

## **CURRICULUM VITAE**

### **MAI NURSHERIDA BINTI JALALUDDIN**

**IC No.:** 830529-05-5216

**Date of Birth:** 29<sup>th</sup> May 1983

**Marital Status:** Married

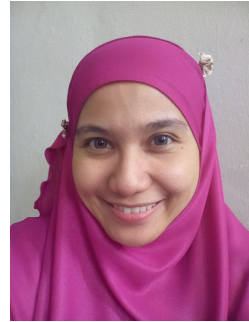
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**Mobile Phone:** +6012-6997489

**Nationality:** Malaysian

**Language:** English and Bahasa Malaysia

**Health:** Excellent



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### **OBJECTIVE**

- To secure a position as an academician and technical professional with opportunity for career advancement and technical excellence.
- I have extensive teaching experience in the department of Mechanical Engineering at University Selangor (UNISEL) for two years and has taught for three semesters in UniKL IPROM as a Part-time lecturer, most of it focused on Finite Element Analysis, Engineering Design and Automotive structures crash analysis. My work provides a useful link between automotive crash analysis with automotive structures improvement design in the department, encouraging research and teaching collaborations.

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### **EDUCATIONAL BACKGROUND**

- Doctor of Philosophy, PhD (Mechanical Engineering), Faculty of Engineering, Universiti Putra Malaysia, (UPM), Serdang, Selangor. **(Thesis was submitted on 15<sup>th</sup> July 2016)**
- Masters of Science (Mechanical Engineering), CGPA 3.583. Faculty of Engineering, Universiti Putra Malaysia, (UPM), Serdang, Selangor.
- Bachelor of Engineering (Mechanical & Manufacturing), CGPA 3.10 (Second Class Upper), Faculty of Engineering, Universiti Putra Malaysia, (UPM), Serdang, Selangor. (2002-2006)
- Matriculation (Sains Hayat), CGPA 3.30, Penang Matriculation College, Kepala Batas, Penang. (Mac 2001-Mac 2002)
- Sijil Pelajaran Malaysia (SPM Sijil Terbuka) (1999-2000), 4A 4B 1C, Sekolah Menengah Tunku Kurshiah, Negeri Sembilan.

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## EMPLOYMENT HISTORY

1.

**Employer** : Universiti Putra Malaysia (UPM)

**Date** : Sept 2013 – Present

**Position** : PhD student

**Department** : Mechanical & Manufacturing Department, Engineering Faculty, UPM

**Scope of Work** :

- Involved in research work entitled “Development of 1 Year Old Asian Dummy Model for the Finite Element Prediction of Injury in Automotive Crash” that lead by Professor Ir. Dr. Barkawi Bin Sahari from UPM.
- The focus parts in this research are child dummy development and development of child skin, muscle and bone material models .
- Software’s used in this research are LS-DYNA for Finite Element Analysis, HyperMesh for part meshing and CATIA.
- This work was supported by Fundamental Research Grant Scheme with Reference Number: FRGS/2/2013/TK01/UPM/01/1, vote 5524355, Ministry of Education (MOE)
- The research program was successfully finished and I’m managed to publish five article papers entitled:

1. J. M. Nursherida, A.A. Nuraini, B.B. Sahari, *On the Development and Validation of 12MO Numerical Child Head Dummy Model for Automotive Crashworthiness Assessment, Proceeding of ICCET 2014 (Published)*
2. J. M. Nursherida, A.A. Nuraini, B.B. Sahari, *Development and Validation of Newborn Child Head Numerical Model Dummy for Impact Simulations, Applied Mechanics and Materials Journal, 2014*
3. J. M. Nursherida, A.A. Nuraini, B.B. Sahari, *Finite Element Modelling of 1-year-old pediatric head with fontanel impact: Validation against experimental data. 27-28 Feb 2015. Australian Journal of Basic and Applied Science (ISI/THOMSON REUTERS) (online issue ISSN 1991-8178). (Published)*
4. J. M. Nursherida, A.A. Nuraini, B.B. Sahari, *Development and Validation of One-Year-Old Child Neck Numerical Model Dummy for Impact Simulations. 12-14 May 2015, IPCAMME Langkawi. Australian Journal of Basic and Applied Science.*
5. J. M. Nursherida, A.A. Nuraini, B.B. Sahari, *Thoracic Impact Testing of Pediatric Finite Element Dummy Model, FICEER 2015*

## 2.

**Employer** : Universiti Kuala Lumpur (UNIKL IPROM)  
**Date** : Sem Feb 2014, Sem Sept 14 and Sem Feb 15  
**Position** : Part Time Lecturer – Finite Element Analysis Subject (PRB34104)  
**Scope of Work** :

- To teach at degree level in areas allocated by the Head of Department and reviewed from time to time by the Head of Department and supervise final year project of undergraduate student by acting as co-supervisor. Subject Taught: Finite Element Analysis.
- To contribute to the development, planning and implementation of a high quality curriculum.
- To assist in the development of learning materials, preparing schemes of work and maintaining records to monitor student progress, achievement and attendance.

## 3.

**Employer** : Universiti Selangor (UNISEL)  
**Date** : Sept 2012 – Feb 2014  
**Position** : Lecturer – Mechanical Engineering Division  
**Department** : Faculty of Engineering, UNISEL  
**Scope of Work** :

- To teach at undergraduate level in areas allocated by the Head of Department and reviewed from time to time by the Head of Department. Subjects taught: Mechanics of Machines, Engineering Design for degree students; Engineering Drawing, Engineering Mathematics III, Refrigeration & Air-conditioning for diploma students.
- To supervise or assist with supervision of undergraduate Final Year Projects.
- To contribute to the development, planning and implementation of a high quality curriculum.
- To assist in the development of learning materials, preparing schemes of work and maintaining records to monitor student progress, achievement and attendance.
- To participate in departmental and faculty seminars aimed at sharing research outcomes and building interdisciplinary collaboration within and outside the department.
- To participate in the development, administration and marking of exams and other assessments.
- To participate in the administration of the department's programmes of study and other activities as requested.

## 4.

**Employer** : Management & Science University (MSU)  
**Date** : June 2012 – September 2012  
**Position** : Lecturer – Mechanical Engineering  
**Department** : Faculty of Information Sciences & Engineering, MSU  
**Scope of Work** :

- To teach at undergraduate level in areas allocated by the Head of Department and reviewed from time to time by the Head of Department. Subject Taught: Engineering Design with CAD application.
- Prepare the Malaysian Qualifications Agency (MQA) documentations for new program development. ie: Diploma in Mechanical Engineering Technology, Diploma in High Rise Building and Bachelor of Mechanical Engineering Technology.
- To assist in the development of learning materials, preparing schemes of work and maintaining records to monitor student progress, achievement and attendance.
- To participate in departmental and faculty seminars aimed at sharing research outcomes and building interdisciplinary collaboration within and outside the department.
- To participate in the development, administration and marking of exams and other assessments.

## 5.

<b>Employer</b>	: Universiti Putra Malaysia (UPM)
<b>Date</b>	: Jan 2009 – February 2012
<b>Position</b>	: Graduate Research Assistant
<b>Department</b>	: Mechanical & Manufacturing Department, Engineering Faculty, UPM
<b>Scope of Work</b>	: <ul style="list-style-type: none"> <li>• Involved in research work entitled “Computationally Optimized Fuel Efficient Car” that lead by Professor Ir. Dr. Barkawi Bin Sahari from UPM.</li> <li>• The focus parts in this research are front bumper system and hood with pedestrian safety.</li> <li>• Software’s used in this research are LS-DYNA for Finite Element Analysis, HyperMesh for part meshing and CATIA.</li> <li>• The research program was successfully finished and I’m managed to publish four journal paper with impact factor entitled:</li> </ul> <ol style="list-style-type: none"> <li>6. Mai Nursherida J., B.B Sahari, Nuraini A.A, B.S 2011. <b><i>Parametric Study of Automotive Composite Bumper Beams Subjected to Frontal Impacts. Key Engineering Materials Vols. 471-472 (2011) pp 484-489 © (2011) Trans Tech Publications, Switzerland (Published).</i></b></li> <li>7. Mai Nursherida J, B.B. Sahari, Aidy Ali, Nuraini A.A., B.S 2011. <b><i>Performance of Automotive Composite Bumper Beams and Hood Subjected to Frontal Impacts. Journal of Materials Testing (Published)</i></b></li> <li>8. J. M. Nursherida, A.A. Nuraini, B.B. Sahari, Aidy Ali, , A.A. Faieza, Tuan Hafandi Tuan Ismail, Azim Azizi, M.S. Salwani, M.S. Nabilah, S.S. Aini, M. Shahril , M.H. Norhidayah <b><i>Determination of Leg Injury Criteria Subjected to Frontal Impacts. Applied Mechanics and Materials. (Published)</i></b></li> <li>9. J. M. Nursherida, B.B. Sahari , A.A. Nuraini, , Aidy Ali, , A.A. Faieza, Tuan Hafandi Tuan Ismail, Azim Azizi, M.S. Salwani, M.S. Nabilah, S.S. Aini, M.Shahril , M.H. Norhidayah. <b><i>Performance of Hood System and Head Injury Criteria Subjected to Frontal Impacts. Applied Mechanics and Materials. (Published)</i></b></li> </ol>

**6.**

**Employer** : Tamco Corporate Holdings Berhad (Switchgear Specialist)  
**Date** : June 2006 – June 2008 (2 Years)  
**Position** : Development Engineer  
**Department** : Research & Development Department  
**Scope of Work** :

- Mechanical Designer
- Handle non-standard job. Specialist in designing Gas Insulated Switchgear.
- Create document change note (DCN) using Oracle system. Load drawing into server.

❖ Kindly refer Attachment 1 project details (Until March 2008). All projects are using SOLIDWORKS & AUTOCAD :-

No.	Description of Job/Project	Scope of Work / Responsibilities	Status
1	TAMCO Energy Integral Australia (TEIA) – 4 nos. of panels	- Design of cubicle (sheet metal), mechanical parts, bus bar design and all non-standard parts.	Completed
2	Multi-Tech PDO Nahada & Musallam (Oman) – 26 nos. of panels	- Design of cubicle (sheet metal), mechanical parts, bus bar design, support bracket for external Z Current Transformer and all non-standard parts.	Completed
3	PETRONAS Job (Malaysia)	- Design of cubicle (sheet metal), mechanical parts, bus bar design and all non-standard parts.	Completed
4	KL Pavilion job (Malaysia)	- Design of cubicle (sheet metal), mechanical parts, LV compartment and all non-standard parts.	Completed
5	Putrajaya TNB job (Malaysia)	- Design of cubicle (sheet metal), mechanical parts, bus bar design and all non-standard parts.	Completed

**Attachment 1**

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**EXTRA CURRICULAR ACTIVITIES**

School player for Tennis and Hockey Team, Sekolah Menengah Tunku Kurshiah, N.Sembilan. (1999-2000).

Vice President for Karate-Do Club (Black belt holder), Sekolah Menengah Tunku Kurshiah, N.Sembilan. (1998-2000).

Member for Safety Club Eleventh College, UPM, Serdang. (2004-2005)

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## **FINAL YEAR PROJECT**

- Experimental Determination of Natural Frequencies and Mode Shapes of WAJA backdoor
- Final Year Project of Bachelor of Engineering (Mechanical and Manufacturing)
- In this project, determination of natural frequencies and mode shapes is performed on an automotive backdoor using experimental method. The material used for platform is mild steel and glass. The purpose is to avoid where possible the occurrence of a phenomenon known as 'resonance' which leads to deflection and causes the structures to fail unexpectedly.

Software used: CATIA, LMS International Modal Analysis Testing, Microsoft Office, Microsoft Project.

Received award for "Best Mechanical Project, Faculty of Engineering UPM 2006".

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## **SKILLS**

- MS Office (MS Word, MS Excel, MS PowerPoint, MS FrontPage)
- Software: LS-DYNA (8 years), HyperMesh (7 year), ANSYS (6 years), CATIA (6 years), AutoCAD (6 years), SOLIDWORKS (6 years), abaqus (2 years).
- Registered with BEM as Graduate Engineer (Nombor Pendaftaran: 75810A)
- Languages : Bahasa Melayu and English
- Good internet application and network skills.
- Highly motivated, self-driven, co-operative, teamwork spirit, be able to work under pressure, and able to communicate with all levels.
- Posses Own Transport : Yes

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## **REFEREES**

- Professor Dr Ir. Barkawi Bin Sahari,  
Project Supervisor, Mechanical Department, Universiti Putra Malaysia,  
43400 Serdang, Selangor. Tel: 03-89466328
- Dr Nuraini Abdul Aziz, Project Co- Supervisor, Mechanical Department,  
Universiti Putra Malaysia, 43400 Serdang, Selangor. Tel: 03-89464382