Curriculum Vitae

Personal information

Name

Associate Professor Dr. Rizauddin Saian

Address

College of Computing, Informatics and Media Universiti Teknologi MARA (UiTM) Perlis Branch,

02600 Arau, Perlis,

Malaysia.

Telephone +6049882770 (office) WhatsApp-http://wa.rizauddin.com

Email rizauddin@uitm.edu.my

Nationality Malaysian

Gender Male

Website

https://www.rizauddin.com/

Google Scholar

https://scholar.google.com/citations?user=ithh22sAAAAJ&hl=en

Scopus

https://www.scopus.com/authid/detail.url?authorId=

36160769800

GitHub (Software)

https://github.com/rizauddin

Google Play (Android Apps)

https://play.google.com/store/apps/developer?id=Rizauddin+

Saian

YouTube Channel

https://www.youtube.com/channel/UCnpqtFxC-e48UVUC9AJWxsw

Education

2013

Doctor of Philosophy, Universiti Utara Malaysia, Sintok, Kedah, Malaysia Title: A Hybrid of Ant Colony Optimization Algorithm and Simulated

Annealing for Classification Rules.

2005

Master of Science (Information Technology), Universiti Utara Malaysia,

Sintok, Kedah, Malaysia

Title: Stemming Algorithm in Searching Malay Text.

1998

Bachelor of Science (Hons) (Mathematics), Universiti Malaya, Kuala

Lumpur, Malaysia

Experiences

Working

2022–current 2009–2022 Associate Professor, UiTM Cawangan Perlis Senior Lecturer, UiTM Cawangan Perlis

1999–2009

Lecturer, UiTM Cawangan Perlis

Administrative

Sep. 2021-Aug. 2023

Head of Quality Unit, UiTM Cawangan Perlis

Mar. 2017-Feb. 2020

Head of Study Centre, Faculty of Computer & Mathematical Sciences, UiTM Cawangan Perlis

Feb. 2013–Dec. 2014 | Postgraduate Coordinator, UiTM Cawangan Perlis

Visiting Fellowship Programme

7 Apr. 2019–11 Apr. 2019 Fakultas Teknik, Universitas Islam Riau, Indonesia.

Courses Taught

Undergraduate MAT668 – Graph Theory

MAT491 – Calculus III MAT421 – Calculus I

MAT422 - Mathematical Logic & Proving Techniques

MAT495/MAT295 - Partial Derivatives & Approximation Methods

MAT530 - Introduction to Mathematical Modelling

MAT535 - Nonlinear Programming

Diploma MAT183 – Calculus I

MAT261 – Intermediate Algebra MAT153 – Business Calculus MAT141 – Engineering Maths

MAT105 - Fundamentals of Mathematics

Research Interests

Data Mining

Machine Learning

Research Grants

Sep. 2021–Aug. 2023 An Improved Ant Colony Optimization Feature Selection Algorithm for Modelling Bankruptcy of Malaysia Shariah-compliant Securities.

FRGS/1/2021/STG06/UITM/02/8. Member.

Jan. 2021–Jun. 2022 Vehicle Routing Problem with Time Windows (VRPTW) Based

Optimization Models for Sustainable e-Grocery Delivery using Homogeneous and Heterogeneous Fleet of Vehicles. 600-

RMC/MITRANS_IRES 5/3(007/2020). Member.

Jan. 2019–Dec. 2021 Hierarchical Clustering based on Ant Colony Optimization Algorithm for

Halal Compliance. TRGS/1/2018/UUM/02/3/3. Member.

Jan. 2019—Sep. 2021 A New Ant Based Decision Tree Algorithm for Imbalanced Medical Data.

FRGS/1/2018/STG06/UITM/02/3. **Head**.

Dec. 2015-Nov. 2016 | Smartphone Assisted Legal Writing. 600-RMI/DANA 5/3/ARAS

(45/2015). Member.

Aug. 2012–Jul. 2016 Decision Models for Flood Disaster Early Warning and Risk Reduction.

Long Term Research Grant Scheme (LRGS). UUM S/O Code: 12490.

Member.

Nov. 2013–Nov. 2015

A Primary User Locality Strategy for Distributed Channel Strategy in Cognitive Radio Ad Hoc Networks. Fundamental Research Grant

Scheme (FRGS). FRGS (600-RMI/FRGS 5/3 (157/2013)). Member.

Jul. 2013-Jun. 2014 Ant Based Rule Induction Algorithm. (2013-2014). Dana Kecemerlangan Pendidikan UiTM (Perlis). 600-UiTMPs/PJIM&A/ST/DKCP (02/2012). Head. Apr. 2012-Apr. 2014 Boundary Value Problems in Deformation of Beam. Fundamental Research Grant Scheme (FRGS). 600-RMI/FRGS 5/3 (9/2012). Member. Apr. 2010-Mar. 2011 A New Ant Based Rule Extraction Algorithm for Web Classification. Fundamental Research Grant Scheme (FRGS). UUM S/O Code: 11873. Member. Honors, Awards, and **Accomplishments** 2020 Anugerah Perkhidmatan Cemerlang (Excellent Service Awards) UiTM 2020. Anugerah Penerbitan Jurnal Berindeks. Majlis Anugerah Semarak Sanjung, UiTM Cawangan Perlis 2020. 2019 Anugerah Semarak Penyelidikan (Vibrant Research Award) UiTM Cawangan Perlis 2019. 2013 Anugerah Perkhidmatan Cemerlang (Excellent Service Awards) UiTM 2013. **Editorial Duties Editorial Board** Jan. 2023-Dec. 2025 Journal of Information and Communication Technology (JICT). ISSN Jan. 2020-Dec. 2022 1675-414X. Scopus Q1. http://jict.uum.edu.my/ Jan. 2017-Dec. 2019 **Technical Program Committee** 2021 The 6th International Conference on Soft Computing in Data Science (SCDS 2021). https://aaec.uitm.edu.my/scds2021/ 2015 The 1st International Conference on Soft Computing in Data Science (SCDS 2015). https://fskm.uitm.edu.my/scds2015/ Reviewer 2021 The 6th International Conference on Soft Computing in Data Science (SCDS 2021). https://aaec.uitm.edu.my/scds2021/ Jan. 2018-Dec. 2020 Malaysian Journal of Computing (MJoC). https://mjoc.uitm.edu.my 2019 The 5th International Conference on Soft Computing in Data Science (SCDS 2019). https://aaec.uitm.edu.my/scds2019/ 2018 The 4th International Conference on Soft Computing in Data Science (SCDS 2018). https://aaec.uitm.edu.my/scds2018/

2017	The 6th International Conference on Computing and Informatics 2017 (ICOCI2017). http://www.icoci.cms.net.my/icoci2017/
	The 3rd International Conference on Soft Computing in Data Science (SCDS 2017). https://aaec.uitm.edu.my/scds2017/
2016	The 2nd International Conference on Soft Computing in Data Science (SCDS 2016). https://fskm.uitm.edu.my/scds2016/
2015	The 1st International Conference on Soft Computing in Data Science (SCDS 2015). https://fskm.uitm.edu.my/scds2015/
Supervisions	
2019–	PhD Supervision Muhammad Hasbullah Mohd Razali. PhD (Statistics) CS953. A New Ant Based Decision Tree Algorithm for Imbalance Data. Main Supervisor. (In progress).
2021–	Ros Fadilah binti Deraman. PhD (Mathematics) CS952. Higher Order Finite Difference Method For Solving Goursat Problem. Co-Supervisor. (In progress).
2021–	Masters Supervision Annuur Zakiah binti Zainol. MSc (Mathematics) CS752. An Improved Ant Colony Optimization Algorithm for Predicting Bankcruptcy in Malaysia. Main Supervisor. (In progress)
2021–	Nurhazimah binti Basir. MSc (Transport and Logistics) (LT780). Multi-Objective Mixed Integer Programming Model of Vehicle Routing Problem for Sustainable Urban e-Grocery Delivery. Co-Supervisor. (In progress).
2019–	Nur Hadirah binti Khairul Anwar. MSc (Mathematics) CS752. Predicting Diabetes Using Ant Colony Optimization. Main Supervisor .
2016–2018	Siti Nor Fathihah Azahari. Master of Science (Mathematics) CS752. Fuzzy Time Series Sliding Window Model for Rainfall Forecasting. Main Supervisor . Completed 6 February 2018.
2019	Undergraduate International Research Interns Angga Ibnu Kholid. Universitas Islam Riau. 16/7/2019–7/8/2019
2018	Josua Iwanda & Sigit Prihantoro. Universiti Islam Riau. Lecturer Room Inventory System. 1/8/2018–27/8/2018.
	Bima Augustian Wana Putra & Royan Permana Rivaldi. Universiti Islam Riau. Library Room Reservation System. 8/1/2018–30/1/2018.
2017	Undergraduate Research Interns Daniel Chan. Diploma Sains Komputer (CS110). Science Laboratory Inventory System. 2/5/2017–25/6/2017.
	l

Undergraduate International Project Supervision

2020 Shella Eldwina Fitri. Universiti Islam Riau. Macro and Micro Graph Search: Optimizing A* Search Algorithm in Big Data. Completed January 2021. **Undergraduate Project Supervision** Nur Insyirah binti Ahmad Zammami. E-commerce text classification 2023 using Ant Colony Optimization. (In progress). 2022 Nur Aisyatul Husna Ahmad Yusri. Early Diabetes Risk Prediction using Ant Colony Optimization. Completed March 2023. Azfaruddin Azri. Prediction of Stroke using Ant Colony Optimization. Completed March 2023. 2021 Nurul Hanis Svafigah binti Mohd Ripin. Predicting Mortality Caused by Heart Failure using Ant Colony Optimization. Completed January 2022. Nurul Fathihah binti Mustapha. Prediction of Lung Cancer using Ant Colony Optimization. Completed August 2021. 2020 Nur Ibtisyam binti Zafri. Predicting Autistic Spectrum Disorder for Toddler using Ant Colony Optimization. Completed January 2021. Siti Sarah Agilah binti Che Ani. Predicting Breast Cancer using Ant Colony Optimization. Completed January 2021. 2019 Siti Aisyah binti Ismail. Predicting Heart Disease using Ant Colony Optimization. Completed June 2020. Nur Syafiqah binti Abdul Ghani. Predicting Bankruptcy using Ant Colony Optimization. Completed June 2020. Noor Shafiga Fazlien. Predicting Attackers of Online Shaming using Ant Colony Optimization. Completed June 2019. 2018 Aliff Adham bin Adnan. Prediction of Health Supplement Consumption using Ant Colony Optimization. Completed Dec 2018. Abdul Abbas Abdul Karim He. Predicting Area of Law Using Ant Colony Optimization. Completed May 2018. 2017 Umi Nasyrah binti Norizan. Predicting Timah Tasoh Reservoir Water Level Stages Using Ant Colony Optimization. Completed June 2017. Nor Amira Natasha Abd Rahman. Predicting Perlis Water Quality Using Ant Colony Optimization. Completed June 2017.

Syaidatul Nadia Sabri. Ant Colony Optimization for Forecasting Flood Based on Rainfall Distribution in Perlis. Completed June 2016.

Nurfaezah Mohamad Zahir. Ant Colony Optimization for Predicting Sg. Arau Water Level. Completed Dec. 2016.

Muhammad Arimi Syakir Ismail. Ant Colony Optimization for Predicting Water Crisis in Perlis. Completed June 2016.

Nur Wahida Baharuddin. Ant Colony Optimization for Forecasting Flood Based on River Water Level in Perlis. Completed June 2016.

2015

Nurul Atiqah Dzulkifly. Ant Colony Optimization Algorithm for Predicting Dengue Fever Types. Completed June 2015.

Zarin Sofia Zahari. Ant Colony Optimization Algorithm for Predicting Inflation Types in Malaysia. Completed June 2015.

Nor Astiqah Omar. Ant Colony Optimization for Prediction Software Piracy Tendency. Completed Dec. 2015.

2014

Nur'Aisyah Abdul Wahab. Factor Influencing Grape Production in Perlis: A Multiple Linear Regression Analysis. Completed Jun. 2014.

Nor Dalila Razali. Financial Credit Scoring Prediction Using Ant Colony Optimization. Completed Dec. 2012.

Innovations

2021

Saian R. & Mohd Zakuan Z. Z. (2021). CaseFinder-A Smartphone App for Searching Legal Cases. 4th Digitalised International Invention, Innovation and Design, Johor 2021. 20 February 2021 — 23 September 2021 https://play.google.com/store/apps/details?id=com.rizauddin.casefinder

Saian R. & Mohd Zakuan Z. Z. (2021). CaseFinder-A Smartphone App for Searching Legal Cases. The 10th Seminar on Innovation and Creativity (SIC 2021). Silver Medal. 12–17 July 2021 https://play.google.com/store/apps/details?id=com.rizauddin.casefinder

Saian R., Teoh Y. K. & Abu Hasan S. (2021). Covid-19 SIR Model with Vaccination. 4th International Malaysia-Indonesia-Thailand Symposium on Innovation and Creativity 2021 (iMIT SIC 2021). Bronze Medal. 24 August 2021 https://data-miners.github.io/projects/covid19/

Saian R., Teoh Y. K. & Abu Hasan S. (2021). Covid-19 SIR Model with Vaccination. The 10th Seminar on Innovation and Creativity (SIC 2021). Silver Medal / Top 3 Video Award. 12–17 July 2021 https://data-miners.github.io/projects/covid19/

2018

Saian R. & Mohd Zakuan Z. Z. (2018). Smartphone Assisted Legal Writer (SALeW). 1st Digitalised International Invention, Innovation & Design Competition Johor 2018. Gold Medal. 19 April 2018 — 1 July 2018 https://play.google.com/store/apps/details?id=com.rizauddin.salew

Saian R., Abdul Halim N., Darus N. A. Mohd Zakuan Z. Z. & Mat Hadzir N. (2017). Research Objectives Aid (ROA). Invention, Innovation & Design Exposition (iidex2017). Bronze Medal. 25–29 August 2017 https://play.google.com/store/apps/details?id=com.rizauddin.roa

Saian R. & Mohd Zakuan Z. Z. (2017). Smartphone Assisted Legal Writer (SALeW). The International Conference and Competition on Teaching and Learning (i-TeLearN2017). Silver Medal. 16 August 2017 https://play.google.com/store/apps/details?id=com.rizauddin.salew

- Saian R., Mohd Zakuan Z. Z., Darus N. A. & Abdul Halim N. (20-23 September 2016). Smartphone Assisted Legal Writer (SALeW). Invention, Innovation & Design Exposition (iidex2016). Bronze Medal. https://play.google.com/store/apps/details?id=com.rizauddin.salew
- Saian R. & Mohd Zakuan Z. Z., Darus N. A., Abdul Halim N., Mat Hadzir N. (27–30 April 2015). Anti-Plagiarism Graph Generator (APGG). Invention, Innovation & Design Exposition (iidex2015). Gold Medal. https://github.com/rizauddin/apgg
- Saian R. & Mohd Zakuan Z. Z. (7 April 2012). Malay Legal Text Indexer (Malay-LETI). *Invention, Innovation & Design 2012*, Universiti Teknologi MARA (Perlis). Bronze Medal.

Copyright

2023 Statistical Distance Evaluation Calculator. 7/2/2023. ref:CRLY2022W04865.

Halal Manufacturing Validator. 14/3/2021. ref:LY2021P02469.

Halal Source Validator. 14/3/2021. ref:RLY2021P02470.

Android Apps Developments

Google Play https://play.google.com/store/apps/developer?id=Rizauddin+Saian&hl=en_US

CaseFinder. A helpful tool for students to find legal cases in for Malaysia anywhere and at any time. https://play.google.com/store/apps/details?id=com.rizauddin.casefinder

SALeW-Legal Writing. An app that guide the students throughout the process of answering law questions. https://play.google.com/store/apps/details?id=com.rizauddin.salew

Research Objectives Aid. An app that provide students with a practicing tool in formulating correct keywords for their research objectives in their research paper. https://play.google.com/store/apps/details?id=com.rizauddin.roa

Ukur Tanah. A simple Malaysia land length and area units converter. https://play.google.com/store/apps/details?id=com.rizauddin.ukurtanah

Zakat Calculator. A simple app to calculate Zakat. https://play.google.com/store/apps/details?id=com.rizauddin.zakatcalc

Car Loan Calculator. A simple app to calculate monthly payments for car loan.https://play.google.com/store/apps/details?id=com.rizauddin.carloancalc

Home Loan Calculator. A simple app to calculate monthly payments for home loan.https://play.google.com/store/apps/details?id=com.rizauddin.homeloancalc

Discount Calculator. A simple app to calculate discounted price. https://play.google.com/store/apps/details?id=com.rizauddin.disccalc

LATEX Template

2021

uitmthesis - uitmthesis is a LaTeX class for writing thesis, dissertation or final year project report. This class was developed based on the "Guidelines on Thesis/Dissertation Format" handbook by IPSis Universiti Teknologi MARA (UiTM).

Overleaf: http://bit.ly/uitmthesis-overleaf

Github (Source Code): https://github.com/rizauddin/uitmthesis

Python

2016

APGG - Anti-Plagiarism Graph Generator

The "Anti-Plagiarism Graph Generator" program is developed to prevent plagiarism in Graph Theory course programming assignments.

Github (Source Code): https://github.com/rizauddin/apgg

Invited Talks

2022

Analitik Data Raya Dalam Pengauditan (Siri 1). Organized by Jabatan Audit Negara. 2 April 2022. Zoom.

2021

Gegar RIG-Semarak Penyelidikan: Proposal. Organized by FSKM, UiTM Perlis. 2 August 2021. Google Meet.

LaTeX Workshop: Writing Thesis in LaTeX for UiTM Students. Organized by FSKM, UiTM Perlis. 22 March 2021. Google Meet.

Optimizing FYP Into Journal Publications. Organized by FSKM, UiTM Perlis. 10, 23, 24 March 2021. Google Meet.

Bengkel Penilaian Peperiksaan Akhir Secara Atas Talian. Organized by FSKM, UiTM Perlis. 1 January 2021. Bilik IT, Perpustakaan Dato' Jaafar Hassan, UiTM Perlis.

Calculus 1 is Easy. Organized by FSKM, UiTM Perlis. 20 June 2020. YouTube Live Streaming. https://youtu.be/a0zQqGvqWHA

2019 Scientific Programming Using Excel VBA for Beginners. Organized by Persatuan Manatics, UiTM Perlis. LT1, UiTM Perlis.

Introduction to Google Forms. Organized by UiTM Perlis. 19 July 2019.

Video Pitching Workshop. Organized by FSKM, UiTM Perlis. 3 May 2019.

Python Workshop. Organized by Manatics, UiTM Perlis. 19 April 2019.

Mendeley Workshop. Organized by Prodi Teknik Informatika, Universitas Islam Riau. 10 April 2019.

LaTeX Workshop for Students. Organized by Prodi Prodi Teknik Informatika, Universitas Islam Riau. 10 April 2019.

Python Programming. Organized by Prodi Teknik Informatika, Universitas Islam Riau. 10 April 2019

Talk: Data mining – Concept and its Applications. Organized by Prodi Teknik Informatika, Universitas Islam Riau. 9 April 2019.

LaTeX Workshop for Lecturers. Organized by Prodi Teknik Informatika, Universitas Islam Riau. 9 April 2019.

Talk: Data Classification with Ant Colony Optimization. Organized by Prodi Teknik Informatika, Universitas Islam Riau. 8 April 2019.

Video Animation Workshop. Organized by Prodi Teknik Informatika, Universitas Islam Riau. 8 April 2019.

Video Animation for Beginners. Organized by FSKM, UiTM Perlis. 26 October 2018.

Simple LaTeX Tutorial. Organized by FSKM, UiTM Perlis. 20 July 2018. https://github.com/rizauddin/simple-latex-tutorial

Introduction to Python Programming for Calculus. Organized by FSKM, UiTM Seremban 3. 19 October 2017. https://github.com/rizauddin/Lab-Assignment-MAT421

Screencast-o-matic (in "Taklimat Pembangunan MOOCs Storyboard"). Organized by UiTM Cawangan Perlis. 22 May 2017.

Zotero Reference Manager (in "Bengkel Jom tulis Artikel"). Organized by Jabatan Sains Matematik & Statistik, UiTM Cawangan Perlis. 21 April 2017.

Data Science with Ant Colony Optimization (in "50 Shades of Data Science? Real Data Science. Real World. Real Results" Forum). Organized by Axiata Intelligence Unit, Axiata Group Berhad. Axiata Tower, Kuala Lumpur. 5 October 2016.

Android Application Development Workshop. Bilik IT, Perpustakaan Dato' Jaafar Hassan, UiTM Cawangan Perlis. Organized by Jabatan Sains Matematik & Statistik, UiTM Cawangan Perlis. 3 September 2016.

Anti-Plagiarism Graph Generator. Lightning Talk. PyCon MY 2016. International University of Malaya-Wales (IUMW). 27 August 2016.

Android Workshop for CS143. Bilik IT, Perpustakaan Dato' Jaafar Hassan, UiTM Cawangan Perlis. Organized by Jabatan Sains Matematik & Statistik, UiTM Cawangan Perlis. 27 February 2016.

Final Year Project MSP660 Writing Style. Bilik Inovasi, PJI, UiTM Cawangan Perlis. Organized by Jabatan Sains Matematik & Statistik, UiTM Cawangan Perlis. 26 February 2016.

Scientific Programming Using Excel for Beginners: Newton's Method. Lab 1, UiTM Cawangan Perlis. Organized by Jabatan Sains Matematik & Statistik, UiTM Cawangan Perlis. 5 February 2016.

Hybrid Smartphone App Development: An Introduction. Lab 1, UiTM Cawangan Perlis. Organized by Jabatan Sains Matematik & Statistik, UiTM Cawangan Perlis. 22 January 2016.

2015 Android Apps Development. Lab 2, UiTM Cawangan Perlis. 17 September 2015.

Python Programming. Bilik IT, Perpustakaan Dato' Jaafar Hassan, UiTM Cawangan Perlis. Organized by iLQAM UiTM Cawangan Perlis. 14 May 2015.

2013 Marking Assignment Electronically (e-marking). Bilik IT, Perpustakaan Dato' Jaafar Hassan, UiTM Cawangan Perlis. Organized by iLQAM UiTM Cawangan Perlis. 27 September 2013.

Kursus EndNote. Bilik IT, Perpustakaan Dato' Jaafar Hassan, UiTM Cawangan Perlis. Organized by iLQAM, UiTM Cawangan Perlis. 22 January 2013.

2009 Bengkel Kemahiran Komputer (Membina Blog). Makmal 9, UiTM Cawangan Perlis. Organized by Jabatan Sains Matematik & Statistik, UiTM Cawangan Perlis. 2 October 2009.

Bengkel Late. Makmal Komputer (Pensyarah), UiTM Cawangan Perlis. Organizedby Unit Penyelidikan, Pembangunan & Pengkomersilan (URDC), UiTM Cawangan Perlis. 17 June 2008.

Bengkel DreamWeaver. Makmal Bahasa 3 & 4, UiTM Cawangan Perlis. Organized by Akademi Pengajian Bahasa, UiTM Cawangan Perlis. 12–13 April 2006.

Bengkel Matematik (Maple). Makmal Komputer 3, UiTM Cawangan Perlis. Organized by Persatuan Q-Sciences, UiTM Cawangan Perlis. 26 March 2006.

2005

Bengkel Penggunaan Microsoft Access. Makmal Komputer 3, UiTM Cawangan Perlis. Organized by DICE, UiTM Cawangan Perlis. 29–30 June 2005.

Bengkel Pemantapan Perisian Microsoft Excel. Makmal Bahasa 3, UiTM Cawangan Perlis. Organized by Jabatan Sains Matematik & Statistik, UiTM Cawangan Perlis. 18 April 2005.

Publications

2022

Nasution, A. H., Fitri, S. E., Saian, R., Monika, W., & Badruddin, N. (2022). Determining intermediary closely related languages to find a mediator for intertribal conflict resolution. Information (Switzerland), 13(12), 557. https://doi.org/10.3390/info13120557

Mohd Razali, M. H., Saian, R., Moktar, B., Bee Wah, Y., & Ku-Mahamud, K. R. (2022). Performance of ACO-based decision tree algorithm with imbalanced class data sets—A heuristic approach. 2022 3rd International Conference on Artificial Intelligence and Data Sciences (AiDAS), 29–38. https://doi.org/10.1109/AiDAS56890.2022.9918761

Zakuan, Z., & Saian, R. (2022). Cyberbullying victimization during COVID-19: Psychological effects and the legal measures. International Journal of Public Health Science, 11(1), 232–239. https://doi.org/10.11591/ijphs.v11i1.21047

2021

Saian, R., & Mohd Zakuan, Z. Z. (2021). Casefinder: A Non-Law Students Smartphone App for Legal Writing. 2021 3rd International Conference on Modern Educational Technology, 13–19.

Mohd Razali, M. H., Saian, R., Yap, B. W., & Ku-Mahamud, K. R. (2021). An improved ACO-based decision tree algorithm for imbalanced datasets. International Journal Mathematical Modelling and Numerical Optimisation, 11(4), 412–427.

Mohd Razali, M. H., Saian, R., Yap, B. W., & Ku-Mahamud, K. R. (2021). A class skew-insensitive ACO-based decision tree algorithm for imbalanced data sets. Indonesian Journal of Electrical Engineering and Computer Science, 21(1), 412–419.

Anwar, N. H. K., Saian, R., & Bakar, S. A. (2021). An enhanced ant colony optimization with Gini index for predicting type 2 diabetes. AIP Conference Proceedings, 2365(1), 020004.

Saian, R., Mohd Zakuan, Z. Z., Hashim, H., & Mahmood, A. (2020). Smartphone app for searching legal cases for non-law students. International Journal on Emerging Technologies, 11(4), 419–422.

Saian, R., Mohamad Fauzi, N. S. F., Mohd Zakuan, Z. Z., Hashim, H., & Mahmood, A. (2020). Predicting attackers of cyberbullying using ant colony optimization in combating psychological effects among the victims. International Journal on Emerging Technologies, 11(5), 205—208.

Anwar, N. H. K., & Saian, R. (2020). Predictive Accuracy for Two Diabetes Datasets using Ant-Miner Algorithm. International Journal of Scientific and Technology Research, 9(4), 239–242.

Kadir, E. A., Dayana, N. E., Rosa, S. L., Othman, M., & Saian, R. (2020). Prediction of Hotspots in Riau Province, Indonesia Using the Autoregressive Integrated Moving Average (ARIMA) Model.

2019

Abdul Wahab, N., & Saian, R. (2019). Empowering Research Skills Among Undergraduates: Focus on Computer and Mathematics Students.

Saian, R. (2019). A Simple Zotero Tutorial. In Empowering Research Skills Among Undergraduates: Focus on Computer and Mathematics Students (pp. 52–59).

Zahir, N. M., & Saian, R. (2019). Ant Colony Optimization For Predicting Flood Based On River Water Level. International Journal of Scientific & Technology Research, 8(11), 40–43.

Labellapansa, A., Syafitri, N., Abdul Kadir, E., Saian, R., Saibah, A., Ahmad, M., & Nurain, S. (2019). Prototype for early detection of fire hazards using fuzzy logic approach and Arduino microcontroller. International Journal of Advanced Computer Research, 9, 276–282. https://doi.org/10.19101/IJACR.PID47

Syafitri, N., Labellapansa, A., Kadir, E. A., Saian, R., Zahari, N. N. A., Anwar, N. H. K., & Shaharuddin, N. E. M. (2019). Early Detection of Fire Hazard Using Fuzzy Logic Approach. International Journal of Advanced Computer Research, 9(43), 252–259.

- 2018
- Saian, R., Abbas, M. A. (2018). Proceedings of the Second International Conference on the Future of ASEAN (ICoFA) 2017 Volume 2, Springer Singapore. https://link.springer.com/book/10.1007%2F978-981-10-8471-3
- Azahari, S. N. F., Saian, R., Othman, M. (2018). Forecasting Rainfall Based on Fuzzy Time Series Sliding Sindow Model, Proceedings of the Second International Conference on the Future of ASEAN (ICoFA) 2017. Volume 2, Springer Singapore. https://link.springer.com/chapter/10.1007/978-981-10-8471-3_14
- Abd Aziz, K. A., Abduh, W. M. Y. M., Idris, M. F. I. M., & Saian, R. (2018). An evaluation of binomial model with implied volatility in pricing warrant. Jurnal Intelek, 13(1), 37–43.
- Zakuan, Z. Z. M., Saian, R., & Ismail, R. (2018). Innovation In Legal Education: SALeW As A Non-Law Students' Tool For Legal Writing. International Journal of Scientific and Technology Research, 7(11), 123–126.
- Saian, R., & Zakuan, Z. Z. M. (2017). SALeW: A Non-Law Students' Tool for Legal Writing. Asian Journal of Management Sciences & Education, 6(3), 139–143. http://ci.nii.ac.jp/naid/40021277771/
 - Sabri, S. N., & Saian, R. (2017). Predicting Flood in Perlis Using Ant Colony Optimization. Journal of Physics: Conference Series, 855(1), 12040. https://doi.org/10.1088/1742-6596/855/1/012040
 - Omar, N. A., Zakuan, Z. Z. M., & Saian, R. (2017). Software Piracy Detection Model Using Ant Colony Optimization Algorithm. Journal of Physics: Conference Series, 855(1), 12031. https://doi.org/10.1088/1742-6596/855/1/012031
 - Azahari, S. N. F., & Saian, R. (2017). An Enhancement of Sliding Window Algorithm for rainfall Forecasting. Proceedings of the 6th International Conference on Computing and Informatics, ICOCI 2017 (pp. 23–28).
- 2016 Ruslan, R., Nor, A. H. M., Saian, R., Omar, M. H., & Manaf, M. (2016). Performance Evaluation of Wi-Fi and White-Fi: Simulation Approach. 2016 UKSim–AMSS 18th International Conference on Computer Modelling and Simulation (pp. 343–346).
- 2015 Mohamed, M., Jusoh, M. S., Saian, R., Fadzil, M. N., & Noorani, M. S. M. (2015). Existence of positive solution to a second order mpoint boundary value problem. Global Journal of Pure and Applied Mathematics, 11(5), 3639–3653.
- Ruslan, R., Saian, R., & Teramizi, N. M. (2014). Performance Analysis of AODV and WCETT Routing Protocols in Cognitive Radio Ad-Hoc Network (CRAHN). International conference on Intelligent Systems, Modelling and Simulation (ISMS 2014).

- Othman, M., Saian, R., Nazri, M. N., Kamal, N. S. A., & Liyana, N. (2013). Fuzzy Forecasting For Water Level of Flood Warning System in Perlis. International Symposium on Mathematical Sciences & Computing Research 2013 (iSMSC 2013). Perak, Malaysia.
- Abd Aziz, K. A., Mohd Idris, M. F. I., & Saian, R. (2012). Adaptation of Warrant Price with Black Scholes Model and Historical Volatility. Proceedings of 2nd Regional Conference on Applied and Engineering Mathematics (RCAEM-II). Penang, Malaysia: UNIMAP.

Saian, R., & Ku-Mahamud, K. R. (2012). Ant Colony Optimization for Rule Induction with Simulated Annealing for Terms Selection. UKSim 14th International Conference on Computer Modelling and Simulation (UKSim2012) (pp. 33–38). Cambridge, United Kingdom: IEEE Computer Society. doi:http://doi.ieeecomputersociety.org/10.1109/UKSim.2012.115.

- 2011 Ku Mahamud, K. R., & Saian, R. (2011). A New Ant Based Rule Extraction Algorithm for Web Classification (No. FRGS S/O code 11873). Kedah, Malaysia: College of Arts and Sciences, Universiti Utara Malaysia.
 - Saian, R., & Ku-Mahamud, K. R. (2011). Classification Rule Discovery with Ant Colony Optimization. Second International Soft Science Conference (ISSC 2011). Ho Chi Minh City, Vietnam.
 - Saian, R., & Ku-Mahamud, K. R. (2011). Hybrid Ant Colony Optimization and Simulated Annealing for Rule Induction. UKSim 5th European Symposium on Computer Modeling and Simulation (pp. 70–75). Madrid, Spain: IEEE Computer Society. doi:http://doi.ieeecomputersociety.org/10.1109/EMS.2011.17.
- Saian, R., & Ku-Mahamud, K. R. (2010). Comparison of Attribute Selection Methods for Web Texts Categorization. Second International Conference on Computer and Network Technology (ICCNT2010) (pp. 115–118). Bangkok, Thailand: IEEE Computer Society. doi:http://doi.ieeecomputersociety.org/10.1109/ICCNT.2010.13.
- Saian, R., & Ku-Mahamud, K. R. (2004). Searching Malay Text using Stemming Algorithm. Journal of Information and Communication Technology (JICT), 3(2), 107–117.
- Ting, K. L., Saian, R., Lim, K. G., & Wahiddin, M. R. (1998). Quantum Trajectory Simulations of the Photon Statistics of a Cavity QED Laser. Jurnal Fizik Malaysia, 19(3), 99–103.