

Associate Professor Dr. Mohd Hasnun Arif Bin Hassan

Deputy Dean (Academic and Student Affairs)
Faculty of Mechanical & Automotive Engineering Technology
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Google Scholar : [POVKEBsAAAAJ](https://scholar.google.com/citations?user=POVKEBsAAAAJ)



Biography

Hasnun Arif earned his first degree in **Mechanical Engineering** from the **University of Applied Sciences Bingen, Germany** in 2010. During the final year of his undergraduate study, he was offered a scholarship by Universiti Malaysia Pahang Al-Sultan Abdullah (UMPSA) to pursue a **Master's degree in Mechanical Engineering** at the **University of Malaya** in Kuala Lumpur, from which he graduated with distinction in 2012. After that, he embarked on his **PhD** journey at **UMPSA** where he studied **head injury sustained by soccer players due to heading manoeuvre**. He completed his PhD study in 2016, then continued to serve UMPSA as a senior lecturer.

His research interests include *finite element modelling of the interaction between human and sports equipment, instrumentation of sports equipment, and injury prevention particularly with regards to sports and traffic accidents*. His work aims to apply engineering principles in sports not only to enhance the performance of an athlete, but also to prevent injuries.

Besides research work, Hasnun is also involved in managing journals, namely the Malaysian Movement, Health and Exercise (MoHE Journal) under the Ministry of Education of Malaysia, where he now serves as a Section Editor. He also currently the coordinator of Open Journal System (OJS) and Open Monograph Press (OMP) in UMPSA. He considers himself a computer geek who enjoys graphic design and website development. Hasnun also loves music and plays guitar, bass and/or drum occasionally.

Education Background

2012 – 2016	Doctor of Philosophy <i>Faculty of Manufacturing Engineering, Universiti Malaysia Pahang Al-Sultan Abdullah</i> Passed without correction (Scale 1)
2010 – 2012	M.Eng. in Mechanical Engineering <i>Faculty of Engineering, Universiti Malaya</i> CGPA: 3.84 (with Distinction)
2005 – 2010	Diplom Ingenieur (Dipl-Ing.) in Mechanical Engineering <i>University of Applied Sciences Bingen, Germany</i> Notendurchschnitt: 2,1 (equivalent to Second-class Upper)

Ph.D. Thesis

Title	Modelling and Analysis of Soccer Heading and Protective Headgear to Understand and Prevent Mild Traumatic Brain Injury
Description	Analytical modelling, finite element analysis and experimental quantification of linear and angular head acceleration due to soccer ball heading in addition to the analysis of protective headgear for soccer players.
Supervisor	Prof. Dr. Zahari Taha
Thesis Examiner	Prof. Dr.-Ing. Veit Senner (TU Munich) Prof. Ir. Dr. Noor Azuan Abu Osman (UM) Assoc. Prof. Dr. Abdul Aziz Jaafar (UMPSA)

Career/Academic Appointments

2024 – Present	Associate Professor <i>Faculty of Mechanical & Automotive Engineering Technology, UMPSA</i>
2019 – 2024	Senior Lecturer <i>Faculty of Mechanical & Automotive Engineering Technology, UMPSA</i>
2016 – 2019	Senior Lecturer <i>Faculty of Manufacturing Engineering, UMPSA</i>
2016	Tutor <i>Faculty of Mechanical Engineering, UMPSA</i>

Administrative Positions

2019 – present	Deputy Dean (Academic & Student Affairs) <i>Faculty of Mechanical & Automotive Engineering Technology, UMPSA</i>
2019	Head of Programme (Automotive) <i>Faculty of Mechanical & Manufacturing Engineering, UMPSA</i>
2018 – 2019	Head of Programme (Master of Industrial Engineering) <i>Faculty of Manufacturing Engineering, UMPSA</i>

Courses Taught

BFF1123 / BHM2103	Dynamics (Rigid Body)	DMM2633	Manufacturing Technology
DMM2523	Dynamics (Particle)	BVA3013	Automotive Legislation
BFM3002	Computer Simulation		

Professional Affiliation

Board of Engineers Malaysia (BEM)	Graduate Engineer (GE70570A)
Malaysia Sports Technology Association	President (2021 – present)
Society of Automotive Engineers Malaysia	Treasurer (2021 – present)
International Sports Engineering Association (ISEA)	Full Member (until 12/04/2020)

Research Interests

Sports Engineering and Technology, Finite Element Analysis, Head Impact Protection, Sports Injury Protection, Instrumentation of Sports Equipment, Road Safety, Applied Machine Learning.

Postgraduate Supervision

Level	Name	Title	Status	Role
PhD	Yusof Hashim	The Potential Influence Of Organizational Ergonomic Risks Factors On Musculoskeletal Disorders And Driving Fatigue Related Near Miss Accidents	Graduated	Main Supervisor
PhD	Nurul Qastalani Radzuan	Prediction of Road Fatalities in Malaysia using Machine Learning	Active	Main Supervisor
MSc	Tan Fu Yang	Development and Analysis of Passive and Active Blind Spot Detection System	Graduated	Main Supervisor
MSc	Ismail Ali Abdul Aziz	Development of Test Equipment to Study Tooth Bending Strength of Helical Gears in Automotive Transmission	Graduated	Co-supervisor
MSc	Nik Mohd Haikal Mohamed Hassan	Investigation of Head Impact Injury During Sepak Takraw Heading	Graduated	Co-supervisor
MSc	Atiqullah Huzaifah	Development of Motion Tracking Device to Investigate the Relationship of Swing Profile Towards the Trajectory and Deviation of a Golf Shot	Active	Co-supervisor

Research Grants (Principal Investigator)

Title	Type of Grant	Amount (RM)	Status
Should Motorcyclist Head Impact Assessment be Implemented by Asean Ncap?	International Grant (ASEAN NCAP)	14,100	Active
Development of a Test Rig to Evaluate Motorcycle Helmet Protection Against Oblique Impact	International Grant (ASEAN NCAP)	25,700	Active
Social Experiment on Drivers' Demographics and Their Driving Decisions	International Grant (ASEAN NCAP)	27,500	Finished
Experimental and Computational Analysis of Motorcycle Helmet	UMP Internal Grant	26,000	Finished
Prediction of Road Traffic Accidents using Machine Learning	International Grant (ASEAN NCAP)	26,000	Finished
Field of View Measurement of Side Blind Spot Mirror	International Grant (ASEAN NCAP)	10,000	Finished
Badminton Agility Training Device	UMP - Community Technology Solution Platform	20,000	Finished
Design of Protective Headgear for Soccer Players through Experimental and Computational Analysis	UMP Internal Grant	23,300	Finished
Experimental and Computational Analysis of Head Impacts in Sports	UMP Seed Money	5,500	Finished
Total grants received as Principal Investigator (PI)		RM 178,100	

Research Grants (Co-Investigator)

Title	Type of Grant	Amount (RM)
Design and Development of a Driving Simulator for the Road Safety Research	Internal Grant	39,800
Development of Motion Tracking Device to Determine Biomechanics of a Golf Player	Internal Grant	20,000
Malaysian Driver's Response During Obstacle Avoidance Task Using Driving Simulation Study	International Grant	19,800

Title	Type of Grant	Amount (RM)
Protective Bandana (PROB) for Sepak Takraw Players	Internal Grant	33,000
Inventive Road Safety Performance Indicator: A New League	International Grant	14,000
Test Setup Dummy Positioning / Overall Setup Reflecting ASEAN Driving Behaviour	International Grant	15,100
Formulation of Machine Learning Model to Classify Kinematics Data of Human Daily Activities	Internal Grant	25,200
Surface Modification of Zno Coated Ag Nanoparticles for Multifunctional Fabric	Internal Grant	33,500
A Predictive Human Comfort Model Based on Road Profile Characteristics	Internal Grant	28,000
Pen Batches Localization Using RFID Tag	Industrial Grant	20,000
The Design and Control of a Grasping Exoskeleton for Stroke Motor Function Recovery	Internal Grant	29,000
Experimental Study of Drag Reduction Effect by Microbubbles Via Particle Image Velocimetry	Internal Grant	28,450
Simulation of Assistive Grouser Mechanism for Use on Lightweight Wheeled Robot for Traversing on Unconsolidated Soft Sand Inclines	Internal Grant	20,000
Synthesis of Silver Nanowires Hybrid Thin Film for Advanced Automotive Application	Internal Grant	26,000
Total grants received as Co-investigator (CI)		RM 351,850

Awards

Awards	Year
Anugerah Inovasi Sukan by Menteri Belia dan Sukan (Anugerah Inovasi)	2022
PECIPTA 2022 (Silver)	2022
CITREX 2022 (Silver)	2022
CITREX 2018 (Certificate)	2018

Journal Editor

Mekatronika (Penerbit UMP)	<i>Founding Chief Editor</i>
Malaysian Movement, Health & Exercise Journal (Ministry of Education)	<i>Section Editor</i>
Journal of Society of Automotive Engineers Malaysia (SAE Malaysia)	<i>Editor</i>
International Journal of Road Safety (MIROS)	<i>Editor</i>

Journal Reviewer

Brain Multiphysics (<i>Elsevier</i>) – Scopus
Frontiers in Human Neuroscience (<i>Frontiers</i>) – WoS
Frontiers in Public Health (<i>Frontiers</i>) – WoS
International Journal of Performance Analysis in Sport (<i>Taylor and Francis</i>) – WoS
International Journal of Injury Control and Safety Promotion (<i>Taylor and Francis</i>) – WoS
Proc. of the Institution of Mechanical Eng., Part H: Journal of Engineering in Medicine (<i>SAGE</i>) – WoS
Proc. of the Institution of Mechanical Eng., Part P: Journal of Sports Engineering and Technology (<i>SAGE</i>) – WoS
Transportation Engineering (<i>Elsevier</i>) – Scopus
International Journal of Automotive and Mechanical Engineering (<i>UMP Press</i>) – Scopus
Journal of Engineering Science & Technology (<i>Taylor's University</i>) – Scopus
Journal of Advanced Manufacturing Technology (<i>Penerbit UTeM</i>) – Scopus

Keynote/Invited Talk

- Oct 8, 2022 **Technological Advancement in Sports**
Keynote Speaker
International Conference Sport Health and Recreation (ICoSHR) 2022
Organised by: Universitas Negeri Padang, Indonesia
- Oct 14, 2021 **Advanced Safety for Cars**
Panelist
Webinar Perkembangan Teknologi Keselamatan Termaju Untuk Kereta di Malaysia
Organised by: Malaysian Institute of Road Safety Research (MIROS)
- June 22, 2021 **Technology and Innovation in Sports**
Panelist
Visi Sukan Negara VSN2030 Townhall
Organised by: Ministry of Youth and Sports
- Oct 2, 2019 **Machine Learning in Sports**
Keynote Speaker
Movement, Health & Exercise 2019, Kuching, Malaysia
Organised by: Ministry of Higher Education and USM
- Dec 5, 2017 **Finite Element Analysis in Sports**
Invited Speaker
Movement, Health & Exercise 2017, Johor Bahru, Malaysia
Organised by: Ministry of Higher Education and UiTM
- May 25, 2017 **Modelling and Simulation in Sports: A case study of soccer heading**
ISN Lecture Series 5/2017
National Sports Institute of Malaysia, Bukit Jalil, Kuala Lumpur
- May 24, 2017 **Engineering Sports: Modelling and Simulation**
Guest Lecture
Fakultas Teknik, Universitas Syiah Kuala, Banda Aceh, Indonesia
- Oct 17, 2014 **Engineering Sports towards Injury Prevention**
Seminar Keselamatan dan Kesihatan Dalam Sukan 2014
Department of Occupational Safety & Health Pahang, Kuantan, Malaysia
- Dec 4, 2013 **Sports and Engineering: Towards improving the athlete's performance**
Seminar Teknologi Sukan 2013
Universiti Teknikal Malaysia Melaka (UTeM), Malacca, Malaysia

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ISI-WOS	4 Refer: https://www.webofscience.com/wos/author/record/220962
Scopus	7 Refer: https://www.scopus.com/authid/detail.uri?authorId=57199938270
Google Scholar	9 Refer: https://scholar.google.com/citations?user=POVKEBsAAAAJ&hl=en

Publications

TITLE	YEAR
Proceedings of the 8th International Conference on Movement, Health and Exercise: MoHE 2022—Refocusing on Sports and Exercise for a Post-pandemic World MHA Hassan, AMC Muhamed, NS Safii, LY Kok, RMFR Azidin, ... Springer Nature	2023
A Cluster Analysis and Artificial Neural Network of Identifying Skateboarding Talents Based on Bio-fitness Indicators AM Ab Rasid, MZ Suhaimi, A PP Abdul Majeed, MA Mohd Razman, ... Innovation and Technology in Sports: Proceedings of the International ...	2023
Investigation on the Acceleration of Wrist and Waist During a Golf Swing Towards the Ball Trajectory K Reveendran, MN Omar, NH Johari, MHA Hassan, A Aziz Innovation and Technology in Sports: Proceedings of the International ...	2023
Experimental Investigation of Mechanical Properties of Sepak Takraw Ball Based on Different Ball Orientation NMH Mohamed Hassan, NH Johari, MHA Hassan, IM Sahat, MN Omar, ... Innovation and Technology in Sports: Proceedings of the International ...	2023
Innovation and Technology in Sports: Proceedings of the International Conference on Innovation and Technology in Sports.(ICITS) 2022, Malaysia SFS Omar, MHA Hassan, A Casson, A Godfrey, APPA Majeed Springer Nature	2023
The Effect of Wearing Soccer Headgear on the Head Response in Soccer Heading FY Tan, MHA Hassan, NH Johari, MN Omar, I Hasanuddin International Journal of Automotive and Mechanical Engineering 19 (4), 10112 ...	2022
Investigation of the Optimal Sensor Location and Classifier for Human Motion Classification A Mohamed, NA Othman, H Ahmad, MHA Hassan 2022 IEEE 12th International Conference on Control System, Computing and ...	2022
A Study on the Wear Resistance and Lubrication Properties of Mixed Engine Oils KS Ali, MN Omar, NH Johari, MHA Hassan Proceedings of the 2nd Energy Security and Chemical Engineering Congress ...	2022
Pedal Error Naturalistic Driving Study Among Malaysian Drivers MZ Baharom, ZA Manap, NMA Ismail, MHA Hassan, J Karjanto, ... Proceedings of the 2nd Energy Security and Chemical Engineering Congress ...	2022
Technological Advancement in Instrumentation & Human Engineering: Selected Papers from ICMER 2021 MHA Hassan, MH Zohari, K Kadirgama, NAN Mohamed, A Aziz Springer Nature	2022

<p>The effect of foam padding on the head response in soccer heading FY Tan, MHA Hassan, NH Johari, MN Omar, I Hasanuddin Malaysian Journal of Movement, Health & Exercise 11 (2), 108</p>	2022
<p>Head injury evaluation strategy for Sepak Takraw ball heading: a systematic review N Hassan, NH Johari, MN Omar, MHA Hassan, Z Ahmad IET Digital Library</p>	2022
<p>Effect of using anti-wear and friction modifier-based additives on tribological performance of engine lubricants A Salih, MN Omar, NH Johari, MHA Hassan IET Digital Library</p>	2022
<p>Displacement measurement of soft material indentation using light intensity MN Omar, MHA Hassan Journal of Mechanical Engineering (JMechE) 19 (1), 21-38</p>	2022
<p>Human-Centered Technology for a Better Tomorrow MHA Hassan, NH Johari, UK Jamaludin, MH Jalil, IM Sahat, MN Omar Springer Singapore</p>	2022
<p>The Association of Socio-demographic Characteristics Towards Driver Behaviour and Traffic Fatality in Selangor, Malaysia NQ Radzuan, MHA Hassan, KA Abu Kassim, AA Ab. Rashid, ... Human-Centered Technology for a Better Tomorrow: Proceedings of HUMENS 2021 ...</p>	2022
<p>The Influence of Ball Impact Angle on the Brain Deformation in Soccer Heading: A Finite Element Analysis MHA Hassan, MA Mohd Anni, FY Tan, NH Johari, MN Omar Human-Centered Technology for a Better Tomorrow: Proceedings of HUMENS 2021 ...</p>	2022
<p>Classification of Sepak Takraw kicks using machine learning FY Tan, MHA Hassan, A PP Abdul Majeed, MA Mohd Razman, ... Human-Centered Technology for a Better Tomorrow: Proceedings of HUMENS 2021 ...</p>	2022
<p>Factors Contributing to the Pedal Error or Pedal Misplacement Among Malaysian Car Drivers: A Survey MZ Baharom, Z Ahmad, NMA Ismail, MHA Hassan, J Karjanto, ... International Conference on Mechanical Engineering Research, 51-60</p>	2021
<p>Modeling of Soft Tissue Deformation Using Mass Spring Method with Nonlinear Volume Force MN Omar, NH Johari, MHA Hassan, MA Azizan Human-Centered Technology for a Better Tomorrow: Proceedings of HUMENS 2021 ...</p>	2021
<p>The Influence of Socio-demographics Background on the Driving Behavior: A Short Review NQ Radzuan, MHA Hassan, KAA Kassim, AA Ab Rashid, ISM Razelan, ... Journal of the Society of Automotive Engineers Malaysia 5 (2), 194-205</p>	2021

The Analysis of Road Traffic Fatality Pattern for Selangor, Malaysia Case Study NQ Radzuan, MHA Hassan, KAA Kassim, AAA Rashid, ISM Razelan, ... MEKATRONIKA 3 (1), 79-88	2021
Flipped Classroom Approach in Rigid Body Dynamics: A Case Study of Five-Semester Observation. MH Arif Hassan, NA Othman International Journal of Engineering Pedagogy 11 (1)	2021
Advances in Mechatronics, Manufacturing, and Mechanical Engineering: Selected articles from MUCET 2019 MA Zakaria, APPA Majeed, MHA Hassan Springer Nature	2020
A simplified human head finite element model for brain injury assessment of blunt impacts MHA Hassan, Z Taha, I Hasanuddin, A Majeed, H Mustafa, NA Othman Journal of Mechanical Engineering and Sciences 14 (2), 6538-6547	2020
A Support Vector Machine Approach in Predicting Road Traffic Mortality in Malaysia NQ Radzuan, MHA Hassan, RM Musa, APPA Majeed, MAM Razman, ... Journal of the Society of Automotive Engineers Malaysia 4 (2)	2020
Enhancing Health and Sports Performance by Design MHA Hassan, AMC Muhamed, NFM Ali, DKC Lian, KL Yee, NS Safii, ...	2020
The Classification of Skateboarding Trick Manoeuvres Through the Integration of Image Processing MNA Shapiee, MAR Ibrahim, MAM Razman, MA Abdullah, RM Musa, ... InECCE2019: Proceedings of the 5th International Conference on Electrical ...	2020
The application of artificial neural networks in predicting blood pressure levels of youth archers by means of anthropometric indexes RM Musa, MZ Suhaimi, A PP Abdul Majeed, MR Abdullah, SM Mat-Rasid, ... Enhancing Health and Sports Performance by Design: Proceedings of the 2019 ...	2020
Does a Circular Convex Blind Spot Mirror Increase the Driver's Field of View? MHA Hassan, FY Tan, MA Abdullah, NQ Radzuan, KAA Kassim Journal of the Society of Automotive Engineers Malaysia 4 (1), 44-49	2020
The Classification of Skateboarding Trick Manoeuvres Through the Integration of Image Processing Techniques and Machine Learning MNA Shapiee, MAR Ibrahim, MAM Razman, MA Abdullah, RM Musa, ... InECCE2019, 347-356	2020
Forecasting road deaths in Malaysia using support vector machine NQ Radzuan, MHA Hassan, APPA Majeed, KAA Kassim, RM Musa, ... InECCE2019: Proceedings of the 5th International Conference on Electrical ...	2020
RITA 2018 PPA Majeed, JA Mat-Jizat, MHA Hassan, Z Taha, HL Choi, J Kim Springer Singapore	2020

<p>The Flexural Strength Prediction of Porous Cu-Sn-Ti Composites via Artificial Neural Networks A El-Sawy, APPA Majeed, RM Musa, MAM Razman, MHA Hassan, ... RITA 2018, 403-407</p>	2020
<p>The Application of Artificial Neural Networks in Predicting Blood Pressure Levels of Youth Archers by Means of Anthropometric Indexes RM Musa, MZ Suhaimi, APPA Majeed, MR Abdullah, SM Mat-Rasid, ... International Conference on Movement, Health and Exercise, 348-357</p>	2019
<p>Predicting Serious Injuries Due to Road Traffic Accidents in Malaysia by Means of Artificial Neural Network NQ Radzuan, MHA Hassan, APPA Majeed, RM Musa, MAM Razman, ... Symposium on Intelligent Manufacturing and Mechatronics, 75-80</p>	2019
<p>Technical and tactical performance indicators discriminating winning and losing team in elite Asian beach soccer tournament R Muazu Musa, A PP Abdul Majeed, MR Abdullah, AF Ab. Nasir, ... PloS one 14 (6), e0219138</p>	2019
<p>RITA 2018: Proceedings of the 6th International Conference on Robot Intelligence Technology and Applications APPA Majeed, JA Mat-Jizat, MHA Hassan, Z Taha, HL Choi, J Kim Springer</p>	2019
<p>The control of an upper extremity exoskeleton for stroke rehabilitation by means of a hybrid active force control Z Taha, APP Abdul Majeed, MA Abdullah, KZM Azmi, MAB Zakaria, ... Robot Intelligence Technology and Applications 5: Results from the 5th ...</p>	2019
<p>Headgear for weakening impact from concussion in rugby games: design and development MSF Hussin, MA Shamsudin, ZA Abidin, MHA Hassan, MY Halyani, ... International journal of recent technology and engineering 8 (4), 2020-2023</p>	2019
<p>Measurement of sand moisture composition for concrete mixture NA Othman, WMSWA Puzi, H Ahmad, MHA Hassan Proceedings of Mechanical Engineering Research Day 2018, 119-120</p>	2018
<p>Instrumented mouthpiece for head kinematics measurement MHA Hassan, Z Taha, APPA Majeed, NA Othman Proceedings of Mechanical Engineering Research Day 2018 2018, 117-118</p>	2018
<p>The effect of spin and friction on reaction forces in a soccer ball impact: A computational study MHA Hassan, Z Taha Proceedings of Mechanical Engineering Research Day 2018, 87-88</p>	2018
<p>Development and localization of a mobile robot N Othman, M Jaffar, H Ahmad, MHA Hassan Proceedings of Mechanical Engineering Research Day 2018, 121-122</p>	2018

Mechanics of Soccer Heading and Protective Headgear MHA Hassan, Z Taha, I Hasanuddin, MJM Mokhtarudin Springer	2018
The Application of Support Vector Machine in Classifying Potential Archers Using Bio-mechanical Z Taha, RM Musa, APPA Majeed, MR Abdullah, MA Abdullah, ... Intelligent Manufacturing & Mechatronics: Proceedings of Symposium, 29 ...	2018
The employment of support vector machine to classify high and low performance archers based on bio-physiological variables Z Taha, RM Musa, APPA Majeed, MR Abdullah, MA Abdullah, ... IOP conference series: materials science and engineering 342 (1), 012020	2018
Intelligent Manufacturing & Mechatronics MHA Hassan, MHA Hassan, Baumann Springer Singapore	2018
Finite Element Analysis of Impact Energy on Spur Gear IABA Aziz, DMNBD Idris, MHAB Hassan, MFB Basrawi MATEC Web of Conferences 225, 06011	2018
Development of a Soccer Ball Launching Device MHA Hassan, Z Taha, MAH Shaharudin, LK Wee, Z Anuar Intelligent Manufacturing & Mechatronics: Proceedings of Symposium, 29 ...	2018
Simulation of Soccer Heading Manoeuvre MHA Hassan, Z Taha, I Hasanuddin, MJM Mokhtarudin Mechanics of Soccer Heading and Protective Headgear, 29-37	2018
Human Head Finite Element Model MHA Hassan, Z Taha, I Hasanuddin, MJM Mokhtarudin Mechanics of Soccer Heading and Protective Headgear, 19-27	2018
Soccer Ball Finite Element Model MHA Hassan, Z Taha, I Hasanuddin, MJM Mokhtarudin Mechanics of Soccer Heading and Protective Headgear, 11-17	2018
Concussion in Soccer MHA Hassan, Z Taha, I Hasanuddin, MJM Mokhtarudin Mechanics of Soccer Heading and Protective Headgear, 1-9	2018
Analysis of Protective Headgear MHA Hassan, Z Taha, I Hasanuddin, MJM Mokhtarudin Mechanics of Soccer Heading and Protective Headgear, 39-43	2018
The Application of Support Vector Machine in Classifying Potential Archers Using Bio-mechanical Indicators Z Taha, RM Musa, APPA Majeed, MR Abdullah, MA Abdullah, ... Intelligent Manufacturing & Mechatronics, 385-391	2018

<p>Talent identification of potential archers through fitness and motor ability performance variables by means of Artificial Neural Network</p> <p>Z Taha, RM Musa, APPA Majeed, MR Abdullah, MHA Hassan Intelligent Manufacturing & Mechatronics, 371-376</p>	2018
<p>The Identification and Control of a Finger Exoskeleton for Grasping Rehabilitation</p> <p>Z Taha, MM Alim, APPA Majeed, MA Zakaria, MAM Razman, ... Intelligent Manufacturing & Mechatronics, 177-182</p>	2018
<p>Classification of High Performance Archers by Means of Bio-physiological Performance Variables via k-Nearest Neighbour Classification Model</p> <p>Z Taha, RM Musa, APP Abdul Majeed, MR Abdullah, AF Ab. Nasir, ... Intelligent Manufacturing & Mechatronics: Proceedings of Symposium, 29 ...</p>	2018
<p>Finite element analysis on effects of rim and web thicknesses on root stress of thin-rimmed spur gear with asymmetric web arrangement</p> <p>IAA Aziz, DMND Idris, MHA Hassan, MF Basrawi, AF Yusop, WM Ghazali AIP Conference Proceedings 1901 (1)</p>	2017
<p>The identification and control of an upper extremity exoskeleton for motor recovery</p> <p>Z Taha, APPA Majeed, MA Abdullah, IM Khairuddin, MA Zakaria, ... PROCEEDINGS OF MECHANICAL ENGINEERING RESEARCH DAY 2017 (MERD), 483-484</p>	2017
<p>Reliability testing of inertial measurement units in the analysis of physiological variables in archery</p> <p>Z Taha, RM Musa, MR Abdullah, MHA Hassan PROCEEDINGS OF MECHANICAL ENGINEERING RESEARCH DAY 2017 (MERD), 140-141</p>	2017
<p>Investigating effects of rim and web thickness on root stress of thin-rimmed spur gear with symmetric web arrangement</p> <p>IAA Aziz, SRM Hanafi, DMZD Idris, MRM Rejab, MHA Hassan, ... PROCEEDINGS OF MECHANICAL ENGINEERING RESEARCH DAY 2017 (MERD), 88-89</p>	2017
<p>Analytical modelling of protective headgear for soccer players</p> <p>MHA Hassan, Z Taha PROCEEDINGS OF MECHANICAL ENGINEERING RESEARCH DAY 2017 (MERD), 66-67</p>	2017
<p>A reaction-force-validated soccer ball finite element model</p> <p>Z Taha, MHA Hassan Proceedings of the Institution of Mechanical Engineers, Part P: Journal of ...</p>	2017
<p>Parametric Analysis of the Influence of Elastomeric Foam on the Head Response During Soccer Heading Manoeuvre</p> <p>Z Taha, MHA Hassan Procedia Engineering 147, 139-144</p>	2016
<p>MODELLING AND ANALYSIS OF SOCCER HEADING AND PROTECTIVE HEADGEAR TO UNDERSTAND AND PREVENT MILD TRAUMATIC BRAIN INJURY</p> <p>MHA Hassan Universiti Malaysia Pahang</p>	2016

Analytical modelling of soccer heading Z Taha, MHA Hassan, I Hasanuddin Sadhana 40 (5), 1567-1578	2015
Finite Element Analysis of Soccer Heading MHA Hassan, Z Taha Procedia Engineering 112, 46-51	2015
SHOE SIZING SYSTEM FOR MALAYSIAN YOUTH SOCCER PLAYERS: A PRELIMINARY STUDY ON THE FOOT ANTHROPOMETRY Z Taha, MA bin Aris, MHA Hassan, APPA Majeed, N Ahmad MoHE 2014	2014
FINITE ELEMENT MODELLING OF SOCCER BALL Z Taha, MHA Hassan MoHE 2014	2014
Biomechanics measurements in archery Z Ahmad, Z Taha, MHA Hassan, MA Hisham, NH Johari, K Kadirgama Journal of Mechanical Engineering and Sciences 6, 762-771	2014
Impact-absorbing materials in reducing brain vibration caused by ball-to-head impact in soccer Z Taha, MHA Hassan, I Hasanuddin, MA Aris, APPA Majeed Procedia engineering 72, 515-520	2014
A low cost 3D foot scanner for custom-made sports shoes Z Taha, MA Aris, Z Ahmad, MHA Hassan, NN Sahim Applied Mechanics and Materials 440, 369-372	2014
The Efficacy of Impact-Absorbing Materials during Collision with a Soccer Ball Z Taha, MHA Hassan, MA Aris Applied Mechanics and Materials 440, 363-368	2014
The influence of football boot construction on ball velocity and deformation Z Taha, MA Aris, MHA Hassan IOP Conference Series: Materials Science and Engineering 50 (1), 012028	2013
An Overview Of Sports Engineering: History, Impact And Research Z Taha, MHA Hassan, APPA Majeed, MA Aris, NN Sahim Malaysian Journal of Movement, Health & Exercise 2	2013
Predicting brain acceleration during heading of soccer ball Z Taha, MHA Hassan, MA Aris, Z Anuar IOP Conference Series: Materials Science and Engineering 50 (1), 012023	2013