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NOR IZZATI BINTI JAINI  
FACULTY OF INDUSTRIAL SCIENCES AND TECHNOLOGY  
UNIVERSITI MALAYSIA PAHANG  
Lebuhraya Tun Razak  
26300 Gambang, Kuantan, Pahang, MALAYSIA.

**Biodata**

Date of Birth: 5 March 1984.

Place of Birth: Machang, Kelantan.

Hobbies: Reading, Sport, Research, Teaching, Writing, Travelling.

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**Education**

PhD (Mechanical Engineering), University of Manchester, 2017.

MSc. (Mathematics), Universiti Teknologi Malaysia Skudai, 2006.

BSc. (Mathematics Industry), Universiti Teknologi Malaysia Skudai, 2008.

**Expert Area**

Decision Sciences

Operational Research

Applied Calculus

Differential Equations

Computational Complex Variable

**Positions Held**

Senior Lecturer, Faculty of Industrial Sciences and Technology, Universiti Malaysia Pahang, July 2017 – recent.

Lecturer, Faculty of Industrial Sciences and Technology, Universiti Malaysia Pahang, August 2008 – June 2017.

Advisor of Sekretariat Mahasiswa Anak Sabah Sarawak, Universiti Malaysia Pahang, 2011 – 2012, 2017 – recent.

Committee of Mathematics Support Center (MSC), Faculty of Industrial Sciences and Technology, Universiti Malaysia Pahang, 2017-2018.

Committee of Unit Insaniah & Kebajikan (UnIK), Faculty of Industrial Sciences and Technology, Universiti Malaysia Pahang, 2017-2018.  
Secretary of Unit Insaniah & Kebajikan (UnIK), Faculty of Industrial Sciences and Technology, Universiti Malaysia Pahang, 2008 – Feb 2010.  
Head of Quality Unit Teaching & Learning (MS ISO 9001-2000), Faculty of Industrial Sciences and Technology, Universiti Malaysia Pahang, 2008 – 2010.  
Member of Kelab Inovatif & Kreatif (KIK), Faculty of Industrial Sciences and Technology, Universiti Malaysia Pahang, 2009.  
Fellow of Kolej Kediaman 3, Universiti Malaysia Pahang, August 2008 – Feb 2010.  
Facilitator of Rakan Siswa (RAKSI), Universiti Malaysia Pahang – 2009.  
Committee member for Anugerah Cendekia Bitara, Universiti Malaysia Pahang, 2011.  
Committee member for Karnival Ez-Scimat, Universiti Malaysia Pahang, 2011.  
Committee member for Program Matemadesa, Universiti Malaysia Pahang, 2011.  
Faculty Academic Committee, Faculty of Industrial Sciences and Technology, Universiti Malaysia Pahang, 2011 – 2012.

### **Research Interest**

Decision Sciences - Multi-criteria decision making, Pareto solutions, Compromise solutions.  
Operational Research – Heuristic method, Scheduling & Transportation problems.  
Complex Variables – Conformal Mapping.  
Optimization Problem – Multi-objective optimization, Application in engineering / industry.

### **Research Grants**

Fundamental Research Grant Scheme (RDU190198) - A study on the decision making support in scheduling and vehicle routing problems via trade-off ranking method (Head Researcher).  
UMP Short-term Research Grant (RDU1703199) - A ranking algorithm for Pareto optimal solutions in fuzzy multi-criteria decision making, (Head Researcher).  
UMP Short-term Research Grant (RDU100376) – Multidimensional Knapsack Problem via Mixed Heuristic Method (Head Researcher).  
UMP Short-term Research Grant (RDU1703106) - Pelancongan dan Pembangunan Setempat di Malaysia: Satu Kajian Analisis Aliran Kemasukan Pelancong Timur Tengah ke Negeri Pahang sebagai Eko- Pelancongan (Co-Researcher).  
Fundamental Research Grant Scheme (RDU170112) – An Inter-Dependent Non-Separable Data Envelopment Analysis Model for National Sustainability Indicator Development (Co-Researcher).  
Fundamental Research Grant Scheme (vot78479) – Boundary Integral Equations for Conformal Mapping of Multiply Connected Regions via The Generalized Neumann Kernel (Co-Researcher).

### **Publications**

Nor Izzati Jaini, Master Dissertation, An Integral Equation Method for Conformal Mapping of Doubly Connected Regions onto an Annulus via the Neumann Kernel, 2008.

Ali H. M. Murid, Laey-Nee Hu, Mohd Nor Mohamad and Nor Izzati Jaini, Numerical Conformal Mapping of Doubly Connected Regions onto an Annulus via an Integral Equation with the

Neumann Kernel, Proceedings of the Seminar on Science and Technology 2008 Universiti Malaysia Sabah, Kota Kinabalu, Sabah, 29-30 October 2008, 60-67.

An Integral Equation Method For Conformal Mapping Of Doubly And Multiply Connected Region Via The Kerzman-Stein And Neumann Kernels, Research Thesis for FRGS vot78089, 2009.

Mixed Heuristic Method for Multidimensional Knapsack Problem, International Conference of Science & Technology (ICSTIE 2012), Eastin Hotel, Penang, 7-8 November 2012.

Calculus Workbook for Diploma, 2012, Penerbit UMP.

Mathematics for Management (BUM1123) Workbook for Degree, 2012, Penerbit UMP.

Applied Calculus (BUM2123) Workbook for Degree, 2012, Penerbit UMP.

Nor I. Jaini, Sergei V. Utyuzhnikov, Critical Criterion Analysis for Multi-criteria Decision Making, International Journal of Applied Physics and Mathematics, vol. 6, no. 3, pp. 129-137, 2016.

Nor I. Jaini, Sergei V. Utyuzhnikov, Trade-off Ranking Method for Multi-criteria Decision Analysis, Journal of Multi-Criteria Decision Analysis, vol. 24, no. 3-4, page 121-132, 2017.

Nor I. Jaini, Sergei V. Utyuzhnikov, The Effect of Uncertainties in Distance-based Ranking Methods for Multi-criteria Decision Making, AIP Conference Proceedings, vol. 1867, no. 1, doi: 020010, 2017.

Nor Izzati Jaini, An Efficient Ranking Analysis in Multi-criteria Decision Making, PhD Thesis, University of Manchester, 2017.

Adam Shariff Adli, Aminuddin, et al. "A two stage data envelopment analysis model with undesirable output." *Journal of Physics: Conference Series*. Vol. 890. No. 1. IOP Publishing Ltd, 2017.

Nor I. Jaini, Sergei V. Utyuzhnikov, A Fuzzy Trade-off Ranking Method for Multi-criteria Decision Making, Axioms, vol. 7, no. 1, page 1-21, 2018.

### **Teaching Experience** (August 2008-recent)

Diploma: Basic Mathematics, Calculus.

Degree: Applied Calculus, Differential Equations, Engineering Mathematics I, Engineering Mathematics II, Numerical Methods, Mathematics for Management.

### **Award**

Excellence Service Award, Universiti Malaysia Pahang, 2010.