

### Faculty Profile

<b>Name</b>	Dr. M. Pravin Kumar			
<b>Department</b>	Medical Electronics			
<b>Qualifications</b>	M.E., Ph.D.,			
<b>Area of Specialization</b>	Soft Computing, Computer Networks, Process Modeling and Optimization.			
<b>Date of Joining (VCET)</b>	12.09.2018			
<b>Date of Birth</b>	04.04.1985			
<b>Experience in (Years)</b>	<b>Teaching</b>	15	<b>Industry</b>	Nil
<b>Number of Papers Published</b>	<b>National Journals</b>	Nil	<b>International Journals</b>	21
<b>Number of Papers Presented</b>	<b>National Conferences</b>	16	<b>International Conferences</b>	24
<b>Books Published</b>	Nil			
<b>Patents</b>	<b>Granted</b>	Nil	<b>Published</b>	06
<b>Grants Received:</b>	Nil			
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### **INTERNATIONAL JOURNALS: 21**

1. **Pravin Kumar .M**, Jayaraman T., Senthilkumar .M, Sumaiya Begum .A (March 2023), "Performance Investigation of Generalized Rain Pattern Absorption Attention Network for Single-Image Deraining", Journal of Circuits, Systems and Computers, Vol. 32, No. 13 DOI:10.1142/S0218126623502316. [**SCIE, SCOPUS and WEB OF SCIENCE**].
2. Shobana Nageshwari .C, Vimal Kumar .M .N, **Pravin Kumar .M**, Surenderanath .S 2022, 'Real Time Interaction Approach for Aiding Typhlosis', International Journal of Early Childhood Special Education, Vol. 14, Issue. 2, ISSN: 1308-5581, pp. 4764-4771, DOI:10.9756/INT-JECSE/V14I2.530. [**WEB OF SCIENCE and SCOPUS**]
3. Vijay Kumar Burugari, Prabha Selvaraj, Venkata Praneel, Hari Kishan Kondaveeti, **M Pravin Kumar**, (October 2020), "The Application of Computational Modeling for the Optimization Of Bio Fuel Production Processes", International Journal of Advanced Trends in Computer Science and Engineering, Vol. 9, No. 5, ISSN 2278-3091, pp. 7883-7893. [**SCOPUS**]

4. T.V. Padmavathy, **M. Pravin Kumar**, M. Shakunthala, M.N. Vimal Kumar, S. Saravanan, (September 2020), "A NOVEL DEEP LEARNING CLASSIFIER AND GENETIC ALGORITHM BASED FEATURE SELECTION FOR HYBRID EEG-fNIRS BRAIN-COMPUTER INTERFACE", *NeuroQuantology*, Vol. 18, No. 9, ISSN 1303-5150, pp. 125-134. [SCOPUS]
5. **Pravin Kumar M.** and Abinaya A. (August 2020), "DEVELOPMENT OF ARDUINO BASED COST EFFECTIVE AND SECURABLE VOTING MACHINE", *International Journal of Engineering, Research and Technology (IJERT) RTICCT*, Vol. 8, Issue 12, pp. 35-37.
6. **Pravin Kumar M.** and Vijayachitra S, (July 2018), "STEEL PROCESS MODELING BASED ON COMPUTATIONAL INTELLIGENCE TECHNIQUES", *Asian Journal of Information Technology*, Vol. 17, Issue 2, pp.124-130.
7. **Pravin Kumar M.**, Vijayachitra S and Sapna S (April 2018), "INTERNET OF THINGS FOR SMART STEEL MAKING", *International Science and Technology Journal*, ISSN 1632-2882, Vol. 7, Issue 4, pp. 64-67. [Impact Factor - 5.3]
8. **Pravin Kumar M.** and Vijayachitra S (Jan-Mar 2016), "SOFT COMPUTING TECHNIQUES FOR LADLE REFINING PROCESS IN STEEL MAKING", *International Journal of Advanced Engineering Technology*, vol. 7, no. 1, pp. 955-958.
9. Sapna .S and **Pravin Kumar .M** (September 2015), "DIAGNOSIS OF DISEASE FROM CLINICAL BIG DATA USING NEURAL NETWORK", *Indian Journal of Science and Technology*, ISSN 0974-5645, Volume 8, No. 24, pp.1-7. [SCOPUS]
10. **Pravin Kumar M.** and Vijayachitra S. (June 2015), "STEEL PROCESS MODELING USING CLUSTERING TECHNIQUE", *International Journal of Applied Engineering Research*, ISSN 0973-4562, Volume 10, No. 62, pp.34-36. [SCOPUS (2010-17)]
11. Dr.Sapna .S and **Pravin Kumar .M** (May 2015), "AN INTEGRATED APPROACH TO BIG DATA USING FUZZY TECHNIQUE", *International Journal of Applied Engineering Research*, ISSN 0973-4562, Volume 10, No. 62, pp.12-16. [SCOPUS(2010-17)]
12. Dr.Sapna .S and **Pravin Kumar .M** (June 2015), "INTEGRATION OF FUZZY CLUSTERING TECHNIQUE WITH BIG DATA FOR DISEASE DIAGNOSIS" *International Journal of Electrical, Computing Engineering and Communication (IJECC)*, Vol.1, Issue 3, ISSN: 2394-8310, pp.32-37.
13. **Pravin Kumar M.** and Vijayachitra S. (June 2015), "FUZZY BASED APPROACH FOR ASSESSING AMOUNT OF ALLOY ADDITIVES IN STEEL PRODUCTION PROCESS", *International Journal of Electrical and Computing Engineering (IJECE)*, Vol.1, Issue 4, ISSN: 2349-8218, pp.70-73.
14. **Pravin Kumar M.**, Vijayachitra S. and Sri Padmavathi M. (May 2015),"INDUSTRIAL PROCESS MODELING USING INTELLIGENT COMPUTING TECHNIQUES", *Karpagam Journal of Engineering Research (KJER)*, ISSN 2393-994X, Volume 3, pp. 831-838.
15. **Pravin Kumar M.** and Vijayachitra S. (June 2014), "ESTIMATION OF AMOUNT OF ALLOYING ELEMENTS IN STEEL MAKING PROCESS USING SUBTRACTIVE CLUSTERING TECHNIQUE", *International Journal of Applied Environmental Sciences*, ISSN 0973-6077, Volume 9, No. 3, pp.1009-1017.
16. Sudha S. and **Pravin Kumar M.** (May 2014), "EDMP PACKET SCHEDULING SCHEME FOR WIRELESS SENSOR NETWORK", *International Journal of Modern Trends in Engineering and Science (IJMTES)*, Vol.1, Issue.5, ISSN No. 2348 3121, pp.154-157. [Impact Factor – 2.02]

17. Sapna S, Dr.Tamilarasi A. and **Pravin Kumar M.** (October 2012), “BACKPROPAGATION LEARNING ALGORITHM BASED ON LEVENBERG MARQUARDT ALGORITHM”, The First International Conference on Information Technology Convergence and Services-ITCSE’12 (Academy & Industry Research Collaboration Center-AIRCC) at Avinashilingam University, Coimbatore, pp.393-398.
18. Sapna S, Dr.Tamilarasi A. and **Pravin Kumar M.** (December 2012), “PREDICTION OF HIDDEN KNOWLEDGE FROM CLINICAL DATABASE USING FUZZY C-MEANS CLUSTERING TECHNIQUE”, International Journal of Computer Sciences, Systems Engineering and Information Technology-IJSCSSEIT, ISSN: 0974-5807, Vol.5, No.2, pp.249-257.
19. Lavanya N.M. and **Pravin Kumar M.** (March 2012), “AN EXPERT SYSTEM BASED ON PSO AND FUZZY TECHNIQUE FOR MEDICAL DIAGNOSIS”, International Journal of Advanced Research in Technology (IJART), Vol.2, Issue.4, ISSN No. 6602 3127, pp.66-71.
20. Sapna S, Dr.Tamilarasi A. and **Pravin Kumar M.** (January 2012), “IMPLEMENTATION OF GENETIC ALGORITHM IN PREDICTING DIABETES”, International Journal of Computer Science Issues (IJCSI), Vol-9, Issue-1, N0.3, pp.234-240.
21. Vijayachitra S, Dr.Tamilarasi A. and **Pravin Kumar M.** (November 2009), “MULTIPLE INPUT MULTIPLE OUTPUT (MIMO) PROCESS OPTIMIZATION USING FUZZY GA CLUSTERING”, International Journal of Recent Trends in Engineering, Vol.2, No.2, ISSN No.1797-9617, pp.16-18.

#### INTERNATIONAL CONFERENCES: 24

1. **Pravin Kumar M** (June 2023), ‘A Novel Investigation for a Prediction of Intellect Tumor and Categorization by CNN based on Resu-Net Architecture’, Proceedings of 8<sup>th</sup> International Conference on Communication and Electronics Systems (ICCES 2023), PPG Institute of Technology, Coimbatore, pp. 840-844. [SCOPUS]
2. Sobana Nageswari C, Vimal Kumar M N, **Pravin Kumar M**, Surenderanath S (April 2021), “REAL TIME INTERACTION APPROACH FOR AIDING TYPHLOSIS”, Proceedings of International Virtual Conference on Advances in Communication, Machine Learning, Embedded with Internet of Things (IVCACME-2021), at Kongu Engineering College Perundurai.
3. Balakrishnan P, Sathiyasekar K, **Pravin Kumar M**, Raja L (January 2021), “WAVELET AND INTELLIGENT TECHNIQUE BASED TRANSMISSION LINE FAULT DETECTION, CLASSIFICATION AND LOCATION”, Proceedings of International Conference on Emerging Trends in Electrical Systems & Engineering (ICETESE - 2021), at Malla Reddy Engineering College for Women (Autonomous), Secunderabad.
4. **Pravin Kumar .M** (March 2020), “ACCIDENT DETECTION AND FASTER AMBULANCE SERVICE USING LORA BASED NETWORK FOR MEDICAL ASSISTANCE”, International Conference on Advanced Science and Engineering Research (ASER 2020), at Al-Ameen Engg. College, Erode.
5. **Pravin Kumar .M** Velmurugan R., Balakrishnan P. (June 2019), “DETECTION AND CONTROL OF WATER LEAKAGE IN PIPELINES AND TAPS USING ARDUINO NANO MICROCONTROLLER”, International Conference on Intelligent Manufacturing and Energy Sustainability, at Malla Reddy College of Engineering & Technology, Hyderabad.
6. **Pravin Kumar .M** (March 2019), “Water LEAKAGE MANAGEMENT SYSTEM USING ARDUINO”, International Conceference on Advanced Science and Engineering Research (ASER 2019), at Al-Ameen Engg. College, Erode.
7. **Pravin Kumar .M** and Hema .C (April 2017), “MARITIME BORDER ALERT SYSTEM USING GPS”, International Conceference on Social Media, Data Analytics and Cloud

Computing (ICSDC), at Aarupadai Veedu Institute of Technology, Chennai-603104.

8. **Pravin Kumar .M** and Dr.Vijayachitra .S (July 2015), “NEURO FUZZY TECHNIQUE FOR STEEL PROCESS MODELING”, International Conference on Soft Computing in Applied Sciences & Engineering, (ICSCASE-2015), at Noorul Islam University, Kumaracoil, Kanyakumari Dist.,Tamilnadu, India-629180.
9. Sapna .S and **Pravin Kumar .M** (July 2015), “DIAGNOSIS OF DISEASE FROM CLINICAL BIG DATA USING NEURAL NETWORK”, International Conference on Soft Computing in Applied Sciences & Engineering (ICSCASE-2015), at Noorul Islam University, Kumaracoil, Kanyakumari Dist.,Tamilnadu, India-629180.
10. **Pravin Kumar .M** and Dr.Vijayachitra .S (May 2015), “STEEL PROCESS MODELING USING CLUSTERING TECHNIQUE”, International Conference on Applied Research in Engineering and Technology (ICA<sup>R</sup>ET-2015), Thamirabharani Engineering College, Tirunelveli.
11. Dr.Sapna .S and **Pravin Kumar .M** (May 2015), “AN INTEGRATED APPROACH TO BIG DATA USING FUZZY TECHNIQUE”, International Conference on Applied Research in Engineering and Technology (ICA<sup>R</sup>ET-2015), Thamirabharani Engineering College, Tirunelveli.
12. **Pravin Kumar .M** and Dr.Vijayachitra .S (April 2015), “FUZZY BASED APPROACH FOR ASSESSING AMOUNT OF ALLOY ADDITIVES IN STEEL PRODUCTION PROCESS”, International Conference on Electrical Computing and Communication Engineering” Exploro International, Bangalore.
13. Dr.Sapna .S and **Pravin Kumar .M** (April 2015), “INTEGRATION OF FUZZY CLUSTERING TECHNIQUE WITH BIG DATA FOR DISEASE DIAGNOSIS”, International Conference on Electrical Computing and Communication Engineering Exploro International, Bangalore.
14. Dr.Sapna .S and **Pravin Kumar .M** (March 2015), “IDENTIFICATION OF RETINAL DAMAGE DUE TO DIABETES USING FUZZY TECHNIQUE”, International Workshop and Conference on Research Contributions in Technology and Applications 2015, Regional Office, Anna University, Tirunelveli.
15. **Pravin Kumar .M**, Dr.Vijayachitra .S and Sri Padmavathi .M (March 2015), “INDUSTRIAL PROCESS MODELING USING INTELLIGENT COMPUTING TECHNIQUES”, DRDO Sponsored Second IEEE International Conference on Innovations Information, Embedded and Communication Systems, ICII ECS’15, Karpagam College of Engineering, Coimbatore.
16. Ashok.S and **Pravin Kumar M** (April 2014), “REDUCING ENERGY IN CACHE ACCESS ARCHITECTURE USING PARTIAL TAG COMPARISON”, International Conference on Intelligent Engineering Systems (2IES-14), EASA College of Engineering & Technology, Coimbatore.
17. Sudha.S and **Pravin Kumar M** (March 2014), “IMPROVED DYNAMIC MULTILEVEL PRIORITY PACKET SCHEDULING SCHEME FOR WIRELESS SENSOR NETWORK”, International Conference on Recent Innovations in Engineering, Sri Subramanya College of Engineering and Technology, Palani.
18. **Pravin Kumar M.**, Dr.Vijayachitra S. and Sneha Paul (March 2013), “FUZZY EXPERT SYSTEM FOR OPTIMIZATION OF INDUSTRIAL PROCESS”, International Conference on Advanced Computing, Machines and Embedded Technology (ICACT 2013), J.K.K.Nattraja College of Engineering and Technology, Kumarapalayam.
19. Sapna S., Dr.Tamilarasi A. and **Pravin Kumar M.** (October 2012), “BACKPROPAGATION LEARNING ALGORITHM BASED ON LEVENBERG MARQUARDT ALGORITHM”, The First International Conference on Information Technology Convergence and Services-

ITCSE'12 (Academy & Industry Research Collaboration Center-AIRCC) at Avinashilingam University, Coimbatore, pp.393-398.

20. Sapna S., Dr. Tamilarasi A., **Pravin Kumar M.** (July 2012), "PREDICTION OF HIDDEN KNOWLEDGE FROM CLINICAL DATABASE USING FUZZY C-MEANS CLUSTERING TECHNIQUES", International Conference on Currents Trends in Engineering & Management-ICCTEM'12 at Vidyavaradhaka College of Engineering, Mysore, pp.75.
21. Lavanya N.M. and **Pravin Kumar M.** (March 2012), "AN EXPERT SYSTEM BASED ON PSO AND FUZZY TECHNIQUES FOR MEDICAL DIAGNOSIS", International Conference on Advanced Computing Technology (ICACT 2012), J.K.K.Nattraja College of Engineering and Technology, Kumarapalayam.
22. Lavanya N.M. and **Pravin Kumar M.** (March 2012), "AN OPTIMIZED DIABETIC DIAGNOSIS FUZZY EXPERT SYSTEM", Proceedings of Second International Conference on Recent Advances and Trends in Computer Engineering, Management and Security (ICRATEMS 2012), Vivekanandha College of Engineering for Women, Elaiyampalayam, Tiruchengode, pp.121-125.
23. Sapna S., Dr. Tamilarasi A. and **Pravin Kumar M.** (July 2011), "FUZZY RELATIONAL EQUATION IN PREVENTING NEUROPATHY", First International Conference on Advanced Computer Technology, (ICACT 2011) JKKN College of Engineering & Technology, Kumarapalayam, pp.121.
24. **Pravin Kumar M.** and Vijayachitra S. (June 2009), "PROCESS OPTIMIZATION USING GENETIC ALGORITHM", Proceedings of International Conference on Control, Automation, Communication and Energy Conservation (INCACEC 2009), Kongu Engineering College, Perundurai, Vol.1, pp.255-260.

## **NATIONAL CONFERENCES: 16**

1. **Pravin Kumar M.**, Rajalakshmi S, Sowmya P, and Suganya L ( April 2024), "Revitalizing Varicose Vein Therapy", Proceedings of the National Conference on Innovation in Scientific Computing and Optimization Techniques, at Er.Perumal Manimekalai College of Engineering, Hosur.
2. **Pravin Kumar M.**, Santhiya R, Sejina H, and Sreeragh M S (April 2024), "Automatic Detection and Control of Sleep Apnea", Proceedings of the National Conference on Innovation in Scientific Computing and Optimization Techniques, at Er.Perumal Manimekalai College of Engineering, Hosur.
3. **Pravin Kumar M.** and Abinaya A. (March 2020), "DEVELOPMENT OF ARDUINO BASED COST EFFECTIVE AND SECURABLE MACHINE", National Conference on Recent Trends in Information, Communication and Computing Technology (RTICCT 20), at K.S.R. College of Engineering, Tiruchengode.
4. **Pravin Kumar M.** (Sep. 2019), "INDUSTRIAL PROCESS AUTOMATION AND OPTIMIZATION USING IOT", CSIR Sponsered National Conference on Smart Materials Using Nano-Technology and Adaptable Intelligence Systems for Energy Applications-A Futute Approach, at Velalar College of Engineering and Technology, Erode.
5. **Pravin Kumar M.** and Roshinimubarak S. (March 2018), "HEART ATTACK DETECTION AND RECOVERY SYSTEM", 4<sup>th</sup> National Conference on Recent Trends in Electronics and Communication (NCRTEC 2k18), at Jayalakshmi Institute of Technology, Thoppur.
6. **Pravin Kumar M.** and Venkatesa Pradeep R. (March 2017), "AUTOMATION OF CITY CORPORATION DUMP BIN", National Conference on Computing

Perspectives on Smart City, at Kumaraguru College of Technology, Coimbatore-641049.

7. **Pravin Kumar M.** and Sumaiya A. (March 2016), “RESCUE OF PEOPLE FROM UNDERGROUND COAL MINES USING EMBEDDED SYSTEM”, Fifth National Conference on Smart Systems-NCS2, at Erode Builders Educational Trust’s Group of Institutions, Kangayam.
8. **Pravin Kumar M.** and Monisha M. (March 2016), “AUTOMATIC RAILWAY TRACK VACUUMING SYSTEM”, Fifth National Conference on Smart Systems-NCS2, at Erode Builders Educational Trust’s Group of Institutions, Kangayam.
9. Ashok.S and **Pravin Kumar M.** (March 2014), “PARTIAL TAG COMPARISON METHOD FOR REDUCING ENERGY CONSUMPTION IN CACHE ACCESS ARCHITECTURE”, Fourth National Conference on Smart Systems-NCS2, at Erode Builders Educational Trust’s Group of Institutions, Kangayam.
10. Sudha S. and **Pravin Kumar M.** (February 2014), “ENHANCED DYNAMIC MULTILEVEL PRIORITY PACKET SCHEDULING SCHEME FOR WIRELESS SENSOR NETWORK” National Conference on Innovations in Information and Communication Technologies for Rural Development (NCICT 14), Sri Krishna College of Technology, Coimbatore.
11. **Pravin Kumar M.** and Dr.Vijayachitra S. (April 2013), “FUZZY TECHNIQUES FOR OPTIMIZATION OF INDUSTRIAL PROCESS”, National Level Conference on Control System (NLCCS 2013), at Erode Sengunthar Engineering College, Thudupathi, Erode-638057.
12. **Pravin Kumar M.**, and Dr.Vijayachitra S. (March 2013), “INDUSTRIAL PROCESS OPTIMIZATION USING FUZZY TECHNIQUES”, Third National Conference on Smart Systems-NCS2, at Erode Builders Educational Trust’s Group of Institutions, Kangayam.
13. **Pravin Kumar M.** and Akalyaa A.S (March 2012), “PERFORMANCE ANALYSIS OF RIP, EIGRP AND OSPF USING PACKET TRACER” Second National Conference on “Recent Trends in Communication, Computation and Security (NCRTCCS 2012), Christian College of Engineering and Technology, Oddanchantram.
14. Sapna S, Dr. Tamilarasi A, **Pravin Kumar M.** (February 2012), “FUZZY GENETIC ALGORITHM IN PREDICTING DIABETES”, First National Conference on Recent Advancements in Signal Processing and Communications-NCRASPC’12 at R.M.K. College of Engineering and Technology, Chennai, pp. 48-54.
15. **Pravin Kumar M.** and Vijayachitra S. (March 2009), “FUZZY GA BASED PROCESS OPTIMIZATION”, Proceedings of Fourth National Conference on Optimization Techniques in Engineering Sciences and Technologies(OPTEST’09), Bannari Amman Institute of Technology, Sathyamangalam, pp.50.
16. **Pravin Kumar M.** and Vijayachitra S. (March 2009), “PROCESS OPTIMIZATION USING FUZZY GA CLUSTERING”, Proceedings of National Conference on Recent Advances in Computer Vision and Information Technology (NCVIT’09), Government College of Technology, Coimbatore, pp.241-246.

## **PATENTS: 05**

1. **Title:** System to Facilitate Visually Impaired Person to Identify Person Present in Surrounding  
**Application Number:** 201941050087, **Filed Date:** 05.12.19, **Published Date:** 13.12.19.
2. **Title:** Alcohol Detector Embedded in Vehicle’s Seat Belt  
**Application Number:** 202011018414, **Filed Date:** 29.04.20, **Published Date:** 19.06.20

3. **Title:** An IOT based Automatic Fatigue and Health Monitoring System during Travel  
**Application Number:** 202041043131, **Filed Date:** 05.10.20, **Published Date:** 16.10.20.
4. **Title:** Smart Child Rescue System from Borewell  
**Application Number:** 202141025208, **Filed Date:** 07.06.21, **Published Date:** 18.06.21.
5. **Title:** Retinal Scan and Speech Enabled Safety Locker System for the Important Files and Data to Prevent from Robbery  
**Application Number:** 202241013978A, **Filed Date:** 15.03.22, **Published Date:** 08.04.22.
6. **Title:** Embedded Based Medical Assistant Robot for Hospital  
**Application Number:** 202341047970 A, **Filed Date:** 17.07.23, **Published Date:** 22.09.2023

## **BOOK CHAPTER: 01**

**Pravin Kumar M.,** Velmurugan R., Balakrishnan P. (February 2020) Detection and Control of Water Leakage in Pipelines and Taps Using Arduino Nano Microcontroller. In: Reddy A., Marla D., Simic M., Favorskaya M., Satapathy S. (eds) Intelligent Manufacturing and Energy Sustainability. Smart Innovation, Systems and Technologies, Springer, Vol 169, [SCOPUS].