



# NOR AZUANA RAMLI

SENIOR LECTURER | PHD

## OBJECTIVE

To build a long-term career as a senior lecturer in a position that offers opportunities for career growth, and to keep publish research papers in high impact journals

## SKILLS

Obtained Professional Certificate for AutoCAD. Experience in 3D software design such as CATIA, SolidWorks and Autodesk Inventor. Expert in Microsoft Office. Experience in Mathematical software such as Minitab, SPSS and MATLAB and Data Scientist software such as R and Python.

## RESEARCH AREA

Machine learning and data science (application in currency crisis prediction and energy prediction), energy efficiency and energy management.

## EXPERIENCE

**SENIOR LECTURER • ELECTRICAL ENGINEERING SECTION, UNIVERSITI KUALA LUMPUR, BRITISH MALAYSIAN INSTITUTE • 16/3/2015 - CURRENT**  
Responsible for managing all Mathematics and Statistics subjects for Bachelor Engineering (Electrical) students, including oversight of day to day operational processes (timetabling, assessment, examination systems) and programme accreditation processes. Ensure that programme design and delivery comply with the quality standards and regulations of the University and Board of Engineers. Manage Final Year Project for diploma and degree students. Undertake and contribute to research, conducting individual research and collaborating with others. Publish Scopus and high index journals, conference papers and book for students' reference. Seeking for potential grants (internal and external).

**Admin position:** Mathematics Coordinator, Vetting Committee, FYP Committee, UniKL BMI Journal (JET) Publication Committee, GLU-STEM Committee, Innovation Coordinator

## EDUCATION

**PHD (TIME SERIES) • 25/4/2015 • UNIVERSITI SAINS MALAYSIA**  
Thesis title "Modeling early warning system using combination of logit model and nearest neighbour tree for predicting currency crisis"

**MASTER OF INNOVATION AND ENGINEERING DESIGN • 12/8/2010 • UNIVERSITI PUTRA MALAYSIA**  
Obtained CGPA 3.69

**BSC (INDUSTRIAL MATHEMATICS) • 16/8/2008 • UNIVERSITI TEKNOLOGI MALAYSIA**  
Obtained CGPA 3.51 and Dean's List for 3 semesters

## PUBLICATIONS

(Refer to attachment)



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## PUBLICATIONS (JOURNALS)

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1. N.F Azis@Aziz, N.A. Ramli and M.F. Abdul Hamid. (2019). Energy efficiency of wastewater treatment plant through aeration system. *Desalination and Water Treatment*. DOI: 10.5004/dwt.2019.24134
2. M.F. Abdul Hamid and N.A. Ramli. (2016). Improvement of energy efficiency in waste water treatment plant by enhancing performance of anaerobic digestion. *Journal of Biological Sciences* 16(7), 284-289. DOI: 10.3923/jbs.2016.284.289
3. Nor Azuana Ramli and Mohd Fairuz Abdul Hamid. (2016). Analysis of energy efficiency and energy consumption costs: a case study for regional wastewater treatment plant in Malaysia. *Journal of Water Reuse and Desalination*. DOI: **10.2166/wrd.2016.196**
4. Nor Azuana Ramli, Mohd Tahir Ismail and Hooy Chee Wooi. (2014). Measuring the accuracy of currency crisis prediction with combined classifiers in designing early warning system. *Machine Learning June 2014* (published online).
5. Nor Azuana Ramli, Mohd Tahir Ismail and Hooy Chee Wooi. (2014). An analysis on two different data sets by using ensemble of k-nearest neighbor classifiers. *WSEAS Transactions on Mathematics Volume 13*, 780-789.
6. Nor Azuana Ramli, Mohd Tahir Ismail and Hooy Chee Wooi. (2014). Application of fuzzy optimization and time series for early warning system in predicting currency crisis. *Malaysian Journal of Mathematical Sciences* 8(2), 239-253.
7. Nor Azuana Ramli, Mohd Tahir Ismail and Hooy Chee Wooi. (2014). Do the choices of indicators affect the predictability in modeling an early warning system for currency crisis? An analysis. *International Business Management* 8(2), 64-75.

## PUBLICATIONS (CONFERENCES/PROCEEDINGS)

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1. Naufal Hajjaj Noor Hashim, Nor Azuana Ramli (2019). Smart building energy management using big data analytic approach. *13<sup>th</sup> International Conference Mathematics, Actuarial, Computer Science & Statistics (MACS 13)*, Karachi, Pakistan.
2. Mohd Syafiq Asyraf Suhaimi, Nor Azuana Ramli, Mohd Fairuz Abdul Hamid, Azizah Kassim, Saiful Adib Abdul Munaff (2019). Active and passive strategies to improve energy efficiency for healthcare building. *13<sup>th</sup> International Engineering Research Conference*, Taylor's University, Malaysia.
3. Noor Fikri Noor Azman, Mohd Badrulhisham Ismail, Nor Azuana Ramli (2019). Control and monitoring air conditioner: perspective of Internet of Things. *2019 International Conference on Engineering Technology and Technopreneurship (ICE2T)*, Bandung, Indonesia.

4. Muhammad Akram Masoud, Nor Azuana Ramli, Shariah A. Walid (2019). Energy audit of building system by using smart kWh calculator and building simulation. *2019 International Conference on Engineering Technology and Technopreneurship (ICE2T)*, Bandung, Indonesia.
5. Nursyura Laili Mazlan, Nor Azuana Ramli, Lilik Jamilatul Awal, Mohd Badrulhisham Ismail, Azizah Kassim, Ashwin Menon (2019). A smart building energy management using internet of things (IoT) and machine learning. *2019 International Conference on Engineering Technology and Technopreneurship (ICE2T)*, Bandung, Indonesia.
6. Nor Azuana Ramli, Mohd Fairuz Abdul Hamid, Nurul Hanis Azhan and Muhammad Alif As-siddiq Ishak (2018). Solar power generation prediction by using k-nearest neighbor method. *International Conference on Engineering Technology (ENTEC)*. Kuala Lumpur, Malaysia.
7. Nuran Nadhirah Noor Azmi, Nor Azuana Ramli, Azizah Kassim and Saiful Adib Abdul Munaff (2018). Calibration of a commercial building energy simulation models using energy and weather data. *5<sup>th</sup> IET International Conference on Clean Energy and Technology (CEAT 2018)*. Kuala Lumpur, Malaysia.
8. Mohd Fairuz Abdul Hamid, Nor Azuana Ramli and Nik Mohamad Fajarul Syawal Nik Mohd Kamal (2017). An analysis of energy performance of a commercial building using energy modeling. *3<sup>rd</sup> IEEE Conference on Energy Conversion (CENCON 2017)*, Kuala Lumpur, Malaysia.
9. Nor Azuana Ramli and Mohd Fairuz Abdul Hamid (2017). A review on two different systems in municipal sewage treatment plant. *3<sup>rd</sup> IEEE Conference on Energy Conversion (CENCON 2017)*, Kuala Lumpur, Malaysia.
10. Mohd Fairuz Abdul Hamid, Nor Azuana Ramli and Zulhazmi Elias (2017). Energy efficiency strategies for sewage treatment plant: a case study in Malaysia. *2017 International Conference on Engineering Technology and Technopreneurship (ICE2T)*, Kuala Lumpur, Malaysia.
11. Fadi M. Albatsh, Shameem Ahmad, Tofael Ahmed, F.B.K Mahmood, Arghya Saha, Mohammad Z.A. Choedhury, Nor Azuana Ramli (2017). A comparative analysis of line stability indices for dynamic voltage stability. *2017 International Conference on Engineering Technology and Technopreneurship (ICE2T)*, Kuala Lumpur, Malaysia.
12. Nor Azuana Ramli, Mohd Fairuz Abdul Hamid and Muhd Syahril Mokhtar (2017). Development and optimization of energy efficiency for regional network pump station via glass reinforced plastics material: a design and built case study. *3<sup>rd</sup> International Conference on Power Generation Systems and Renewable Energy Technologies (PGSRET)*, UTM Skudai, Johor, Malaysia.
13. Mohd Fairuz Abdul Hamid, Nor Azuana Ramli and Siti Nor Baizura Mat Napiyah (2017). Factors affecting mini hydro power production efficiency: a case study in Malaysia. *3<sup>rd</sup> International Conference on Power Generation Systems and Renewable Energy Technologies (PGSRET)*, UTM Skudai, Johor, Malaysia.
14. Mohd Fairuz Abdul Hamid, Harison Gimang Anak Richard and Nor Azuana Ramli (2016, November). An analysis on energy consumption of two different commercial buildings in

- Malaysia. *2016 IEEE 6<sup>th</sup> International Conference on Power and Energy (PECON)*, Hatten Hotel Melaka, Malaysia.
15. Nor Azuana Ramli and Mohd Fairuz Abdul Hamid (2016). Energy analysis of a wastewater treatment plant by using artificial neural network. *International Conference on Applied Computing, Mathematical Sciences and Engineering (ACME)*, Berjaya Waterfront, Johor, Malaysia.
  16. Mohd Fairuz Abdul Hamid and Nor Azuana Ramli (2015, November). Improvement of energy efficiency in waste water treatment plant by enhancing performance of anaerobic digestion. *International Conference on Engineering Technology and Entrepreneur*, Kuala Lumpur, Malaysia.
  17. Nor Azuana Ramli (2015, November). Predicting currency crisis: an analysis on early warning system from different perspective. Chapters in Book *The 2<sup>nd</sup> International Conference on Computing, Mathematics and Statistics*, Langkawi, Malaysia. (pp. 330-340)
  18. Nor Azuana Ramli and Mohd Fairuz Abdul Hamid (2015, August). An analysis on energy production costs for wastewater treatment plant in Malaysia. *International Conference on Power, Energy and Communication Systems*, Perlis, Malaysia.
  19. Nor Azuana Ramli, Mohd Tahir Ismail and Hooy Chee Wooi (2014, April). A novel nearest neighbour tree for currency crisis forecasting. *Proceedings of the 16<sup>th</sup> International Conference on Mathematical and Computational Methods in Science and Engineering*, Kuala Lumpur, Malaysia. (pp. 113-120)
  20. Nor Azuana Ramli, Mohd Tahir Ismail and Hooy Chee Wooi (2013, November). Currency crisis indication by using ensembles of support vector machine classifiers. *AIP Conference Proceedings* **1605**, Penang, Malaysia. (pp. 1013)
  21. Nor Azuana Ramli, Mohd Tahir Ismail and Hooy Chee Wooi (2013, July). Designing early warning system: prediction accuracy of currency crisis by using k-nearest neighbour method. *World Academy of Science, Engineering and Technology*, Singapore. (pp. 1061-1066)

## **PUBLICATION (CHAPTER IN BOOK)**

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Nor Azuana Ramli (2015). Predicting currency crisis: an analysis on early warning system from different perspective. Chapter 31 in the Book *Quest for Research Excellence on Computing, Mathematics and Statistics*. Faculty of Computer and Mathematical Sciences, Universiti Teknologi MARA Cawangan Kedah, pp. 330-340.

## PUBLICATION (BOOKS)

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1. Nor Azuana Ramli (2017). *Statistical Tables and Mathematical Formula for Bachelor Engineering and Bachelor Engineering Technical Students*. UniKL Publication.
2. Nor Azuana Ramli (2013). *Designing Early Warning System: Prediction Accuracy of Currency Crisis by Using k-Nearest Neighbour Method*. LAP Lambert Academic Publishing.

## GRANTS

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1. Fundamental Research Grant Scheme (FRGS). Project Title: The Optimal Location of STATCOM and BESS in Smart Grid System for Voltage Stability Improvement using PSO Adaptive Neural Network Hybrid Algorithm (Member). RM90,000
2. Short Term Research Grant (STRG). Project Title: An analysis on energy efficiency of regional wastewater treatment plants in Malaysia (Leader). RM15,000

## AWARDS

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- Winner Design Challenge Award in Innovate Malaysia 2019 for project entitled “A Smart Building Energy Management System using Internet of Things (IoT) and Big Data Analytics Approach.
- Best Paper at International Conference on Engineering Technology and Technopreneurship (ICE2T) 2019 in Bandung, Indonesia
- Bronze Award in Melaka International Intellectual Exposition 2019 (MIIEEx 2019)