Curriculum Vitae

Dr. Noor Syazwana binti Abd Aziz
Lecturer
Centre for Defence Foundation Studies
National Defence University of Malaysia (NDUM), Malaysia
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Educational Qualifications:

Degree	University	Year
Ph.D., (Mathematics)	Universiti Kebangsaan Malaysia (UKM)	2022
M.Sc., (Mathematics)	Universiti Teknologi Malaysia (UTM)	2012
B.Sc., (hons) (Computational Mathematics)	Universiti Teknologi Mara (UiTM)	2010

Teaching Experiences: 10+ years

Research Experiences: 4+ years

Area of Expertise: Biomechanics

- Mathematical modelling, kinematics and kinetics study, human movement

Employment History:

- June 2019-Till date: **Lecturer** in Centre Defence Foundation Studies, National Defence University of Malaysia, Malaysia
- 2011-2012: **Lecturer Assistant** in Faculty of Geoinformation and Real Estate, Universiti Teknologi Malaysia

Awards:

- Dean List (October 2007- April 2009)
- Anugerah Cemerlang Matematik (August 2009)
- Best Paper ICOAIMS (2019)
- Bronze medal in Pre-University/Matriculation Innovation Competition (PIITRAM 2022)
- Silver medals in Defence, Security and Sustainability (DSS 2022)
- 2 Gold medals in Pusat Asasi Pertahanan Innovation Competition (PAPIC 2022)
- 4 Gold medals in Pitch Your Idea Video Competition (Hari Siber & IR PKSRID 2023)
- 1 Gold and 1 Bronze in Pusat Asasi Pertahanan Innovation Competition (PAPIC 2023)
- Gold medals in Defence, Security and Sustainability (DSS 2024)

Research Project /Grant: Current Sum of RM 150,000 Ringgit Malaysia

- September 2022-31 August 2024:NDUM Short Term Grant. Investigating the Impact of Covid-19 Pandemic on School Student Motivation and Psychological Well-Being using Multivariate Regression Analysis (In Progress)

- July 2021 – June 2023: NDUM Short Term Grant. Kajian Biomekanik Teknik Pendaratan Payung Terjun Bagi Tentera Malaysia Dengan Kaedah Gordon Dan Analisis Fungsian Data (Completed).

- 2013-2015: Research Development Grant Scheme. Modelling The Accurate Shooting Posture Through Gordon Method (Completed)

- 2013 –2015: Research Development Grant Scheme. A New Numerical Algorithm For Solving Higher Order Stiff Boundary Value Problem By Multistep Block Method (Completed).

Supervision:

Ph.D Supervision

No.	Name of Student	Project Title	Role (Main/Co-Supervision)	Status • Completed • Submitted • In Progress
1.	Normurniyati Abd Shattar	Development of Gait Kinematics Assessment Model Based on Openpose Human-Skeleton for Rehabilitation Application	Co - Supervision	In Progress

Supervision (Final Year Research Project)

No.	Name of Student	Project Title	Date of Registration	Role (Main/Co-Supervision)	Status • Completed • Submitted • In Progress
1.	PKdt Muhammad Haris Danial bin Hafizul Azly	Fruit Ripness Detection Using Adaptive Threshold Based Image Analysis	Semester5 (September 2022)	Co-Supervision	Completed
2.	Muhammad Akmal Hakim bin Hamid	Kinematics Analysis on Three Types of Sit Ups by Recreational Individuals	Semester 5 (September 2022)	Co-Supervision	Completed
3.	Nurul Izzah binti Abdul Rahim	Comparison of 30 Meter Sprint Running Times with and Without Finishing Line in Male and Female Sprinter	Semester 5 (September 2022)	Co-Supervision	Completed
4.	Nivashini Nicole A/P Michael	The Association Of Early Specialization and Sport Involvement With Musculoskeletal Injury Among Track Athletes	22 Januari 2024	Co-Supervision	Completed

5.	Muhammad Syukran Aiman bin Saiful Azlan	Gender and Relative Age Effect on Pistol and Rifle Shooter Performance Athletes in Malaysia Universities	22 Januari 2024	Co-Supervision	Completed
6.	Muhammad Adam Syauqi bin Alwi	The measurement Level of Physical Fitness Performance on The Components of Muscle Strength and Endurance of Football Players	22 Januari 2024	Co-Supervision	Completed

Publication:

- **Academic Journals (ISI/WoS):**

[1] **Aziz, S**., Rambely, A.S., Gan, K.B. & Wan Din, W.R. 2020. Kinetics Study in Parachute Landing Fall Technique by Comparing Professional and Amateur Malaysian Army Parachutists Using Kane's Method. *Mathematics* 8 (6): 917-931.

[2] **Aziz, S.**, Gan. K.B & Rambely, A.S. 2020. Angular Kinematics Study on Parachute Landing Activity for Professional and Amateur Parachutists of Malaysian Military Using Video Processing Technique. *Malaysian Journal of Mathematical Sciences*. 14: 31-45.

[3] **Aziz, S**., Gan,K.B., Rambely, A.Z., Gopal, K., Ariffin, M.S. & Shattar, N. Relationship Between Angle And Peak Vertical Ground Reaction Force Estimation In Parachute Landing Fall Among Army Parhutist Using Mathematical Modelling. *Alexandria Engineering Journal*. 61:5413-542

- **Proceeding Article:**

[1] A.A. Dahalan, **N.S.Aziz** and J.Sulaiman. 2015. QSAGE Iterative method for the numerical solution of two-point fuzzy boundary value problem. International Conference on Research Applied Mathematics and Statistic (ICRAMS2015). Holiday Inn Hotel, Bandung, Indonesia. 3-5 December 2015.

[2] A.A. Dahalan, **N.S.Aziz** and J.Sulaiman. 2015. AGE Iterative Method Applied to 2D Fuzzy Poisson Equation. International Conference on Research Applied Mathematics and Statistic (ICRAMS2015).

[3] A.A. Dahalan, **N.S.Aziz** and J.Sulaiman. 2016. Performance of Quarter –Sweep Successive Over Relaxation Iterative Method for Two point Fuzzy Boundary Value Problem. 2016 Applied Mathematics in Science and Engineering International Conference (APPEMSE)

[4] **Aziz, S**., Rambely, A.S., Wan Din, W.R. & Shattar, N. 2019. Case Study On The Optimum Angle Of Parachute Landing Between Professional and Amateur Parachutist in the Malaysian army. *Proceedings of 150th the IRES International Conference.*

[5] **Aziz, S**., Rambely, A.S. & Rauf, U.F.A. 2019. Kinematics study on PLF technique by comparing professional and amateur Malaysian army parachutists based on event during landing. *Journal of Physics: Conference Series* 1366:012054.

[6] Normurniyati Abd Shattar, Kok Beng Gan & **Noor Syazwana Abd Aziz.** 2021**.** Experimental setup for markerless motion capture and landmarks detection using OpenPose during dynamic gait index measurement. *International Conference on Space Science and Communication (IconSpace)*. 286-289.

[7] **Aziz, S**., Ariffin, M.A., Gan, K.B. & Shattar,N.A. 2022. Smooting of Hip Angle Kinematics Data During Parachute Landing Using Functional Data Analysis Approach. IEEE 20th Student Conference on Research and Development (SCOReD). 34-38.

Copyright:

- Coding Smoothing Using Functional Data Analysis for Server (CRLY2024W03730)

Presentations:

- 3 – 5 December 2015: **International Conference on Research Applied Mathematics and Statistic (ICRAMS2015).** Holiday Inn Hotel, Bandung, Indonesia.
- 26 – 28 January 2016: **Applied Mathematics in Science and Engineering International Conference (APPEMSE)**, The Pines Hotel,Melaka, Malaysia
- 2 – 3 January 2019: **International Conference on Applied Physics and Mathematics (ICAPM 2019)** Singapore.
- 23 – 25 July 2019: **International Conference On Applied And Industrial Mathematics And Statistic (ICOAIMS2019), The Zenith Hotel, Kuantan, Malaysia**
- 26-27 June 2024: **International Conference on Advanced Materials and Applied Sciences (IConMAS 2024) UPNM, Selangor, Malaysia**.

Invited Speaker

- 8 – 9 November 2022: **IEEE 20th Student Conference on Research and Development (SCOReD 2022) Bangi Golf Resort, Selangor, Malaysia.**

Membership in Professional Society:

- Lifetime member of Malaysia Mathematical Sciences Society (PERSAMA)
- Lifetime member of International Association of Engineers (IAENG)