manual Keselamatan Dan Kesihatan Pekerjaan Universiti Teknologi Mara Uitm Cawangan Pulau Pinang</p> <p><a href="#">Mohd Fauzi Bin Ismail, Bakhari, N.a., Mohd Rafe Bin Abdul Majid, Abdul Malek Bin Saidina Omar, Nor Aimi Binti Abdul Wahab, Mohd Noor Bin Mokhtar, Mohamad Azli Bin Razali, 2017, manual keselamatan dan kesihatan pekerjaan universiti teknologi mara uitm cawangan pulau pinang,1-56</a></p>

- Pautan kepada profil pensyarah di dalam “UiTM Expert”

<https://expert.uitm.edu.my/profile.php?id=9Zveby0ajNqSLiUSOZ1x5DVjSzIh5ZI20jLOnQmI5Fw=>

- Pautan kepada profil pensyarah di dalam Google Scholar

<https://scholar.google.com/citations?user=VEAMKEAAAAJ&hl=en>

- Pautan kepada profil pensyarah di dalam SCOPUS

<https://www.scopus.com/authid/detail.uri?authorId=36082610900>

<https://orcid.org/0000-0002-3422-0664>

- Pautan kepada profil pensyarah di dalam Web of Science

<https://publons.com/researcher/4684505/ismail-mohd-fauzi/>

- Pautan kepada profil pensyarah di dalam Research Gate

<https://www.researchgate.net/profile/Mohd-Ismail-30>

- Gambar profil terkini untuk dimuat naik di dalam laman web pengajian.

