PERSONAL PARTICULARS

Name	:	**Kanendra Naidu,** *PhD, C.Eng (UK), P.Tech (EE), SMIEEE, MIET*	
Nationality	:	**Malaysian**	
Current Status	:	**Senior Lecturer**	
Address	:	**Universiti Teknologi MARA (UiTM) Shah Alam, Fakulti Kejuruteraan Elektrik, Jalan Ilmu 1/1, 40450 Shah Alam, Selangor (O)** **No.110C, Tai Kwong Mansion, Jalan Berhala, Brickfields, 50470, Kuala Lumpur (H)**	
Contact No.	:	**+6019-2921784 (HP)**	**+603-55442000 (O)**
E-Mail	:	**kanendra@uitm.edu.my**	**vkanendra@gmail.com**

EDUCATIONAL BACKGROUND

Doctor of Philosophy (University of Malaya) **2012 – 2015**
Title of Research : Power System Network Splitting and Load Frequency Control Optimization using ABC Based Algorithms

Masters Degree in Electrical Energy and Power System (University of Malaya) **2009 – 2011**
Grade/CGPA : 4.0
Title of Research : Load Frequency Control Analysis using Fuzzy Logic Controller

Bachelor of Engineering (Hons) Electrical and Electronic (UCSI University) **2005 – 2008**
Grade/CGPA : 3.90

International Advanced Diploma in Computer Engineering (Informatics) **2003 – 2004**
Grade/CGPA : 3.74
Major : Electronics & IT

Diploma in Electronic and Information Technologist (Informatics) **2002 – 2003**
Grade/CGPA : 3.50

AREA OF EXPERTISE

Artificial Intelligence in Power System, Intentional Controlled Islanding, Network Reconfiguration, Load Frequency Control Optimization, Energy Management, Sustainable Energy Integration, Carbon Emission Analysis, Electrical Vehicle, Battery 2nd Life Evaluation

GRANTS

PI

- Fundamental Research Grant Scheme **(FRGS/1/2021/TK0/UITM/02/18) – RM61,900.00** 2021 - 2023
- Examining the role of Virtual Power Plant (VPP) in providing frequency control ancillary services during intentional controlled islanding (ICI)

- Short Term Research Grant **(STRG No: 15072) – RM20,000.00** 2018 – 2020
- An Efficient Maneuvering Control System Designing for Unmanned Under & Sea Surface Vehicle (UUSV) For Sea Surveillance Applications

Co-PI

- MyIS Komuniti **(100-TNCPI/GOV 16/6/2 (002/2025) – RM 114,900.00** 2025 - 2026
- Akuaponik Pintar Solar: Meningkatkan Kemandirian Golongan Orang Kurang Upaya Di Pusat Pemulihan Dalam Komuniti Teluk Bahang

- IMAP MOHE **(600-RMC/IMaP 5/3 (009/2024) - RM 168,000.00** **2024 - 2026**
- Integration of Deep-Learning Based Driving Behavior Detection Module with Smart Dashcam

- Fundamental Research Grant Scheme **(FRGS/1/2024/TK07/UITM/02/19) – RM74.200.00** 2024 - 2026
- Fault Signature Determination in Integrated Net Energy Metering-Distribution Network (NEM-DN) Based on Neutral-To-Earth (NEV) Profile Using Modified S-Transform (MST)

- Fundamental Research Grant Scheme **(FRGS/1/2023/TK07/UITM/02/23) - RM 123,500.00** 2023 - 2026
- Modelling of Multi-Scale Vision Transformer (VIT) with Scalable Attention for Facial Expression Analysis of Distracted Drivers

- Fundamental Research Grant Scheme **(FRGS/1/2022/TK07/UITM/02/3) - RM 115,000.00** 2022 – 2025
- Derivation of a new EV charging pattern model for photovoltaic-based charging stations (PV-CS) in ensuring cost minimization towards decarbonization efforts in Malaysia.

- UiTM Research Grant Scheme **(600-RMC/KEPU 5/3 (012/2021)) - RM 40,000.00** 2021 - 2023
- Identification Of Potential Fire Hazard Based on Voltage and Current Profile

- Micro Industry Hub (MIH) **(MIH-(001/2020)) - RM 198,000.00** 2020 - 2026
- Vehicle Intelligence and Telematic Lab (VITAL)

- Short Term Research Grant **(STRG No: 17071) – RM20,000.00** 2017 – 2020
- Optimal Placement of Flexible AC Transmission Systems (FACTS) Devices in Transmission Network for Online Voltage Stability Enhancement

- Fundamental Research Grant Scheme **(FRGS 2017-1)** 2017 – 2020
- The Optimal Location of STATCOM and BESS in Smart Grid System for Voltage Stability Improvement using PSO Adaptive Neural Network Hybrid Algorithm

RESEARCH

H-Index / Citation

- Google Scholar (21 / 2585)
- Scopus (19 / 1840)
- Web of Science (15 / 1195)

Review Activity

- ISI-indexed Journals – International Journal of Electrical Power and Energy Systems (IJEPES), IET Generation, Transmission & Distribution, International Transactions on Electrical Energy Systems and Energy Conversion and Management, Applied Soft Computing, IEEE Access

Research Activities

- Research mobility at UPC (Universitat Politècnica de Catalunya) Barcelona under Erasmus to deliver:
  1. Lecture 1: Machine learning (ANN) for Propagation of RF Signals and Path Loss Prediction
  2. Lecture 2: Optimization (PSO and ABC) for Loop Antenna Design
  3. Lecture 3: PV Penetration and Its Technical Challenges in Malaysian Grid
- Research team member in collaboration with Nilai University on evaluation on ONAN transformer oil analysis assessment in relation to thermal gradient behavior at Malaysian distribution grid
- Technical committee STI 2023 and Technical Forum Moderator for PECON 2022, ICPEA 2023
- Co-chair of Publication for UniKL BMI's ICE2T 2019 conference
- Session Chair - ICETAS 2017, POWERCON 2022, PECON 2022, ICPEA 2024, ICICT 2024
- Conference Judge – 9th & 11th EURECA (Taylor's University)

AWARDS

Silver Medal at MAGIEX 2024 for Enhancement of the Floating Solar PV System Capabilities via Peltier Module Integration System

Silver Medal at SDG Innovation@IBSD Virtual Competition 2023 for Gridguard: Revolutionizing Grid Resilience with Virtual Power Plant (VPP) Integration and Load Frequency Control (LFC) Optimization During Intentional Controlled Islanding (ICI)

Bronze Award at iidex 2023 fpr DFC-Ship: Distributed Fault Classification for Shipboard Power Distribution Systems

STAR Scholarship Award for B.Eng (Hons) Electrical & Electronics (UCSI University)

Dean's List Award for May 2005 Semester, January 2006 Semester, May 2006 Semester, September 2006 Semester & January 2007 Semester

STAR Scholarship Award for Diploma and Advance Diploma in Computer Engineering Majoring in Electrical (Informatics)

PROFESSIONAL AFFILIATION

- Chartered Engineer, IET UK (**696417**), IET Member **(1100647567)**
- Professional Technologist - ELECTRICAL & ELECTRONICS TECHNOLOGY (EE) **(MBOT PT20050170)**
- Senior IEEE Member **(Membership No: 95023944)**
- Graduate member with Board of Engineers Malaysia (BEM) **(Registration No: 57997A)**

CONSULTANCY

Technical Consultant Engineer (Electrical)

- AMTEL Cellular Sdn. Bhd. on Battery 2nd Life Project — 2024 - 2025

CIAST Fellowship Program (Mentor)

- Optimization of Load Frequency Control using Nature Inspired Algorithm — 2024

Audit Panel Member

- BEM ETAC Audit Panel Member for Diploma programme — 2022 - 2033

External examiner

- Segi University – BEng (Hons) in Electrical & Electronic Engineering — 2017 - 2025
- Segi University – BEng (Hons) in Mechanical Engineering — 2017 - 2021

Panel examiner

- PhD: Wang Jianfeng (Segi University) — 2024
- Masters (Research): Muhammad Alif bin Mansor (UiTM) — 2023
- Masters (Research): Nurul Najwa Binti Anuar (UniKL) — 2020
- PhD: Mr Kameswara Satya Prakash Oruganti (Taylor's University) — 2019

Speaker

- Keynote Speaker at Seminar on Vehicle Recycling in ASEAN Region: The Malaysia Chapter on ERIA Publication Launching Event - Advancing Circular Economy Practices in Malaysia's Automotive Sector: Current Landscape and Industry Commitment — 2025

- Keynote Speaker at International Conference on Futuristic Information and Communication 2025 - Artificial Intelligence for Smart Cities: Transforming Urban Living through Data, Intelligence and Connectivity — 2025
- Webinar on Carbon Capture, Storage, and Emission Tracking at IIIT, Kottayam — 2024
- Webinar on Real Time Applications of Arduino Microcontroller at Paavai Engineering College, India — 2023
- MATLAB Workshop for Mastering the Basic at UiTM — 2023
- Emerging Sustainability Trends: Driving Positive Change for a Better Tomorrow at IEM-JSM-ST ASEAN ELECTROTECHNICAL SYMPOSIUM & EXHIBITION (IESE) 2023 — 2022
- Technical Forum Moderator for PECON 2022: Key Strategies and Initiatives in Ensuring Energy Supply's Sustainability and Resiliency — 2022
- Load Frequency Control: Intelligent Approach for Optimum Performance (IEEE PES Webinar) — 2020
- Webinar on Industrial Revolution 4.0: Impact on Power System (Taylor's University) — 2020
- Webinar on Effective Applications of AI tools (Hindusthan College of Engineering and Technology, India) — 2020
- Webinar on Nature-based Swarm Optimization for Power System Problems (Amrita School of Engineering, India) — 2020
- Webinar on Particle Swarm Optimization (PSO) technique: Application in Power System (Paavai Engineering College) — 2020
- Artificial Neural Network (ANN): Application in Power System Workshop (UniKL BMI) — 2019
- Matlab and Artificial Neural Network Workshop Workshop (UniKL BMI) — 2019

SUPERVISION

Completed

Masters

- **Supervision** at UiTM — 2021
  Title: Examining the role of Virtual Power Plant (VPP) in providing frequency control ancillary services during intentional controlled islanding (ICI)Student: Wan Amir Azrin Bin Wan Shuhaimi
- Co-Supervision at UniKL BMI — 2017
  Title: Optimization of Integrated Photovoltaic, Biogas, Biomass and Diesel Power Generation Systems with Battery Storage for Water Treatment Plant Student: Kannan a/l Sandresan

PhD

- Co-Supervision with UiTM Shah Alam — 2022

Title: Induced Current Protection Scheme of Stroke-Induced Current for Large-Scale Solar Photovoltaic System
Student: Nurul 'Aini Binti Mohamad Zakaria 2017

- Co-Supervision with University of Malaya
  Title: Network Reconfiguration and Distributed Generator Optimization for System Improvement Based on Dataset and Metaheuristic Technique
  Student: Munir Azam Mohammad 2018
- Co-Supervision with Taylor's University
  Title: Investigation of Vienna Rectifier Topology for the Future Electric Vehicle Charging Stations
  Student: Gowthamraj Rajendran 2018
- Co-Supervision at UniKL BMI
  Title: Intelligent Control System for Energy and Comfort Management in Smart Building
  Student: Miqdad Abdul Aziz

In Progress

Masters

- Co-Supervision with UiTM Shah Alam 2025
  Title: Optimization of Ev Charging Station Placement Considering the Impact of Load Balancing In Distribution Network
  Student: Nurdiana Natasha Binti Zailani
- Co-Supervision with UiTM Shah Alam 2025
  Title: Optimization of EV Charging Patterns based on Network Reconfiguration considering Photovoltaic-Based Stations for Power Loss Minimization Using Hybrid PSO-MVO Algorithms
  Student: Nur Aina Fatini Binti Roslan
- Co-Supervision with UiTM Shah Alam 2025
  Title: Predicting Battery Health and Remaining Useful Life by Integrating LSTM and MDd For Energy Storage and Electric Vehicles Systems
  Student: Hafiz Sofiuddin Bin Abdul Muzahid
- Co-Supervision with UiTM Shah Alam
  Title: Open-Circuit Fault-Tolerance Dual Active Bridge Converter Topology 2023
  Student: Mohamad Syazwan Bin Mohamed

PhD

- **Supervision** with UiTM Shah Alam 2024
  Title: Research on Photovoltaic Power Prediction Technology Based on Machine Learning
  Title: Li Yunqiao
- Co-Supervision with UiTM Shah Alam
  Title: Intelligent Lithium Health Improvement Estimation of Battery Management System using Deep-Learning Network Integration 2023
  Student: Mohammad Lukman Bin Mohd Yasin

- Co-Supervision with UiTM Shah Alam
  Title: Derivation of a New Ev Charging Pattern Model for Photovoltaic-Based Charging Stations (PV CS) in Ensuring Cost Minimization Towards Decarbonization Efforts in Malaysia 2023
  Student: Amalina Izzati Binti Md Isa
- Co-Supervision with UiTM Shah Alam 2023
  Title: Research on Estimation of Soc and Soh of Lithium Ion Battery Based on Deep Learning
  Student: Pan Xiaohong
- Co-Supervision at UniKL BMI 2018
  Title: A Reliability Evaluation for Optimum Photovoltaic Power System
  Student: Zaki Abdul Karim
- Co-Supervision at UPM 2017
  Title: Multi-microgrid system stability enhancement incorporating FACTS devices using hybrid analytical-metaheuristic optimization technique.
  Student: Bazilah Ismail

WORK EXPERIENCE

Senior Lecturer (UiTM Shah Alam) **Jan 2021 – till date**

- Member of Centre for Electrical Power Engineering Studies at Faculty of Electrical Engineering
- Committee member for SAR EAC 2022 & SRR MQA 2022
- Jury committee member for Green Campus UiTM 2021 Sustainability Programme
- Resource person for Electrical Power Systems for Railway

Head of Electrical Technology Section (UniKL BMI) **Nov 2018 – Nov 2020**

- PIC for development of Bachelor of Electrical Engineering Technology (Sustainable Energy) and Bachelor Electrical Engineering Technology (High Voltage with Chargeman competency)
- RMK 12 project leader for High Voltage Facility setup at UniKL BMI
- PIC in setting up SIEMENS Innovation and Resources Training Center (SIRTC) at UniKL BMI
- Planning manpower and budget allocation (OPEX and CAPEX) for Electrical Technology Section
- Development of strategic partnership with Segi University on High Voltage facilities.
- KPI setting and monitoring and special task allocation
- Special tasks for section:
  1. ISO, MQS, ETAC audit preparation and monitoring
  2. Technical CSRs – Wiring works at local establishment, Siemens / AutoCAD for high school students
  3. Short courses – Siemens / AutoCAD / Transformer Analysis
  4. RMK11 – Zero Energy Building

Electrical Technology Program Coordinator (UniKL BMI) **March 2017 – Oct 2018**

- PIC for BET Electrical ETAC SAR
- CQI and monitoring for CLOs and PLOs attainment for BET Electrical programme in line with ETAC requirement – Sydney Accord

- Committee member in charge of New Programme Development at institute level (IPDMC)
- Development of modular and part time (evening classes) programme for BET Electrical
- Development of course syllabus for Masters in Electrical Engineering, bridging progamme (EAC-ETAC) and short courses
- Final year project committee member – speaker and vetting committee
- Final exam vetting committee member

Senior Lecturer (UNIKL BMI) **Sept. 2016 – Dec 2020**

- Lecturer and subject leader for Electrical subjects and supervisor for final year degree / diploma projects - Measurement and Instrumentation, Automation and Robotics, Engineering Design, Electrical System Design in Building
- Final Year Project committee member in charge of workshop/seminars and project briefings.
- Electrical club advisor for student activities and CSR programme

Post-Doctoral Researcher (University of Malaya) **Nov. 2015 – June 2016**

- Assisting in supervising Masters and PHD research projects.
- Lecturing Degree and Masters students for electrical subjects.

Part time Lecturer (UiTM Shah Alam) **Feb. 2014 – Aug. 2015**

- Conducting lectures and preparing internal assessment for the following subjects: Artificial Intelligence in Power System, Electrical Machines and Electrical Power

Research Assistant (University of Malaya) **Jan. 2012 – Oct. 2015**

- In charge of handling the High Impact Research (H16001-00-D000004) grant.
- Research assistant with University Malaya Power and Energy System (UMPES) Research Group
- Writing research proposals and assisting in supervising students for their Degree and Masters final year project.
- In charge of handling laboratory experiments for electrical subjects.

Tutor (UCSI University) **Jan. 2009 – Dec. 2011**

- Lecturer for Electrical & Electronic Engineering Diploma / International Degree subjects: Circuit Analysis 2, Microprocessor Based Systems, Introduction to Linear Algebra
- Supervisor for final year diploma projects.
- Lab tutor in charge of the Power Systems & Machines laboratory. In charge of setting up laboratory experiments and preparation of lab manuals for following subjects: Power Systems, Power Electronics, Electrical Machines, Microprocessor Systems, Electrical Power, Computing for Engineers (C++ programming), Circuit Analysis, Microprocessor Based Systems
- Committee member of Faculty Learning & Teaching in charge of reporting faculties' facility and quality control & assurance.
- Committee member of Faculty Research & Scholarly Activities in charge of assisting research undertakings by students involving electrical projects.

Electrical Consultant Engineer at UPA (United Perunding & Associates) **Jan. 2008 – Jan. 2009**

- Electrical consultant engineer for construction projects under 33kV.
- Undertaking tasks related to electrical services such as lighting design, cable routing, main and distribution board design, telephone system and lightning protection design.
- Liaising with the authority (TNB & Telekom) in matters pertaining to electrical and telephone services.
- Attend site meetings and performing site supervision for projects in charge.
- Preparing tender documents, tender evaluation reports, project cost estimates, budget and payment issues pertaining to project in charge.

Trainee Engineer at TNB (Tenaga Nasional Berhad) **Nov. 2006 – Dec. 2006**

- Assisting the field service team in setting up new substations and assisting in tasks performed by the Operation and Maintenance Dept. such as substation shutdown and maintenance, cable jointing and street lighting.

PUBLICATIONS

Academic Journals
(Published)
2025

Boopathi, D., Jagatheesan, K., Samanta, S., **Naidu, K.**, & Anand, B. (2025). Optimum Solution for System Stability of Interconnected Power Grid Using Hybrid Genetic Firefly Algorithm Optimized PID Controller. In Optimizing Solutions for Real-Life Problems (pp. 163-179). Singapore: Springer Nature Singapore.

Izzati, A., Mohamad, H., **Naidu, K**., Sapari, N. M., Awalin, L. J., & Yasin, Z. M. (2025). Optimizing Electric Vehicle Charging Station Placement: Comparative Analysis. SSRG International Journal of Electrical and Electronics Engineering, 12(4), 241-251.

Ahmad, M. S., Mansor, N. N., Mokhlis, H., **Naidu, K.,** Mohamad, H., & Ramadhani, F. (2025). Demand Response Program towards Sustainable Power Supply: Current Status, Challenges, and Prospects in Malaysia. IEEE Access. - **ISI Indexed**

2024

Boopathi, D., Jagtheesan, K., Samanta, S., & **Naidu, K**. (2024). Performance Analysis of a Multi-objective Function-Based PID Controller for System Frequency Regulation. In Applied Multi-objective Optimization (pp. 115-132). Singapore: Springer Nature Singapore.

Zakaria, N. A. M., Hussain, M. N. M., **Vijyakumar, K. N**., Ibrahim, I. R., Damanhuri, N. S., & Ahmad, N. F. (2025). A Novel Induced Current Protection Scheme for Large-Scale Solar Photovoltaic Systems Using Early Streamer Emissions. *IIUM Engineering Journal*, *26*(1), 187-204. - **ISI Indexed**

2023

Aziz, M., Kadir, K., Azman, H. K., & **Vijyakumar, K**. (2023). Optimization of Air Handler Controllers for Comfort Level in Smart Buildings Using Nature Inspired Algorithm. Energies, 16(24), 8064.

2022

Awalin, L. J., Halim, S. A., Syahiman, Ramli, A., **Naidu, K.,** Ismail, B., ... & Ali, I. (2022). Dynamic modeling of power network-integrated wind turbine. Wind Engineering, 46(6), 1806-1819. - **ISI Indexed**

Rajendran, G., Vaithilingam, C. A., **Naidu, K**., Alsakati, A. A., Oruganti, K. S. P., & Fauzan, M. F. (2022). Dynamic Voltage Stability Enhancement in Electric Vehicle Battery Charger Using Particle Swarm Optimization. IEEE Access, 10, 97767-97779. (ISI-Cited Publication) - **ISI Indexed**

Mohamad, H., Muda, M., Salim, N. A., Yasin, Z. M., & **Naidu, K.** (2022, March). Islanding Detection Based on Rate of Change of Frequency over Active Power and PQ Load Insertion for Synchronous Distributed Generation. In 2022 IEEE International Conference in Power Engineering Application (ICPEA) (pp. 1-6). IEEE. ***(Scopus indexed)***

Alsakati, A. A., Vaithilingam, C. A., Alnasseir, J., **Naidu, K**., & Rajendran, G. (2022). Transient stability enhancement of grid integrated wind energy using particle swarm optimization based multi-band PSS4C. IEEE Access, 10, 20860-20874. - **ISI Indexed**

Kumarakrishnan, V., Vijayakumar, G., Jagatheesan, K., Boopathi, D., Anand, B., & **Kanendra Naidu, V.** (2022). PSO Optimum Design-PID Controller for Frequency Management of Single Area Multi-Source Power Generating System. In Contemporary Issues in Communication, Cloud and Big Data Analytics (pp. 373-383). Springer, Singapore.

2021

Mohamad, H., Yasin, Z. M., Salim, N. A., Rahimullah, B. N. S., & **Naidu, K.** (2021). Hybrid islanding detection method based on the rate of change of frequency and load impedance. Bulletin of Electrical Engineering and Informatics, 10(6), 2997-3006.

Rajendran, G., Vaithilingam, C. A., Misron, N., **Naidu, K**., & Ahmed, M. R. (2021). A comprehensive review on system architecture and international standards for electric vehicle charging stations. Journal of Energy Storage, 42, 103099. - **ISI Indexed**

Rajendran, G., Vaithilingam, C. A., Misron, N., **Naidu, K**., & Ahmed, M. R. (2021). Voltage Oriented Controller Based Vienna Rectifier for Electric Vehicle Charging Stations. IEEE Access, 9, 50798-50809. - **ISI Indexed**

A. Alsakati, C. A. Vaithilingam, **K. Naidu**, G. Rajendran, J. Alnasseir and A. Jagadeeshwaran, "Particle Swarm Optimization for Tuning Power System Stabilizer towards Transient Stability Improvement in Power System Network," 2021 IEEE International Conference on Artificial Intelligence in Engineering and Technology (IICAIET), 2021, pp. 1-6, doi: 10.1109/IICAIET51634.2021.9573534.

2020

Rajendran, G., Vaithilingam, C. A., **Naidu, K**., & Oruganti, K. S. P. (2020). Energy-efficient converters for electric vehicle charging stations. SN Applied Sciences, 2(4), 1-15. - **ISI Indexed**

Naidu, K., Ali, M. S., Tan, C. K., Arof, H., & Mokhlis, H. (2020). Optimized artificial neural network to improve the accuracy of estimated fault impedances and distances for underground distribution system. PLoS ONE, 15(1), e0227494-e0227494. - **ISI Indexed**

2019

Muhammad, M. A., Mokhlis, H., **Naidu, K**., Amin, A., Franco, J. F., & Othman, M. (2019). Distribution Network Planning Enhancement via Network Reconfiguration and DG Integration using Dataset Approach and Water Cycle Algorithm. Journal of Modern Power Systems and Clean Energy. - **ISI Indexed**

Muhammad, M. A., Mokhlis, H., Amin, A., **Naidu, K**., Franco, J. F., Wang, L., & Othman, M. (2019). Enhancement of simultaneous network reconfiguration and DG sizing via Hamming dataset approach and firefly algorithm. IET Generation, Transmission & Distribution, 13(22), 5071-5082. - **ISI Indexed**

Joyo MK, Raza Y, Ahmed SF, Billah MM, Kadir K, **Naidu K**, Ali A, Mohd Yusof Z. Optimized Proportional-Integral-Derivative Controller for Upper Limb Rehabilitation Robot. Electronics. 2019; 8(8):826. - **ISI Indexed**

Saharuddin, N. Z., Abidin, I. Z., Mokhlis, H., & **Naidu, K**. (2018). Intentional islanding methods as post fault remedial action: A review. Indonesian Journal of Electrical Engineering and Computer Science, 12(1), 182-192.

2018

Latreche, Y., Bouchekara, H. R. E. H., Kerrour, F., **Naidu, K**., Mokhlis, H., & Javaid, M. S. (2018). Comprehensive review on the optimal integration of distributed generation in distribution systems. Journal of Renewable and Sustainable Energy, 10(5), 055303.

Abu Talib, D., Mokhlis, H., Abu Talip, M., **Naidu, K**., & Suyono, H. (2018). Power System Restoration Planning Strategy Based on Optimal Energizing Time of Sectionalizing Islands. Energies, 11(5), 1316. *(ISI-Cited Publication)*

Subramani, G., Ramachandaramurthy, V. K., & **Vijyakumar, K. N**. (2018). Optimal Sizing of Battery Energy Storage System (BESS) for Peak Shaving Under Malaysian Electricity Tariff. Advanced Science Letters, 24(3), 1861-1865.

Saharuddin, N., Zainal Abidin, I., Mokhlis, H., Abdullah, A., & **Naidu, K**. (2018). A Power System Network Splitting Strategy Based on Contingency Analysis. Energies, 11(2), 434. *(ISI-Cited Publication)*

2017

Muhammad, M., Mokhlis, H., **Naidu, K**., Franco, J. F., Illias, H. A., & Wang, L. (2017). Integrated database approach in multi-objective network reconfiguration for distribution system using discrete optimization techniques. IET Generation, Transmission & Distribution. *(ISI-Cited Publication)*

Talib, D. N. A., Mokhlis, H., Talip, M. S. A., & **Naidu, K**. (2017) Parallel power system restoration planning using heuristic initialization and discrete evolutionary programming. Journal of Modern Power Systems and Clean Energy, 1-13. *(ISI-Cited Publication)*

Naidu, K., Mokhlis, H., & Terzija, V. (2017). Performance investigation of ABC algorithm in multi-area power system with multiple interconnected generators. Applied Soft Computing, 57, 436-451. *(ISI-Cited Publication)*

Sukumar, S., Mokhlis, H., Mekhilef, S., **Naidu, K**., & Karimi, M. (2016). Mix-mode energy management strategy and battery sizing for economic operation of grid-tied microgrid. Energy. *(ISI-Cited Publication)*

Raza, S., Mokhlis, H., Arof, H., **Naidu, K**., Laghari, J. A., & Khairuddin, A. S. M. (2016). Minimum-Features-Based ANN-PSO Approach for Islanding Detection in Distribution System. IET Renewable Power Generation. *(ISI-Cited Publication)*

M. Karimi, H. Mokhlis, **K. Naidu**, S. Uddin, A.H.A. Bakar (2016). Photovoltaic penetration issues and impacts in distribution network – A review. *Renewable and Sustainable Energy Reviews*. 53, Pages 594-605 *(ISI-Cited Publication)*

Aman, M. M., Jasmon, G. B., Bakar, A., Halim, A., Mokhlis, H., & **Naidu, K**. (2015). Graph theory-based radial load flow analysis to solve the dynamic network reconfiguration problem. *International Transactions on Electrical Energy Systems*. *(ISI-Cited Publication)*
Naidu, K., Mokhlis, H., & Bakar, A. (2014). Multiobjective optimization using weighted sum artificial bee colony algorithm for load frequency control. *International Journal of Electrical Power & Energy Systems, 55*, 657-667. *(ISI-Cited Publication)*

Naidu, K., Mokhlis, H., Bakar, A., Terzija, V., & Illias, H. (2014). Application of firefly algorithm with online wavelet filter in automatic generation control of an interconnected reheat thermal power system. *International Journal of Electrical Power & Energy Systems, 63*, 401-413. *(ISI-Cited Publication)*

Rosli, H. M., Mokhlis, H., **Naidu, K**., Jamian, J. J., & Bakar, A. H. A. (2014). Improving state estimation accuracy through incremental meter placement using new evolutionary strategy. *Arabian Journal for Science and Engineering*, *39*(11), 7981-7989. *(ISI-Cited Publication)*

Conferences

2024
Syazwan, M., Hidayat, N. M., **Naidu, K**., Umair, M., Zelan, M. N., & Ali, N. N. (2024, December). Redundancy-Based Fault-Tolerant Control for Dual Active Bridge Converters. In *2024 IEEE 22nd Student Conference on Research and Development (SCOReD)* (pp. 645-651). IEEE.

Sofiuddin, H., Yusoh, M. A. T. M., **Naidu, K.**, & Fatini, N. A. (2024, December). Analysis of Home Energy Management System Based on V2H and BESS Technology. In *2024 IEEE 22nd Student Conference on Research and Development (SCOReD)* (pp. 78-83). IEEE.

Fatini, N. A., Mohamad, H., **Naidu, K.**, & Sofiuddin, H. (2024, December). Comparative Analysis Based on Graph Theory for Network Reconfiguration Considering EV Penetration Level and Consumer Charging Behaviour. In *2024 IEEE 22nd Student Conference on Research and Development (SCOReD)* (pp. 72-77). IEEE.

Seleappan, Y., **Naidu, K**., Ahmad, S. R. C., & Shafie, A. M. (2024, October). Investigation of Jaya Optimized Artificial Neural Network Based PID for Single Area Load Frequency Control. In *2024 2nd International Conference on Power and Renewable Energy Engineering (PREE)* (pp. 78-83). IEEE.

2023
Satheeshkumar, R., Jagatheesan, K., Boopathi, D., Ramesh Chandra Prusty, K., & **Naidu, K**. (2023, May). Frequency Management of an Interconnected Power System Using Ant Colony Optimization Technique Enhanced PI Controller. In International Conference on Data Analytics and Insights (pp. 505-514). Singapore: Springer Nature Singapore.

Mohamad, H., Razali, N. M., Shah, K. I. K., Salim, N. A., & **Naidu, K.** (2023, March). Optimal Charging Scheduling of Electric Vehicle Considering Minimum Power Loss using Firefly Algorithm. In 2023 IEEE 3rd International Conference in Power Engineering Applications (ICPEA) (pp. 334-340). IEEE.

2022
Ahmad, S. R. C., Sendrasaran, K., & **Naidu, K**. (2022, December). Hybrid PSO-FA Optimization for Photovoltaic and Biomass Systems with Battery Energy Storage System (BESS) in Water Treatment Plant. In 2022 IEEE International Conference on Power and Energy (PECon) (pp. 431-436). IEEE. ***(Scopus indexed)***

Azrin, W. A., **Naidu, K**., Mohamad, H., Embrandiri, M., Jagatheesan, K., & Hamid, Z. A. (2022, December). VPP integration with optimized LFC for generator fault in interconnected thermal power system. In 2022 IEEE International Conference on Power and Energy (PECon) (pp. 213-218). IEEE. ***(Scopus indexed)***

2021

Rajendran, G., Vaithilingam, C. A., **Naidu, K.,** & Ahmed, M. R. (2021, October). Open Switch Fault-Tolerant VOC-PI Controller based Vienna Rectifier for EV Charging Stations. In 2021 International Conference on Electrical Engineering and Informatics (ICEEI) (pp. 1-5). IEEE.

Rajendran, G., Vaithilingam, C. A., **Naidu, K**., Alsakati, A. A., & Ahmad, H. (2021, November). PSO-Based PI Controller for Voltage-Oriented Controller based Vienna Rectifier for Electric Vehicle Charging Stations. In 2021 IEEE 19th Student Conference on Research and Development (SCOReD) (pp. 356-361). IEEE.

Rajendran, G., Vaithilingam, C. A., **Naidu, K**., Prakash, K. S., & Ahmed, M. R. (2021). Hard Switching Characteristics of SiC and GaN Devices for Future Electric Vehicle Charging Stations. In MATEC Web of Conferences (Vol. 335, p. 02007). EDP Sciences.

2019

Ahmed, S. F., Ali, A., Raza, S. Y., Kadir, K. A., Joyo, M. K., & **Naidu, K**. (2019, July). Model predictive control for upper limb rehabilitation robotic system under disturbed condition. In AIP Conference Proceedings (Vol. 2129, No. 1, p. 020123). AIP Publishing LLC.

Awalin, L. J., **Naidu, K**., Suyono, A., & Ali, I. (2019, July). Automation of faulty type classification considering voltage sag and current swell profile by using MATLAB programming. In AIP Conference Proceedings (Vol. 2129, No. 1, p. 020134). AIP Publishing LLC.

Awalin, L. J., **Naidu, K**., & Suyono, H. (2019, July). Fault types classification using support vector machine (SVM). In AIP Conference Proceedings (Vol. 2129, No. 1, p. 020132). AIP Publishing LLC.

Naidu, K., Muhammad, M. A., Mokhlis, H., Sufyan, M., & Amin, A. (2019, July). Optimal coordination of EV charging with network reconfiguration. In AIP Conference Proceedings (Vol. 2129, No. 1, p. 020094). AIP Publishing LLC.

Rahman, M. A. A., Ismail, B., **Naidu, K**., & Rahmat, M. K. (2019). Review on population-based metaheuristic search techniques for optimal power flow. Indonesian Journal of Electrical Engineering and Computer Science, 15(1), 373-381.

2018

Talib, D. N. A., Mokhlis, H., Talip, M. S. A., & **Naidu, K**. (2018, May). Islands Determination for Parallel Power System Restoration using Heuristic Based Strategy. In 2018 IEEE Innovative Smart Grid Technologies-Asia (ISGT Asia) (pp. 30-35).

2014

Mokhlis, H.; **Naidu, K**.; Bakar, A.H.A.; Terzija, V., *Performance investigation of ABC algorithm for automatic generation control of a three area interconnected power system*. 5th Brunei International Conference in Engineering and Technology (BICET 2014). pp.1-6.

Naidu, K.; Mokhlis, H.; Bakar, A.H.A.; Terzija, V., *Comparative performance analysis of Firefly Algorithm for load frequency control in automatic generation control of interconnected reheat thermal power system*. 3rd IET International Conference in Clean Energy and Technology (CEAT) 2014. pp.1-6.

Aman, M.M.; Jasmon, G.B.; Bakar, A.H.A.; **Naidu, K**.; Mokhlis, H., *Discrete artificial bee colony algorithm for solving network reconfiguration problem*. 3rd IET International Conference in Clean Energy and Technology (CEAT) 2014. pp.1-6.

2013

Naidu, K.; Mokhlis, H.; Bakar, A.H.A., *Application of firefly algorithm (FA) based optimization in load frequency control for interconnected reheat thermal power system*. IEEE Jordan Conference in Applied Electrical Engineering and Computing Technologies (AEECT 2013), pp. 1-5.

Aman, M.M.; Jasmon, G.B.; **Naidu, K**.; Bakar, A.H.A.; Mokhlis, H., *Discrete evolutionary programming to solve network reconfiguration problem*. IEEE TENCON Spring Conference 2013. pp.505-509.

2008

Kumar, R., Aravind, C. V., **Naidu, K**., & Fariza, A. (2008, May). Development of a novel voice verification system using wavelets. *IEEE International Conference in Computer and Communication Engineering, (ICCCE) 2008.* pp. 923-927.

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