



Assoc. Prof. Ts Dr Suraya Masrom

## Education

- **Doctor of Philosophy in Information Technology and Quantitative Sciences**  
Universiti Teknologi MARA - 2015
- **Master of Computer Science**  
Universiti Putra MALAYSIA – 2001
- **Bachelor of Computer Science (Hons)**  
Universiti Teknologi MALAYSIA - 1996
- **Diploma in Computer Science**  
Universiti Teknologi MALAYSIA - 1994

## Academic Award

- **Academic Award UiTM (AAU 2018)**
- Teaching Award (Technology)
- ✓ RM5000, Plaque and certificate
- **Academic Award UiTM Perak (AAUP 2018)**
- Teaching Award
- ✓ RM150 and RM2000 grant ,Plaque and certificate
- **UiTM Excellent Service Award(1009,2015)**
- ✓ RM1000 and certificate
- **Best Paper Award (2015)**
- ✓ iSMSC2015
- ✓ Plaque and certificate
- **Research Attachment Fund Ministry of Education (2012)**
- ✓ University of Swinburne, Australia
- ✓ RM10,000
- **PhD Scholarship Ministry of Education (2010)**
- **Best Editor Journal UiTM (2022)**
- RM500 and certificate

## Professional Development

- **30 Days Cloudera Big Data Analytic**
- ✓ July – Aug 2017
- ✓ FSKM, UiTM Shah Alam
- **Data Camp Certifications (Completed Data Analyst with R Track)**
- ✓ Jan 2018
- ✓ FSKM, UiTM Perak, Tapah Branch
- **MBOT Professional Technologist (PT19010006)**
- ✓ MBOT Graduate Technology (GT18020284)
- ✓ Jan 2018
- **AKEPT Teaching and Learning Cycle – Learning Engagement and Motivation**
- ✓ April 2015
- ✓ AKEPT Bandar Enstek, Selangor
- **Certified Microsoft Innovative Educator**

## Teaching Experience



1998-2001 : Young Lecturer    2004-2005 Lecturer (part-time)    2005-2011 : Lecturer  
2001–2004:Lecturer    2011-2019 : Senior Lecture  
2019-Present : Assoc. Prof.

## Industrial Experience

- **Ramgate Systems Sdn Bhd, Ampang, Selangor (1997 – 1998)**
- ✓ Analyst Programmer
- ✓ Network management and deployment of application servers

## Leadership and Management

- **Head of Faculty/Ketua Pusat Pengajian (2016-2019)**
- ✓ Faculty of Computer and Mathematical Sciences
- ✓ 4 Diploma, 1 Degree
- ✓ 70 lecturers, 1400 students
- **General Chair International Conference RASK2017**
- **Chairman II of INDES2018**
- **Penyelaras PJIA&M (2015-2016)**
- **Penyelaras HEP (2014-2015)**
- **Coordinator of Industrial Attachment (2014-2015)**
- **Member of Committees at UiTM Perak, including**
- ✓ Students Representative (JKKP)
- ✓ Flexible working hours
- ✓ Smart Classroom
- ✓ Research and Income Generation
- ✓ Strategic planning
- ✓ Key Performance Indicator

## Contribution of Expertise

- **Big Data and IR 4.0**
- ✓ *Chairman of Big Data Task Force*
- ✓ *Trainer for Cloudera, Hadoop, Python and Machine Learning*
- ✓ *Head of Machine Learning and Interactive Research Group (MaLIV) (2020-2023)*
- ✓ *Director of Big Data Talent (Data Camp Certifications, 2019)*
- ✓ *Qualified facilitator for Data Camp Certification – Data Analyst with R track*
- ✓ *Facilitator of Smart Classroom and Education 4.0 workshop*
- ✓ UiTM Perak
- **Scripting Language-Data Science**
- ✓ *Research partner*
- ✓ Universiti Teknologi PETRONAS
- **Database Design and Development**
- ✓ *Trainer*
- ✓ Institut Latihan Statistik Malaysia
- **Reference Management System**
- ✓ *Trainer*
- ✓ UiTM Perak Branch
- **Reviewers, Panel and Jury**
- ✓ *Jury - INDES2017*
- ✓ *Interview panel - Lecturer position, Graduation award*
- ✓ *Panel – PROPENS*
- ✓ Reviewers – Conferences and Journal
- **LaTeX Thesis Template**
- ✓ *Developer*
- ✓ IPSIS UiTM (2018)
- **System of Examination Invigilators Assignment**
- ✓ *Design, Develop and Support*
- ✓ UiTM Perak (2009-2017)
- ✓ UiTM Perak Tapah Campus (2010-Present)
- **System of Examination Layout Generation**
- ✓ *Design, Develop and Support*
- ✓ UiTM Perak (2014-2018)
- **System of Random Sampling in PROPENS**
- ✓ *Design and Develop*
- ✓ UiTM Perak
- **Curriculum Design**
- ✓ *Committee member - Jawatankuasa Kurikulum Negeri(JKN), Jawatankuasa Kualiti Akademik (JKA), Jawatankuasa Akademik Negeri (JAN), UiTM Perak*
- ✓ *Committee member - new program development for Ijazah Sarjana Muda Sains (Halal), UiTM Perak*
- **Research Grant Mentorship Program**
- ✓ 2019
- ✓ *Mentor*
- ✓ *UiTM Perak*



## Postgraduate students

### ➤ Graduated Students

- ✓ Price Prediction Model Of Green Building Based On Machine Learning Algorithms. Nur Syafiqah Jamil, Master of Science (Built Environment), Anugerah Pelajar Cemerlang 2021.
- ✓ Prediction Models of Heritage Building Based on Machine Learning. Nur Shahirah Jaa'far, Master of Science (Built Environment), Anugerah Pelajar Cemerlang 2021.
- ✓ Development of Office Building Rental Prediction Model Based On Machine Learning. Muhammad Harussani Abdul Salam, Master of Science (Built Environment), GOT, Anugerah Pelajar Cemerlang 2023.

### ➤ Ongoing PhD Students

- ✓ Integrating Continuum Solvation Descriptors With Machine Learning On The Physiochemical And Biological Activities For Toxicology Model Of Metal-oxide Nanoparticles. Zubainun Mohamed Zabidi.
- ✓ Design Strategy of Urban Brownfield Environmental Renewal based on Machine Learning: A Case Study of Luzhou City, Sichuan Province, China. Zhou Jie.
- ✓ Dynamic Dataset Sizing for Optimal Sample Size in Predicting Performance Level of Student. Faezah Mohamad Razi.
- ✓ Machine Learning Rental Forecasting Model. Muhamad Harussani Abdul Salam.
- ✓ Construction of Malaysian Shop Price Index. Intan Faiqah Hamidah Mohd Firazan.
- ✓ Classification of Systemic Lupus Erythematosus (SLE) Based On Automated Machine Learning Pipelines. Afiqah Roshidi.
- ✓ Image Defogging Algorithm based on Dark Channel Prior. Tan Yan.

### ➤ Ongoing Master by Research Students

- ✓ Quality of Life Prediction Model based on Machine Learning. Anis Zulaikha Mohd Zukri.
- ✓ Reverse Migration Models based on Machine Learning. Azreen Anuar.

### ➤ Examiners

- ✓ A Study of Malaysia IT Personnel Competency Framework Using Hybrid PSO and K-Means Approach. DRP of Master by Research, KPPIIM UiTM.
- ✓ Research on Left Ventricular Echocardiography Segmentation Algorithm Based on Machine Learning. DRP of Phd Research, KPPIIM UiTM.
- ✓ Temporal Context Based on Multi-modal Emotion Recognition Model. DRP of Phd Research, KPPIIM UiTM.
- ✓ Optimizing the Random Forest Algorithm for Feature Extraction Strategy. DRP of Phd Research, KPPIIM UiTM.



## Subject Taught

- **Executive Master of Business Administration (AA701) - Arshad Ayub Graduate Business School, UiTM Ipoh Branch**
  - ✓ *Information Technology Management (MIS750)*
- **Diploma of Computer Science (CS110)**
  - ✓ *Fundamentals of Algorithm Development (CSC118)*
  - ✓ *Fundamentals of Computer Problem Solving (CSC128, CSC126)*
  - ✓ *Fundamentals of Data Structure (CSC248)*
  - ✓ *Introduction to Database Management System (ITS232)*
  - ✓ *Introduction to Data Communication and Networking (ITT300)*
- **Bachelor of Computer Science (CS230) - FSKM, UiTM Perak, Tapah Campus**
  - ✓ *Algorithm Analysis and Design (CSC645)*
  - ✓ *Fundamentals of Data Structure (CSC438)*
  - ✓ *Programming II (CSC404)*
  - ✓ *Object Oriented Programming (CSC435)*
  - ✓ *Computer Security (CSC662)*
  - ✓ *Special Topic in Computer Science (CSC649)*
  - ✓ *Hybrid Programming (CSC585)*
  - ✓ *Fundamentals of Computer Problem Solving (CSC404)*
- **Diploma in Accountancy Information System (AC120) – FP, UiTM Perak, Tapah Campus**
  - ✓ *Data Management (AIS275)*



## Research Grants in Teaching & Learning

- **Intelligent Tutoring System**
  - ✓ RM10,000.00
  - ✓ 600-RMI/DANA 5/3/ARAS (39/2015)
- **Facilitating Statistical Software with E-Guide**
  - ✓ RM10,000.00
  - ✓ 600-IRMI/DANA 5/3/ARAS (0182/2016)
- **Peer-Reviewed Active Learning Engagement with A Multi-Level Class**
  - ✓ RM10,000.00
  - ✓ 600-IRMI/DANA 5/3/ARAS (0170/2016)



## Publications in Teaching and Learning

- **Student acceptance of educational games in higher education**
  - ✓ *Journal of Fundamental and Applied Science, WOS indexed*
  - ✓ *Vol. 9, no. 3S, pp. 809–829, 2017*
- **E-learning acceptance based on technology acceptance model (TAM)**
  - ✓ *Journal of Fundamental and Applied Science, WOS indexed*
  - ✓ *Vol. 9, no. 4S, pp. 871–889, 2017*
- **Teaching and learning of pre-calculus: an insights of educators**
  - ✓ *Journal of Fundamental and Applied Science, WOS indexed*
  - ✓ *Vol. 9, no. 6S, pp. 452–467, 2017*
- **Facilitating Statistical Software using E-Guide**
  - ✓ *Presented at The 3rd International Conference on Computing, Mathematics and Statistics 2017 (iCMS2017), November 2017 at Langkawi Island, Malaysia.*
  - ✓ *On publication in a Springer book chapter, SCOPUS indexed.*
- **Peer-reviewed active learning engagement with a multi-level remedial class**
  - ✓ *On publication for Journal of Engineering and Technology, SCOPUS indexed*
- **Predictive Modelling based on Machine Learning – UiTM Press**



## Innovations Award in Teaching and Learning

- **Gold award**
  - ✓ *The 1<sup>st</sup> International Malaysia-Indonesia-Thailand Symposium on Innovation and Creativity 2017, Product - SPSS e-Guide*
- **Gold award**
  - ✓ *The 5th International Innovation, Invention, and Design (INDES) 2016, Product - E-Guide Mobile*

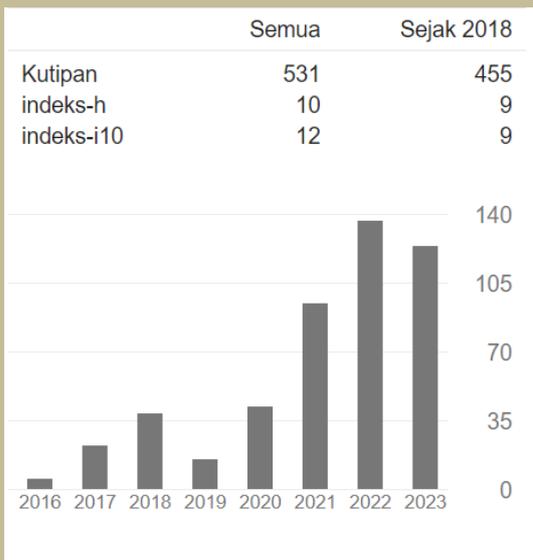


# RESEARCH, CONSULTATION, EDITORIAL, INNOVATION, PUBLICATION (2011-2023)

## Editorial

- **Journal of Fundamental and Applied Sciences (WOS)**
- ✓ Guest Editor
- ✓ JFAS vol 10 6S,5S,2S,1S (2018)
- ✓ JFAS vol 9 8S (2017)
- **Mathematical Sciences and Informatics Journal (myCite)**
- ✓ Chief Editor
- ✓ <https://mijuitm.com.my>

## Google Scholar Citation



## Innovation and Copyright

- **IIDEX2019** – Intelligent Rail Safety Cost Allocation V3, Gold
- **1<sup>st</sup> International Malaysia-Indonesia-Thailand Symposium on Innovation and Creativity 2017** – SPSS e Guide, Gold
- **INDES2016**– Reliable Hadith Recommender System, Silver
- **INDES2016**– Random Sampling in PROPENS, Silver
- **INDES2015**– Easy, Fast and Flexible in Examination Information System, Silver
- **INDES2018** - Secure Anonymous E Voting, Silver, Copyright (IP.5/2/6/3/CP)

## Research Grants, Consultation, Publication

### Research



### Consultation



### Publication



➤ <https://expert.uitm.edu.my/expert.php?#>

### Grants

- ✓ Scripting Language – 3 FRGS, 2 completed
- ✓ Meta-heuristics-based Optimization – 3 FRGS, 1 MITRANS, all completed
- ✓ Recommender System – 1 RAGS, completed
- ✓ Machine learning – 10 FRGS, 4 completed
- ✓ Teaching and learning - 4 ARAS, all completed

### Consultation

- ✓ An Intelligence Machine Learning Classification Model of Housing Affordability Based on Transport Expenditure
- ✓ Kajian Pelan Tindakan Bandar Pintar Manjung 2030

### Publication

- ✓ <https://scholar.google.com/citations?user=TOuIGGoAAAAJ&hl=id>
- ✓ <https://www.scopus.com/authid/detail.uri?authorid=36176242600>
- ✓ <https://publons.com/researcher/3539294/suraya-masrom/>