


CURRICULUM VITAE

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|------------------------------------|--------------------------------|---|--|---|--|
| Name of the Faculty Member: | | Dr.N.B.PRAKASH M.E., Ph.D., | |  | |
| Name of the Department: | | ELECTRICAL AND ELECTRONICS ENGINEERING | | | |
| Present Designation: | | PROFESSOR | | | |
| Regular / Visiting: | REGULAR | Gender: | MALE | | |
| Age & Date of Birth: | | 45, 04.06.1979 | | | |
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EDUCATIONAL QUALIFICATION (STARTING FROM THE HIGHEST DEGREE):

| Degree | Specialization / Regular / P.T | Name Of The Institution | University Board | Class | % of Marks | Month & Year of Passing |
|----------------|---|---|--|--|---------------|-------------------------------|
| PH.D | Faculty of ICE Image Processing (Part Time) | Mepco Schlenk Engg. College, Sivakasi | Anna University, Chennai | Completed Viva voce and received Degree Certificate by 2018 | | |
| M.E | Applied Electronics (Regular) | Mohamed Sathak Engineering College, Kilakarai | Madurai Kamaraj University, Madurai | 1 st Class Distinction | 81.07% | April 2002 |
| B.E | Electrical and Electronics (Regular) | K.L.N.College Of Engineering, Madurai | | 1 st Class Distinction | 78.70% | April 2000 |
| H.S.C | State Board | Rose Mary Matriculation H.Sc.School, Palayamkottai | State Board | 1 st Class Distinction | 83.08% | April 1996 |
| S.S.L.C | Matriculation | | Matriculation | 1 st Class Distinction | 75.82% | April 1994 |

EMPLOYMENT HISTORY:

| Designation | From Date | To Date | Experience | | |
|--|------------|---------------------------|-------------------|-------------|-----------|
| | | | Years | Months | Days |
| Professor | 22.07.2022 | Till Date (15.07.2024) | 1 Y | 11 M | 25 |
| As Associate Professor | 10.07.2013 | 21.07.2022 | 9 Y | - | 11 |
| As Senior Lecturer & Asst. Prof. (Sr.G) | 01.06.2008 | 09.07.2013 | 5 Y | 01 M | 08 |
| As Lecturer | 05.06.2002 | 31.05.2008 | 5 Y | 11 M | 26 |
| Total Experience | | | 20 Y | 23 M | 70 |
| Nett Experience | | | 22Y-1M-10D | | |

INTERNATIONAL JOURNAL PUBLICATIONS:

1. Perumal Saravanan, Kumar Cherukupalli, Ramesh Jayaraman, **Nattanmai Balasubramanian Prakash**, An Analysis of the Experimental Configuration of a Standalone PV System, *Tehnički vjesnik*, 2024:31:4:1048-1054, <https://hrcak.srce.hr/318439> (*SCI Web of Science & Scopus Indexed with IF:0.9*)
2. MPE Rajamani, Murugappan Murugappan, **NB Prakash**, Gomesh Nair, Mohamed Trabelsi, Photovoltaic-Based Dual Output DC–DC Converter Using Gravitational Search Algorithm-Tuned PI and Sliding Mode Controllers, *Arabian Journal for Science and Engineering*, 2024:1-19, <https://link.springer.com/article/10.1007/s13369-024-08962-2> (*SCI Web of Science & Scopus Indexed with IF:2.5*)
3. GR Hemalakshmi, M Murugappan, Mohamed Yacin Sikkandar, D Santhi, **NB Prakash**, A Mohanarathinam, PE-Ynet: a novel attention-based multi-task model for pulmonary embolism detection using CT pulmonary angiography (CTPA) scan images, *Physical and Engineering Sciences in Medicine*, 2024:1-18, <https://link.springer.com/article/10.1007/s13246-024-01410-3> (*SCI Web of Science & Scopus Indexed with IF:3.3*)
4. GR Hemalakshmi, M Murugappan, Mohamed Yacin Sikkandar, S Sabarunisha Begum, **NB Prakash**, Automated retinal disease classification using hybrid transformer model (SViT) using optical coherence tomography images, *Neural Computing and Applications*, 2024:1-18, <https://link.springer.com/article/10.1007/s00521-024-09564-7>, Springer London, (*SCI Web of Science and Scopus Indexed with IF:6.0*)
5. M. Murugappan, Ali K. Bourisly, **N.B.Prakash**, M. G. Sumithra & U. Rajendra Acharya Automated semantic lung segmentation in chest CT images using deep neural network, *Neural Computing and Applications*, 2023:35:15343-15364. <https://link.springer.com/article/10.1007/s00521-023-08407-1>. (*SCI Web of Science and Scopus Indexed with IF:6.0*)
6. Francis H. Shajin, B. Aruna Devi, **N.B.Prakash**, G. R. Sreekanth & P. Rajesh Sailfish optimizer with Levy flight, chaotic and opposition-based multi-level thresholding for medical image segmentation, *Soft Computing*, 2023. <https://link.springer.com/article/10.1007/s00500-023-07891-w> (*SCI Web of Science and Scopus Indexed with IF:4.1*)
7. **N.B.Prakash**, A.Geetha. Classification of Glaucoma in Retinal Images Using EfficientnetB4 Deep Learning Model. *Computer Systems Science & Engineering*. 2022:43(3):1041-1055. <https://www.techscience.com/csse/v43n3/47683/html>, (*SCI Web of Science and Scopus Indexed with IF:4.397*)

8. M Murugappan, **NB Prakash**, R Jeya, A Mohanarathinam, GR Hemalakshmi. A Novel Attention Based Few-shot Classification Framework for Diabetic Retinopathy Detection and Grading. *Measurement*. 2022:200:111485. <https://doi.org/10.1016/j.measurement.2022.111485> (*SCI Web of Science and Scopus Indexed with IF:5.131*)
9. A Mohanarathinam, CS Manikandababu, **NB Prakash**, GR Hemalakshmi, Kamalraj Subramaniam. Diabetic Retinopathy Detection and Classification using Hybrid Multiclass SVM classifier and Deep learning techniques. *Mathematical Statistician and Engineering Applications*. 2022:71(3):891-903. <https://www.philstat.org/index.php/MSEA/article/view/251>, (*Scopus Indexed Journal*)
10. M.Peratchiammal, **N.B.Prakash**, M.Murugappan, B.Vigneshwaran & M.Bakrutheen. Statistical Reliability Analysis on Flashover Characteristics of Ceramic Disc Insulator and Polymeric Insulators. *Arab J Sci Eng* (2022). <https://doi.org/10.1007/s13369-022-06929-9>. (*SCI Web of Science and Scopus Indexed with IF:2.807*)
11. Rajalakshmi M, **Prakash N.B.** (2021) Prediction and analysis of transformer oil using fuzzy logic algorithm. In: Palani, I.A., Sathiya, P., Palanisamy, D. (eds) *Recent Advances in Materials and Modern Manufacturing. Lecture Notes in Mechanical Engineering*. Springer, Singapore. https://doi.org/10.1007/978-981-19-0244-4_32
12. R. Bhaskaran, R. Karuppathal, **N.B.Prakash**, R. Rajkumar, Satellite Image Analysis Using Contextual Data Retrieval Technique for Environmental Monitoring Condition. *Journal of Environmental Protection and Ecology*. 2022: 23(1):301-313. (*SCI Web of Science and Scopus Indexed with IF:0.692*)
13. Ganapathia Pillai Kannayeram, Rathinam Muniraj, **Nattanmai Balasubramanian Prakash**, Thankaswamy Jarin, Sivadhas Rosejanet Boselin Prabhu. An elitist control scheme for power flow management in smart grid system: a hybrid optimization scheme. *Energy Sources, Part A: Recovery, Utilization, and Environmental Effects*. 1-22, 2021. (*SCI Web of Science and Scopus Indexed with IF:3.447*)
14. N Priya, NB Rajesh, D Sivanandakumar, **NB Prakash**. Optimized Adaptive Neuro Fuzzy based Controller for lifetime maximization in power electronics stage for brushless DC drives. *Materials Today: Proceedings*. 2022. (*Scopus Indexed Journal*)
15. **NB Prakash**, M Murugappan, GR Hemalakshmi, M Jayalakshmi, Mufti Mahmud. Deep transfer learning for COVID-19 detection and infection localization with superpixel based segmentation. *Sustainable Cities and Society*. Vol. 75, pp. 103252, 2021. (*SCI Web of Science and Scopus Indexed with IF:7.587*)

16. R.Monika, J.Nithyasree, V.Valarmathi, G.R.Hemalakshmi, **N.B.Prakash**. House Price Forecasting Using Machine Learning Methods. *Turkish Journal of Computer and Mathematics Education* 2021:12(11):3624-3632. *(Scopus Indexed Journal)*
17. J.Jayanthi, M.Kavitha, T.Jayasankar, A.Sagai Francis Britto, **N.B.Prakash**, Mohamed Yacin Sikkandar, C.Bharathiraja. Segmentation of Brain Tumor Magnetic Resonance Images Using a Teaching-Learning Optimization Algorithm. *Computers, Materials & Continua*. 2021:68(3)4191-4203. [doi:10.32604/cmc.2021.012252](https://doi.org/10.32604/cmc.2021.012252) *(SCI Web of Science Indexed & Anna University, Annexure Journal IF: 4.89)*
18. J.Jean Justus, T.Jayasankar, G.Sheryl Oliver, C.Bharathiraja, **N.B.Prakash**. Denaturalized cluster organization based improving energy constraints using relay link chain routing protocol in wireless sensor network. *Journal of Ambient Intelligence and Human Computing (2021)*. <https://doi.org/10.1007/s12652-021-03052-9> *(SCI Web of Science Indexed Journal IF: 4.594)*.
19. D.Venugopal, T.Jayasankar, N.Krishnaraj, S.Venkatraman, **N.B.Prakash**, G.R.Hemalakshmi. Multifactorial Disease Detection Using Regressive Multi-Array Deep Neural Classifier. *Intelligent Automation and Soft Computing*. 2021:28(1):27-38 *(SCI Web of Science Indexed & Anna University, Annexure Journal IF:1.276)*
20. Mohamed Yacin Sikkandar, Natteri M Sudharsan, Santhnaraj Balakrishnan, **N.B.Prakash**, G.R.Hemalakshmi, A.Mohanarathinam. Accurate Hotspot Segmentation in Thermal Breast Images with Gaussian Mixture Model Superpixels. *Journal of Medical Imaging and Health Informatics*. 2021:11(5):1327-1333. *(SCI Web of Science Indexed & Anna University, Annexure Journal IF: 0.659)*.
21. A.Mohanarathinam, **N.B.Prakash**, G.R.Hemalakshmi, Kamalraj Subramaniam, G.K.D.Prasanna Venkatesan. An analysis on image encryption for secured transmission of biomedical applications. *Information Technology in Industry*. 2021:9(1):1-11. *(Scopus Indexed Journal)*
22. Krishnan Muthumayil, Thangaiyan Jayasankar, Nagappan Krishnaraj, Mohamed Yacin Sikkandar, **Prakash Nattanmai Balasubramanian** and Chokkalingam Bharathiraja. Maximizing Throughput in Wireless Multimedia Sensor Network using Soft Computing Techniques. *Intelligent Automation and Soft Computing*. 2021:27(3):771-784 *(SCI Web of Science Indexed & Anna University, Annexure Journal IF:1.276)*
23. J. Jayanthi, T. Jayasankar, N. Krishnaraj, **N.B.Prakash**, A. Sagai Francis Britto, and K. Vinoth Kumar. An Intelligent Particle Swarm Optimization with Convolutional Neural Network for Diabetic Retinopathy Classification Model. *Journal of Medical Imaging and Health Informatics*. 2020:10(10):2308-2315. *(SCI Web of Science*

Indexed & Anna University, Annexure Journal IF:0.659
<https://doi.org/10.1166/jmihi.2021.3362>.

24. A Sheryl Oliver, Kavithaa Ganesan, SA Yuvaraj, T Jayasankar, Mohamed Yacin Sikkandar, **NB Prakash**. Accurate prediction of heart disease based on bio system using regressive learning based neural network classifier. *Journal of Ambient Intelligence and Human Computing (2020)*. <https://doi.org/10.1007/s12652-020-02786-2> (*SCI Web of Science Indexed & Anna University, Annexure List Journal IF:4.594*).
25. Sabarunisha Begum S, Mohamed Yacin Sikkandar, **NB Prakash**, Mohsen Bakouri, Ahmed Bakhit Alanazi, Nasser Mohammed Saad Alkhatlan. Investigation of flow dynamic characteristics of inverse fluidized bed biofilm reactor for degrading pharmaceutical based biomedical wastewater. *Environmental Engineering Research (2021)*. 2021; 26(6): 200182. <https://doi.org/10.4491/eer.2020.182> (*SCI Web of Science Indexed & Anna University, Annexure List Journal IF:1.438*).
26. G.R.Hemalakshmi, D.Santhi, V.R.S.Mani, A.Geetha and **N.B.Prakash**. Classification of retinal fundus image using MS-DRLBP features and CNN-RBF classifier. *Journal of Ambient Intelligence and Human Computing (2020)*. <https://doi.org/10.1007/s12652-020-02647-y> (*SCI Web of Science Indexed & Anna University, Annexure List Journal IF:4.594*).
27. M.Santhosh Rani, K. Vinothkumar, Raja Krishnamoorthy, T.Jayasankar, **N.B.Prakash**, C.Bharatiraja. Design of low power VCO using FinFET technology for biomedical applications <https://doi.org/10.1016/j.matpr.2020.09.736> (*Materials Today Proceedings. Scopus Indexed Elsevier Journal*).
28. Raja Krishnamoorthy, D.Kodandapani, Gowrishankar Kasilingam, **N.B.Prakash**, C.Bharatiraja, T.Jayasankar. Design of low-power coupled chopper instrumentation amplifier using pin pong ripple reduction for biomedical applications. *Materials Today Proceedings*. <https://doi.org/10.1016/j.matpr.2020.09.725> (*Scopus Indexed Elsevier Journal*).
29. Raja Krishnamoorthy, T.Jayasankar, M.Sujatha, **N.B.Prakash**, C.Bharatiraja. Design of high efficiency PLL independent LC oscillator for biomedical transceivers. *Materials Today Proceedings*. <https://doi.org/10.1016/j.matpr.2020.09.230> (*Scopus Indexed Elsevier Journal*).
30. S Bama, R Velumani, **NB Prakash**, GR Hemalakshmi, A Mohanarathinam. Automatic segmentation of melanoma using superpixel region growing technique. *Materials Today Proceedings*. <https://doi.org/10.1016/j.matpr.2020.08.618> (*Scopus Indexed Elsevier Journal*).

31. M Anuradha, T Jayasankar, **NB Prakash**, Mohamed Yacin Sikkandar, GR Hemalakshmi, C Bharatiraja, A Sagai Francis Britto. IoT enabled Cancer Prediction System to Enhance the Authentication and Security using Cloud Computing. *Microprocessors and Microsystems*. (SCI Web of Science Indexed & Anna University, Journal IF:1.045) <https://doi.org/10.1016/j.micpro.2020.103301>
32. GR Hemalakshmi, D Santhi, VRS Mani, A Geetha, **NB Prakash**. Deep Residual Network Based on Image Priors for Single Image Super Resolution in FFA Images. *Computer Modeling in Engineering and Sciences*. 2020:125(1):125-143. (SCI Web of Science Indexed & Anna University, Annexure List Journal IF:0.805)
33. Mohamed Yacin Sikkandar, Bader Awadh Alrasheadi, **NB Prakash**, GR Hemalakshmi, A Mohanarathinam, K Shankar. Deep learning based an automated skin lesion segmentation and intelligent classification model. *Journal of Ambient Intelligence and Human Computing (2020)*. <https://doi.org/10.1007/s12652-020-02537-3> (SCI Web of Science Indexed & Anna University, Annexure List Journal IF:4.594)
34. Mohamed Yacin Sikkandar, S Sabarunisha Begum, NM Sudharsan, **NB Prakash**. Study of flow dynamic behavior of electrochemical reactor for treating liquid biomedical wastewater. *Desalination and Water Treatment*. 2020:197:67-75. <https://doi.org/10.5004/dwt.2020.25971> (SCI Web of Science Indexed & Anna University, Annexure List Journal IF:1.320)
35. G.Kannayeram, **N.B.Prakash**, R.Muniraj. Intelligent hybrid controller for power flow management of PV/battery/FC/SC system in smart grid applications. *International journal of hydrogen energy* 2020: 45(41):21779-21795. (SCI Web of Science Indexed & Anna University, Annexure List Journal IF:4939) <https://doi.org/10.1016/j.ijhydene.2020.05.149>
36. Sikkandar M.Y, Jayasankar T, Kavitha K.R, **Prakash N.B**, Natteri.M.Sudharsan, Hemalakshmi G.R. Three factor nonnegative matrix factorization based HE stain unmixing in histopathological images. *Journal of Ambient Intelligence and Human Computing (2020)*. <https://doi.org/10.1007/s12652-020-02265-8> (SCI Web of Science Indexed & Anna University, Annexure List Journal IF:4.594)
37. M.Karthikeyan, K.Sharmilee, P.M.Balasubramaniam, **N.B.Prakash**, M.Rajesh Babu, V.Subramaniaswamy, S.Sudhakar. Design and Implementation of ANN-based SAPF Approach for Current Harmonics Mitigation in Industrial Power Systems. *Microprocessor and Microsystems*. 2020:77(103194):1-11. <https://doi.org/10.1016/j.micpro.2020.103194>. (SCI Web of Science Indexed & Anna University, Annexure List Journal IF:1.045)

38. E.Punarselvam, T.Kalavathi Devi, A.Sagai Francis Britto, **N.B.Prakash**, and P.Suresh. Segmentation Analysis Techniques and Identifying Stress Ratio of Human Lumbar Spine Using ANSYS. *Journal of Medical Imaging and Health Informatics*. 2020:10(10):2308-2315. (*SCI Web of Science Indexed & Anna University, Annexure List Journal IF:0.659*) <https://doi.org/10.1166/jmih.2020.3170>
39. K.Vijay Anand, K.S.Giridharan, P.Vijayarajan, T.Senthilkumar, **N.B.Prakash**. Power Transformer Fault Detection and Classification Using SVM Classifier. *International Journal of Advanced Science and Technology*. 2020:29(5):6654–6660. (*Scopus Indexed*)
40. E.Punarselvam, Mohamed Yacin Sikkandar, Mohsen Bakouri, **N.B.Prakash**, T.Jayasankar & S.Sudhakar. “Different Loading Condition and Angle Measurement of Human Lumbar Spine MRI Images Using ANSYS. *Journal of Ambient Intelligence and Humanized Computing*. 2020: <https://doi.org/10.1007/s12652-020-01939-7> (*SCI Web of Science Indexed & Anna University, Annexure List Journal IF:4.594*)
41. Mohanarathinam, S.Kamalraj, **Prakash NB**, Hemalakshmi GR, G.K.D.Prasanna Venkatesan. Breathe Analyzer for Respiratory Diseases: A Review. *International Journal of Advanced Science and Technology*, 2020:29(3):8284–8289. (*Scopus Indexed*)
42. M.Aarthilakshmi, S.Meenakshi, A.Poorna Pushkala, V.Rama@Ramalakshmi, **N.B.Prakash**. Brain Tumor Detection Using Machine Learning. *International Journal of Scientific & Technology Research*. 2020:9(4):1976-1979 (*Scopus Indexed*)
43. K.Subbiah Kumar, P.Subashraja, V.Vasanth, M.Venkatesh, **N.B.Prakash**. IoT Based Health Monitoring System. *International Journal of Recent Technology and Engineering (IJRTE)*. 2020:8(6):5216-5218. (*Scopus Indexed*)
44. Peratchiammal M, **Prakash NB**, Vigneshwaran B. Pollution Severity Diagnose on Solid Insulators using the Partial Discharge and Flashover Characteristics. *International Journal of Innovative Technology and Exploring Engineering*. 2020:9(4):2523-2528. (*Scopus Indexed*)
45. Geetha A, Santhi D, **Prakash NB**, Hemalakshmi GR, Sumithra M. Image Processing Techniques for Diagnosis of Glaucoma from the Retinal Image: Brief Review. *Journal of Clinical and Diagnostic Research*. 2020:14(2):NE01-NE09. (*ESCI Indexed, Web of Science, Thomsonreuters*)
46. A.Mohanarathinam, S.Kamalraj, **Prakash NB**, Hemalakshmi GR, G.K.D.Prasanna Venkatesan. An Image Based Encryption Algorithm for Multimedia Applications. *International Journal of Engineering and Advanced Technology*. 2019:9(2):3354-3357. (*Scopus Indexed*)

47. Sreehari G S, **Prakash NB**, Karthikeyan M, Vijayarajan P. PSO-Solar Based for PV System for Maximum Power Point Tracking. *Bioscience Biotechnology Research Communications (Special Issue)*. 2019;12(6):63-74. *(ESCI Web of Science Indexed)*.
48. **Prakash NB**, Hemalakshmi GR. Efficient Brain Image Segmentation Technique Based on Entropy with Genetic Algorithm. *Bioscience Biotechnology Research Communications (Special Issue)*. 2019;12(6):134-141 *(ESCI Web of Science Indexed)*
49. Kannayeram G, **Prakash NB**, Muniraj R, Sundar B. Optimal Blending of Polymeric Materials for Power Transmission Cable Insulation using CHAOTIC PSO and GA – A Case Study. *Sylwan Journal*. 2019;163(11):52-63. *(SCIE Web of Science Indexed & Anna University, Chennai, Annexure List Journal (S.No.10960) IF: 0.691)*
50. Kannayeram G, **Prakash NB**, Muniraj R, Rajesh NB. Optimal Tuning of UPFC Damping Controller in Solar Penetrated Power System using DBCSO. *Sylwan Journal*. 2019;163(11):40-51. *(SCIE Web of Science Indexed & Anna University, Chennai, Annexure List Journal (S.No.10960) IF: 0.691)*
51. Ayyakrishnan M, Saravanan R, Kannayeram G, **Prakash NB**. Fast Recovery Switching Fault Tolerant Control Schemes for Four Switch Voltage Source Inverter. *Sylwan Journal*. 2019;163(11):29-39. *(SCIE Web of Science Indexed & Anna University, Chennai, Annexure List Journal (S.No.10960) IF: 0.691)*
52. Sujatha M, **Prakash NB**, Hemalakshmi GR, Jayasankar T. High Performance Grouping With Load Balancing Scheme for Wireless Sensor Networks. *International Journal of Advanced Science and Technology*. 2019;28(12):441-449. *(Scopus Indexed)*
53. Kannayeram G, Magala V, **Prakash NB**, Muniraj R, Sundar B. Assessment of NR/EPDM Blend Ratio Using Graphical Method. *International Journal of Innovative Technology and Exploring Engineering*. 2019;8(12):2358-2362. *(Scopus Indexed)*
54. Kannayeram G, **Prakash NB**, Muniraj R, Sivakumar T. Optimal Tuning of UPFC Damping Controller Using Single and Multiobjective Evolutionary Algorithms. *International Journal of Scientific & Technology Research*. 2019;8(10):3031-3037. *(Scopus Indexed)*
55. Hemalakshmi GR, Santhi D, **Prakash NB**. The Role of Optic Disc, Retinal Blood Vessels and Exudates in Detection of Diabetic Retinopathy: A Literature Review. *Journal of Clinical and Diagnostic Research*. 2019;13(3):NE01-NE04. *(ESCI Indexed, Web of Science, Thomsonreuters)*

56. Selvathi D, **Prakash NB**, Gomathi V, Hemalakshmi GR. Fundus Image Classification Using Wavelet Based Features in Detection of Glaucoma. *Biomedical & Pharmacology Journal*. 2018;11(2):795-805. **(SJR:0.13) Anna Univ. Annexure-II**
57. Kannayeram G, Manoharan PS, **Prakash NB**. PI-tuned UPFC damping controllers design for multi-machine power system. *Journal of Measurements in Engineering*. 2018;6(2):81-92. **(Clarivative Analytics ESCI Indexed)**
58. **Prakash NB**, Karuppiah N, Vishnu Kumar V, Vishnu RM, Zainy Mohammed Yousuf. Load Frequency Control of Three Area System using FOPID Controller. *WSEAS Transactions on Computer Research*. 2018;6:36-42.
59. **Prakash NB**, Hemalakshmi GR. Industrial Energy Consumption Cost Analysis. *International Journal of Emerging Technology and Advanced Engineering*. 2017;7(6):153-156.
60. **Prakash NB**, Hemalakshmi GR. Detection of Microaneurysms in Fundus Image using ELM classifier. *International Journal of Current Pharmaceutical Review and Research*. 2017;8(3):223-227. **(SJR:0.325)**
61. **Prakash NB**, Selvathi D. An Efficient Detection System for Screening Glaucoma in Retinal Images. *Biomedical & Pharmacology Journal*. 2017;10(1):459-465. **(SJR:0.13) Anna Univ. Annexure-II**
62. **Prakash NB**, Selvathi D. Segmentation of retinal blood vessels in colour fundus images using ANFIS classifier. *International Journal of Biomedical Engineering and Technology*. 2017;24(4):338-355. **(SJR:0.2) Anna Univ. Annexure-I**
63. **Prakash NB**, Hemalakshmi GR, StellaInbaMary M. An efficient approach on optic disc detection and retinal blood vessel segmentation for diabetic retinopathy based on support vector machine. *Journal of Chemical and Pharmaceutical Sciences*. 2016;9(3):1031-1038. **(SJR:0.15) Anna Univ. Annexure-II**
64. **Prakash NB**, Hemalakshmi GR, StellaInbaMary M. Automated Grading of Diabetic Retinopathy Stages in Fundus Images using SVM Classifier. *Journal of Chemical and Pharmaceutical Research*. 2016;8(1):537-541. **(SJR:0.12) Anna Univ. Annexure-II**
65. **Prakash NB**, Selvathi D. An efficient approach for detecting exudates in diabetic retinopathy images. *Biomedical Research (India)*. 2016:Special Issue:S414-S418. **(SJR:0.14) Anna Univ. Annexure-I**
66. **Prakash NB**, Gowthami K. Automatic Vehicle Collision Avoidance System-A Survey. *Research Journal of Pharmaceutical, Biological and Chemical Sciences*. 2016;7(1):1046-1053. **(SJR:0.16) Anna Univ. Annexure-II**
67. Kumar K, **Prakash NB**, Divya S. Investigation of flashover performance on 22kv bushing with non-uniform pollution. *International Journal of Applied Engineering Research*. 2015;10(10):15948-15953. **(SJR:0.2) Anna Univ. Annexure-II**

68. Diffni Gomez AM, **Prakash NB**, Vigneshwaran B. Analysis of Partial Discharge Characteristics on Aged Mineral Oils. *International Journal of Applied Engineering Research*. 2015;10(10):18260-18264. **(SJR:0.2) Anna Univ. Annexure-II**
69. **Prakash NB**, Parvathavarthini M, Madavan R. Mathematical Modeling on AC Pollution Flashover Performance of Glass and Composite Insulator. *Journal of Electrical Engineering and Technology*. 2015;10(4):1796-1803. **(JCR:0.597) Anna Univ. Annexure-I**
70. **Prakash NB**, Selvathi D, Hemalakshmi GR. Development of Algorithm for Dual Stage Classification to Estimate Severity Level of Diabetic Retinopathy in Retinal Images using Soft Computing Techniques. *International Journal on Electrical Engineering and Informatics*. 2014;6(4):717-739. **(SJR:0.18) Anna Univ. Annexure-II**
71. Sivaneshwaran K, Vinothkumar R, Jegatheesh G, **Prakash NB**, Deepieha JR. Demand Based Operating System of Power Compensating Controller. *International Journal of Engineering Development and Research*. 2014;2(2):1559-1562.
72. Hemalakshmi GR, **Prakash NB**. Differentiation of paddy grains & analyzing the defects in paddy grains using Image Processing. *International Journal of Emerging Technologies*. 2014.
73. Selvathi D, **Prakash NB**, Neethi Balagopal. Automated detection of diabetic retinopathy for early diagnosis using feature extraction and support vector machine. *International Journal of Emerging Technology and Advanced Engineering*. 2012;2(11):762-767.
74. Saravanan P, **Prakash NB**. Constructive Genetic Algorithm – An Application to minimize the cost. *Engineering Today Journal*. 2003;5:55-58.

INTERNATIONAL BOOK CHAPTER PUBLICATIONS:

1. R Pandi Selvam, A Sheryl Oliver, V Mohan, **NB Prakash**, T Jayasankar. Explainable Artificial Intelligence with Metaheuristic Feature Selection Technique for Biomedical Data Classification. *Biomedical Data Analysis and Processing Using Explainable (XAI) and Responsive Artificial Intelligence (RAI)*. https://link.springer.com/chapter/10.1007/978-981-19-1476-8_4 2022:43-57. **(SCI and Web of Science Elsevier link)**
2. Velumani Ramesh, Hariharasitaraman S, Sankar Ganesh Sundaram, **Prakash N.B.** and Hemalakshmi G. R. A Federated Learning-Based Light-Weight Privacy-Preserving Framework for Smart Healthcare Systems. *Handbook of Research on Design, Deployment, Automation, and Testing Strategies for 6G Mobile Core Network*. <https://www.igi-global.com/chapter/a-federated-learning-based-light-weight-privacy-preserving-framework-for-smart-healthcare-systems/302198> 2022: Pages: 30: DOI: 10.4018/978-1-7998-9636-4.ch019.

3. T.Jayasankar, **N.B.Prakash**, G.R.Hemalakshmi. 7 - Big Data based breast cancer prediction using kernel support vector machine with the Gray Wolf Optimization algorithm. *Applications of Big Data in Health Care (Theory and Practice) (Book chapter)*. <https://doi.org/10.1016/B978-0-12-820203-6.00003-5>, 2021:173-194 (*SCI and Web of Science Elsevier link*)
4. Krishnaraj N, **Prakash N.B.** (2021) An Intelligent Fitness-Scaling Chaotic Genetic Ant Colony Algorithm Based on Task-Scheduling in Cloud Computing Environments. In: Elhoseny M., Shankar K., Abdel-Basset M. (eds) *Artificial Intelligence Applications for Smart Societies. Studies in Distributed Intelligence. Springer, Cham (Book Chapter)*. https://doi.org/10.1007/978-3-030-63068-3_9 (*SCI Web of Science Indexed Springer Link*)
5. G Kannayeram, PS Manoharan, **NB Prakash**, T Sivakumar, R Saravanan. Robust Optimal Tuning of UPFC Using Single Objective Optimization Algorithm. *Intelligent Paradigms for Smart Grid and Renewable Energy Systems (Book Chapter)* https://link.springer.com/chapter/10.1007/978-981-15-9968-2_2

INTERNATIONAL CONFERENCE PUBLICATIONS:

1. P Ramkumar, **NB Prakash**, B Vigneshwaran, Bayesian Optimized Convolution Neural Network Architecture for Partial Discharge Signature Recognition, *2024 International Conference on Cognitive Robotics and Intelligent Systems (ICC-ROBINS)*, organized by KPR Institute of Engineering and Technology, Coimbatore on 17th to 19th April 2024.
2. CH NV Jyothirmai, GR Hemalakshmi, **NB Prakash**, Vijay Jagdish Upadhye, Harshal Patil, Syed Noeman Taqui, Computational Model Based on CNN to Identify Masses from Liver Images, *2024 2nd International Conference on Intelligent Data Communication Technologies and Internet of Things (IDCIoT)* organized by School of Computer Science and Engineering, REVA University, Bengaluru on 4th to 6th January 2024.
3. Jaanu ASN, Akshaya P, Umamaheswari C, Valliammai V, **Prakash NB**, “Automatic Detection of White Blood Cancer from Bone Marrow Microscopic Images using Deep Learning”, *International Conference on Clinical Diagnosis and Biomedical Devices – ICCDBD 2023* organized by Department of Biomedical Engineering of Sri Shakthi Institute of Engineering and Technology, Coimbatore on 16th & 17th November 2023
4. Revathi, **Prakash NB**, “Predicting Breast Cancer with Machine Learning Algorithms”, *International Conference on Clinical Diagnosis and Biomedical Devices – ICCDBD 2023* organized by Department of Biomedical Engineering of Sri Shakthi Institute of Engineering and Technology, Coimbatore on 16th & 17th November 2023

5. Karthick B, Kabilan S, Sricharan B J, Hemalakshmi G R, Prakash N B, Santhi D Classification and Identification of Types of Breast Cancer using Machine Learning Approach, *International Conference on Recent Advances in Engineering and Computer Applications-2023*, LJ University, Ahmadabad in association with Institute for Engineering Research and Publications (IFERP) held on 14th & 15th July 2023
6. Rajanish Kumar Kaushal, G. R. Hemalakshmi, **N.B.Prakash**, Suresh Maruthai, Keerat Kumar Gupta, Natrayan L, Machine Learning and Cloud-based Mobile App for Real Time Skin Cancer Prediction *2023 7th International Conference on I-SMAC (IoT in Social, Mobile, Analytics and Cloud) (I-SMAC)* <https://doi.org/10.1109/I-SMAC58438.2023.10290392> (*Scopus Indexed Conference*)
7. B.Md. Irfan, G. R. Hemalakshmi, **N.B.Prakash**, S Kamalesh, Rajesh Pokhariyal, Natrayan L, Monitor and Control of Drug Preparation using Deep Q Neural Network *2023 7th International Conference on I-SMAC (IoT in Social, Mobile, Analytics and Cloud) (I-SMAC)* <https://doi.org/10.1109/I-SMAC58438.2023.10290448> (*Scopus Indexed Conference*)
8. P. Arul Kandhan; **N.B. Prakash**; M. Bakrutheen Performance Analysis of Different Fatty Acid Vegetable Oil using Ranking Method <https://ieeexplore.ieee.org/xpl/conhome/10059461/proceeding> (*Scopus Indexed Conference*)
9. Gnanaprakasam C. N.; N. Arockia Rosy; Vaishali Gajendra Shende; **N. B. Prakash**; P. V. Pramila; S. Ramesh ML-based intelligent management and prediction of heart disease <https://doi.org/10.1063/5.0120443> (*Scopus Indexed Conference*)
10. D Sabapathi; Yogesh Shivaji Pawar; Sumagna Patnaik; E. Sivanantham; D. Karthik Prabhu; N. B. Prakash Energy Load Forecasting with Demand Side Management in Industrial Sectors using Neuro-Fuzzy Controller and Deep Learning <https://ieeexplore.ieee.org/xpl/conhome/10073654/proceeding> (*Scopus Indexed Conference*)
11. Sheeba Y, **Prakash N.B.** Insulator Crack Detection using Soft Computing Techniques. *8th International Conference on Advanced Computing and Communication Systems* @ Shri Eashwar College of Engineering, Coimbatore on 25th and 26th March 2022. Paper ID: ICACCS_2022_paper_A062
12. G Kannayeram, M Madhumitha, S Mahalakshmi, P Menaga Devi, K Monika, **NB Prakash**. Smart Environmental Monitoring using LoraWAN. *Proceedings of the 3rd International Conference on Communication, Devices and Computing. Springer, Singapore*, 513-520, 2022. (*Scopus Indexed Conference*)
13. A Muthara Swathi, GR Hemalakshmi, **NB Prakash**. Covid 19-Lung Segmentation and Detection-A Literature Review. *2021 5th International Conference on Electrical, Electronics, Communication, Computer Technologies and Optimization*

- Techniques (ICECCOT). IEEE Conference*, 614-618, 2021. (*Scopus Indexed Conference*)
14. Rajalakshmi M, **Prakash N.B.** (2021) Prediction and analysis of transformer oil using fuzzy logic algorithm (ICSGSM2021-080) in “*International Conference on Smart Grids Structures and Materials*” held on 19th and 20th April 2021 at KLEF (KONERU LAKSHMAIAH EDUCATION FOUNDATION. DEPARTMENT OF ELECTRICAL AND ELECTRONICS ENGINEERING), *Vijayawada Campus, Guntur, Andhra Pradesh.*
 15. Ramar Ananth P, Vishnu S, Sreedhar K.T, **Prakash NB.** (2021) Hybrid System Based D-STATCOM for Power Quality Improvement with IoT. *9th International Conference on Contemporary Engineering and Technology 2021(ICCET-2021).* 10th and 11th April 2021. Prince Shri Venkateshwara Padmavathy Engineering College & Prince Dr.K.Vasudevan College of Engineering and Technology, Chennai.
 16. Selvakumar M, Selvakumar R, Seyad Ibrahim N.M, **Prakash NB.** (2021) Smart GSM Based Anti-Drunk Car Alert System. *9th International Conference on Contemporary Engineering and Technology 2021(ICCET-2021).* 10th and 11th April 2021. Prince Shri Venkateshwara Padmavathy Engineering College & Prince Dr.K.Vasudevan College of Engineering and Technology, Chennai.
 17. **Prakash NB**, Shiny G, Kannayeram G, Madavan R. (2019) Statistical Analysis of Silicon Grease Coated Bushings Characteristics under Various Contaminated Conditions. *Online International Conference on Innovation in Electrical, Electronics and Intelligent Computing (ICI2EIC 2019).* 19th – 20th July 2019. <http://ici2eic.com/publications.html> (Scopus Publications) (Paper ID: OIIC 1051).
 18. Kannayeram G, Manoharan PS, **Prakash NB**, Sivakumar T, Saravanan R. (2019) Robust Optimal Tuning of UPFC using Single Objective Optimization Algorithm. *First International Conference on Advances in Electrical and Computer Technologies 2019 (ICAECT 2019)*, Hotel Aloft, Coimbatore. <http://icact.co.in/> (Springer Partner)
 19. **Prakash NB**, Kalirajan A, Kathirvelmari S, Mohammed Safeek P, Murugan S. (2019) Smart Vehicle System. *International Conference on Recent Trends in Engineering, Technology and Management (ICRTEM-2019).* PSN College of Engineering and Technology, Tirunelveli. (Paper ID: PSN1023)
 20. Kannayeram G, **Prakash NB**, Eswari Prabha P, Gobiga RK. (2019) Damping of Low Frequency Oscillations Using Controllability Measures of UPFC. *IEEE International Conference on Recent Advances in Energy-efficient Computing and Communication (ICRAEEC'2019)*, St.Xavier's Catholic College of Engineering, Nagercoil. <http://www.icaecc2019.com/>
 21. Rajesh NB, **Prakash NB.** (2017) Co-Ordination Control Scheme for Reactive Power Sharing and Harmonic Voltage Distortion Compensation in Droop Controlled Micro-Grids. *AICTE Sponsored International Conference on Power and Energy Systems (ICPES'2017)*, Velammal College of Engineering and Technology, Madurai.

22. Rajesh NB, **Prakash NB**. (2017) Evaluation of Voltage Stability in Power System Network with Observability Using Phasor Measurement Unit (PMU). *AICTE Sponsored International Conference on Power and Energy Systems (ICPES'2017)*, Velammal College of Engineering and Technology, Madurai.
23. Tamilarasi A, **Prakash NB**, Suvatha A, Muthuselvi M. (2017) FPGA Implementation of Electric Vehicle Using Transformer-less Inverter Topology. *International Conference on Intelligent Transport System and Vehicle Technology ITSVT'2017*, Karpagam College of Engineering, Coimbatore.
24. Shiny G, **Prakash NB**, Madavan R. (2016) Effect of Combination of Pollutants on the Performance of the Bushing. *IEEE International Conference on Energy Efficient Technologies for Sustainability ICEETS'2016*, St.Xaviers Catholic College of Engineering, Nagercoil.
25. Shiny G, **Prakash NB**, Madavan R. (2016) Analysis of Bushing Performance under Various different polluted environments. *International Conference on Intelligent Systems and Control, ISCO'2016*, Karpagam College of Engineering, Coimbatore.
26. Kumar K, **Prakash NB**, Divya S. (2015) Investigation of flashover performance on 22kv bushing with non-uniform pollution. *IEEE Sponsored 2nd International Conference on Innovations in Information Embedded and Communication Systems ICIIECS'15*, Karpagam College of Engineering, Coimbatore.
27. Kumar K, **Prakash NB**, Divya S. (2015) Investigation of Non-Uniform Pollution Performance on RTV Coated Bushing. *IEEE International Conference on Electrical, Computer and Communication Technologies*. SVS College of Engineering, Coimbatore.
28. Diffni Gomez AM, **Prakash NB**, Vigneshwaran B. (2015) Investigation of Partial Discharge Characteristics Fluids in Electric Power Apparatus *IEEE International Conference on Electrical, Computer and Communication Technologies*. SVS College of Engineering, Coimbatore.
29. Diffni Gomez AM, **Prakash NB**, Vigneshwaran B. (2015) Analysis of Partial Discharge Characteristics on Aged Mineral Oils. *IEEE Sponsored 2nd International Conference on Innovations in Information Embedded and Communication Systems ICIIECS'15*, Karpagam College of Engineering, Coimbatore.
30. **Prakash NB**, Parvathavarthini M, Madavan R. (2015) Investigation of various artificial polluting methods on glass and composite insulators. *IEEE International Conference on Communication and Signal Processing (ICCSP)*. Adhiparasakthi Engineering College, Melmaruvathur
31. Diffni Gomez AM, **Prakash NB**, Vigneshwaran B. (2015) Investigation on electrical characteristics of dielectric fluids under aging phenomena. *IEEE International Conference on Communication and Signal Processing (ICCSP)*. Adhiparasakthi Engineering College, Melmaruvathur

32. Karthiga V, Manimekalai V, Hemalakshmi GR, **Prakash NB**. (2014) Automatic Railway Level Crossing using Android. *International Conference on Innovative Trends in Computing and Technology*. Rajaas Engineering College, Vadakangulum
33. Kaleeswari R, **Prakash NB**, Madavan R, Kannayeram G. (2013) Investigation of flashover performances on various types of insulators with non-uniform pollution. *IEEE International Conference on Power and Energy Systems*, Velammal College of Engineering and Technology, Madurai 2013.
34. Koperundevi K, **Prakash NB**, Madavan R, Kannayeram G. (2013) Investigation of Pollution Performance on Bushing using Sphere to Sphere Configuration. *IEEE International Conference on Power and Energy Systems*, Velammal College of Engineering and Technology, Madurai.
35. Sundar G, Kannayeram G, **Prakash NB**, Vinothkumar V. (2013) CPSO based selection of Optimal Polyurethane and Silicone blend. *International Conference SEMCCO and FANCCO 2013*, SRM University, Chennai.
36. Vinothkumar V, Kannayeram G, **Prakash NB**, Sundar G. (2013) PSO based selection of Optimal Natural and Synthetic Polymeric blend. *International Conference SEMCCO and FANCCO 2013*, SRM University, Chennai.
37. **Prakash NB**. (2013) Investigation of Various Artificial Polluting Methods and New AC Flashover Dynamic Modeling of Glass and Composite Insulators. *International Conference on Advanced Computing Machines and Embedded Technology (ICACT'13)*. J.K.K.Nattraja College of Engineering and Technology.
38. **Prakash NB**, Selvathi D. (2011) Optic Disc Detection and Blood Vessel Segmentation in Color Retinal Images. *International Conference on Advances in Engineering and Technology - Computer Science (ACS)*.
39. Kannayeram G, **Prakash NB**. (2010) Robust Damping of Local and Inter-area Oscillations using UPFC. *International Conference ICETES-2010* Noorul Islam University, Kumaracoil.

NATIONAL CONFERENCE PUBLICATIONS:

1. **Prakash NB**, Aksha J, Esakkiammal G, Maheswari K. (2017) Segmentation of retinal blood vessels in fundus images using image processing techniques. *National Conference on Knowledge Based Inventive Telecommunication Systems (NCKITS-2017)*. KKR & KSR Institute of Technology & Sciences Guntur, Andhra Pradesh,
2. **Prakash NB**. (2013) Investigation of Various Artificial Polluting Methods and New AC Flashover Dynamic Modeling of Glass and Composite Insulators. *CSIR Sponsored 5th National Conference on Advanced Technologies in Electrical Engineering*.

3. **Prakash NB.** (2013) Investigation of Various Artificial Polluting Methods on Glass and Composite Insulators. *7th National Conference Advances in Power Engineering and Control Technology (APECT'13).*
4. Vethakkan Rajkumar C, **Prakash NB**, Subburaj P. (2011) An automated recognition of partial discharge patterns using neural network function. *National Conference on Intelligent Computing and Control for Engineering Applications (NCICE'11)* Anna University of Technology, Coimbatore.
5. **Prakash NB.** (2011) An Automatic Recognition of Partial Discharge Patterns using Neural Network Function. *National Conference on Intelligent Computing and Control of Engineering Applications (NCICE'11).*
6. Kannayeram G, **Prakash NB.** (2010) Robust Damping of Electro Mechanical Oscillations Using UPFC. *National Conference on Innovations in Electrical and Electronics Engg.* M.P.Nachimuthu M.Jaganathan Engg. College, Chennimalai.
7. **Prakash NB.** (2009) Performance Comparison of Harmonic Mitigation Control Strategies for Shunt Active Power Filter. *National Conference*, Einstein College of Engineering, Aalangulum.
8. **Prakash NB.** (2009) Real Time Measurements of Harmonics Using Power Quality Analyzer and Mitigation Using Shunt Active Power Filter. *National Conference*, Dr.Sivanthi Adittanar Engg. College, Tiruchendur.
9. **Prakash NB.** (2008) Neuro Fuzzy Control of Robotic Arm. *National Conderence on Extreme Engineering and Technological Advancements*, Jeyam College of Engineering and Technology, Dharmapuri.
10. **Prakash NB.** (2008) Dielectric Properties Of Polymer Insulating Materials Impregnated With Oil. *National Conference on Emerging Trends in Electrical Engineering and Power Drives*, Government College of Engineering, Tirunelveli.
11. **Prakash NB.** (2003) Optimal Sizing and placement of Capacitors in distributed networks. *National Conference*, Adhiyaman Engineering College, Ozhur.
12. Subburaj P, Saravanan P, **Prakash NB.** (2003) Role of Power Electronics in Alternative Energy Sources. *UGC Sponsored National Conference on Recent Trends in Industrial Electronics, Drives and Controls.* Annamalai University, Annamalai Nagar, Chidambaram.
13. Subburaj P, **Prakash NB.** (2003) Power Quality Problems with Harmonic Distortion. *19th National Convention of Electrical Engineers. National Seminar on Challenges in Meeting the Demand for Quality in Power Supply*, The Institution of Engineers, (India), Madurai Local Centre.

WORKSHOPS/SEMINARS/FDP ATTENDED:

| S.No | Topic | Institution | Date |
|------|--|--|--|
| 1. | Outcome Based Education for Effective Learning and Teaching | Association of Indian Universities & AMET University, Chennai | 19 th July – 27 th July 2023 |
| 2. | Certificate of Energy Literacy | Energy Swaraj Foundation | 09.03.2023 |
| 3. | Renewable Energy Systems | Jerusalem College of Engineering, Chennai | 29 th & 30 th September 2021 |
| 4. | AICTE Online Orientation Training Program for Mentors under | National Initiatives for Technical Teachers Training (NITTTR, Chennai) | 05.07.2021-09.07.2021 |
| 5. | AICTE Training and Learning Academy (ATAL Online FDP on Internet of Things (IoT)) | Indian Institute of Information Technology Nagpur | 30.04.2020-04.05.2020 |
| 6. | FDP on Technology Advancement in Power System Control, Power Controllers, Dives and E-Vehicle – TAPPAD 2020 | Dr.N.G.P .Institute of Technology, Coimbatore | 27.04.2020-01.05.2020 |
| 7. | Two weeks faculty development program on LaTeX | Gopalan College of Engineering and Management, Bangalore | 17.04.2020-30.04.2020 |
| 8. | GIAN Course – “Introduction to Image Based Modeling and Simulation Applications in Musculoskeletal Biomechanics” | Motilal Nehru National Institute of Technology, Allahabad | 22.04.2019-26.04.2019 |
| 9. | A Talk on “Idea-Product-Patent-Income” by Mr.Ramesh Kannan, Registered Patent Agent | National Engineering College, K.R.Nagar, Kovilpatti | 18.03.2019 |
| 10. | Two days Management Development Training Program – Managing Life Creatively | National Engineering College, K.R.Nagar, Kovilpatti | 05.02.2019-06.02.2019 |
| 11. | CSIR Sponsored Three Day Seminar on Research Issues and Challenges in Smart Healthcare Devices RICH'19 | National Engineering College, K.R.Nagar, Kovilpatti | 31.01.2019-02.02.2019 |

| S.No | Topic | Institution | Date |
|------|---|--|-----------------------|
| 12. | TEQIP sponsored FDP program on Free Open Source Software for AI and machine learning | Thiagarajar College of Engineering, Madurai | 01.10.2018-06.10.2018 |
| 13. | Three days training programme on "Technology Enabled Learning" by NITTTR, Chennai | National Engineering College, K.R.Nagar, Kovilpatti | 27.05.2017-29.05.2017 |
| 14. | TEQIP Sponsored Foundation Skills in Integrated Product Development (FSIPD) Train the Trainer Programme | Thiagarajar College of Engineering, Madurai | 19.01.2016-23.01.2016 |
| 15. | NPTEL Online Certification Introduction to Research | NPTEL, Chennai (MDRD) | 01/2016-02/2016 |
| 16. | Formulation of Research and Development Grant Proposals by Scientists and Technologists | National Engineering College, K.R.Nagar, Kovilpatti | 18.11.2015-20.11.2015 |
| 17. | FDP on Entrepreneurship, Innovation and Incubation | Vellore Institute of Technology, Vellore | 01.06.2015-13.06.2015 |
| 18. | AICTE Sponsored FDP on Advanced Computational Intelligence and Optimization Techniques for Health Care Diagnosis System (ACIOTHDS'15) | MEPCO Schlenk Engineering College, Sivakasi | 11.05.2015-24.05.2015 |
| 19. | NPTEL Workshop | National Engineering College, K.R.Nagar, Kovilpatti | 13.03.2015 |
| 20. | Three Days Training Programme – IGNITE on HR | National Engineering College, K.R.Nagar, Kovilpatti | 28.11.2014-30.11.2014 |
| 21. | 17 th ISTE TN& P Section Annual Convention & Conferment of Life Time Achievement Awards – 2014 | National Engineering College, K.R.Nagar, Kovilpatti | 07.11.2014-08.11.2014 |
| 22. | ISTE-SRM Sponsored One week Short Term Training Programme on Soft Computing Techniques for Clinical Decision Making | PSNA College of Engineering and Technology, Dindigul | 07.07.2014-13.07.2014 |
| 23. | Workshop on High Voltage Insulation Testing, Measurement and Simulation Techniques | SASTRA University, Thanjavur | 28.09.2013 |
| 24. | RADIE'11 | National Engineering College, K.R.Nagar, Kovilpatti | 18.02.2011 |

| S.No | Topic | Institution | Date |
|------|--|---|-----------------------|
| 25. | Wavelets Transform and its Applications | MEPCO Schlenk Engineering College, Sivakasi | 04.02.2011-05.02.2011 |
| 26. | DRDO Sponsored Two Days Workshop FPGE-PED'11 | National Engineering College, K.R.Nagar, Kovilpatti | 14.10.2011-15.10.2011 |
| 27. | DRDO Sponsored Two Days Seminar SCTAEE'11 | National Engineering College, K.R.Nagar, Kovilpatti | 05.08.2011-06.08.2011 |
| 28. | Mission 10x (High Impact Teaching Profile) | National Engineering College, K.R.Nagar, Kovilpatti | 01.12.2009-05.12.2009 |
| 29. | National Seminar on Biomedical Engg AMER'08 (Advancements in Medical Engg. Towards Research) | National Engineering College, K.R.Nagar, Kovilpatti | 28.03.2008-29.03.2008 |
| 30. | Outcome Based Technical Education | National Engineering College, K.R.Nagar, Kovilpatti | 25.07.2007 |
| 31. | Research Motivation Programme | National Engineering College, K.R.Nagar, Kovilpatti | 04/2007 |
| 32. | Instructional Design And Delivery | National Engineering College, K.R.Nagar, Kovilpatti | 29.11.2004-04.12.2004 |
| 33. | Microcontroller Programming | Arulmigu Kalasalingam College of Engg, Krishnankoil | 10.11.2003-15.11.2003 |
| 34. | Challenges in meeting the demand for quality in power supply | The Institution of Engineers, Madurai | 08.11.2003-09.11.2003 |
| 35. | High Voltage Engineering | National Engineering College, K.R.Nagar, Kovilpatti | 31.05.2003-05.06.2003 |
| 36. | Fuzzy Logic Application for Power System | K.S.Rangasamy College of Technology, Thiruchencode | 19.03.2003-20.03.2003 |
| 37. | Recent Trends In Electrical Drives | Jerusalem College Of Engg., Chennai | 26.02.2003-27.02.2003 |

GUEST LECTURE:

1. Delivered a Guest Lecture on **“NCC Orientation Seminar Marching Towards Greatness – Your Path to Excellence Begins Here”** at **VIT, Bhopal University, Bhopal** on 22nd February 2024 in a Hybrid Mode.

2. Delivered a Guest Lecture on “**Power System Operation and Control Using Smart Grid**” at **Francis Xavier Engineering College**, Tirunelveli on 18th October 2023
3. Delivered a Guest Lecture on “**Energy Conservation and Optimization**” at **Francis Xavier Engineering College**, Tirunelveli on 27th March 2023
4. Delivered a Guest Lecture on “**Prototype/Process Design and Development**” at **St. Marys College (Autonomous)**, Thoothukudi on 29th August 2022
5. Delivered a Guest lecture on “**Machine Learning and its Applications**” at **Sri Sivasubramaniya Nadar College of Engineering, Chennai** on 9th and 10th December 2021
6. Delivered a Guest lecture on “**Programming and Interfacing using 8086 and 8051**” at **R.M.D. Engineering College, Chennai** on 9th October 2020
7. Delivered a Guest lecture on “**IoT-Its Significance and Applications**” at **Sri Sivasubramaniya Nadar College of Engineering, Chennai** on 24.08.2020
8. Delivered a Guest lecture on “**Career Guidance (Higher Studies) for Polytechnic Students**” at **Lakshmi Ammal Polytechnic College**, Kovilpatti on 06.03.2020
9. Delivered a Guest lecture on “**Deep Learning Techniques**” to the Department of Computer Science, **G.Venkatasamy Naidu College (SFC)** on 08.01.2020.
10. Delivered a Guest lecture on “**Unsupervised Machine Learning**” to the CSE Department Machine Learning Focus Group, **National Engineering College** on 07.07.2018.
11. Delivered a guest lecture on “**High Voltage Equipments**” in a **AICTE Sponsored FDP Program High Voltage Engineer** from 06.11.2017 – 19.11.2017 organized by EEE Department of National Engineering College, Kovilpatti.
12. Delivered a guest lecture on “**Personality and Character Development**” at **Government College of Engg.** Tirunelveli on 29.08.2017.
13. Delivered Seminar on “**Segmentation of Retinal Blood Vessels in Colour Fundus Images using ANFIS Classifier**” at **MEPCO Schlenk Engineering College**, Sivakasi on 24.10.2016.
14. Delivered a presentation on “**Soft Skills and Opportunities Identification for Entrepreneurs**” during the **Entrepreneurship awareness camp** on 29.12.2015 at National Engineering College, Kovilpatti.
15. Delivered a guest lecture on “**Implementation of FLC**” in a three days **National Level Workshop on “Implementation of Soft Computing Techniques using MATLAB**” on 25th to 27th Aug. 2014 organized by EEE Department of National Engineering College, Kovilpatti.

SPECIFIC ACHIEVEMENT:

1. Completed NCC Refresher Course Part-II successfully 22nd June 2022 to 11th July 2022 and has been **promoted to Major Rank with effect from 25th February 2024.**
2. Selected to receive the **Most Precious Award – PILLARS OF INDIA 2021** (In Memory of People's President) to recognize and acknowledge the best contributions in your field **on the eve of 90th birth anniversary of Dr.A.P.J.Abdul Kalam.**
3. Recipient of The Innovative Global Scientific Researchers, Educationalist-Professionals & Journalist Awards & Fellowship Honors Convocation 2020-21 awarded by The Society of Innovative Educationalist & Scientific Research Professionals Chennai as **“Innovative Technological Research & Dedicated, Excellent Professional Achievement Award” Specialization: Electrical and Electronics Engineering.**
4. **Commandant Silver Medal in Pre-commission Training Program @ NCC Officer Training Academy, Nagpur (February 2009)**
5. Best Platoon Commander in NCC Troop **in Pre-commission Training Program @ NCC Officer Training Academy, Nagpur (February 2009)**
6. **Awarded as Certified Master Trainer in TEQIP Sponsored Foundation Skills in Integrated Product Development (FSIPD) Train the Trainer Programme**
7. Completed the NCC Refresher Course Part-I with Alpha Grading
8. Completed the NCC Refresher Course Part-II with Bravo Grading
9. Promoted to the rank of Captain w.e.f. 25.02.2017
10. Motivated NCC Cadets to participate in the TSC, Sports and RDC camps, New Delhi.
11. **Best Project Award from The Institution of Engineers (India) in the 2nd IEI** Tamilnadu State Centre Students & Technicians Convention and All India Seminar on “Innovation, Technology and Knowledge Economy” for Real Time Implementation of Railway Track Fault Detection System Using IR and Ultrasonic Technology. (18th & 19th March 2016).

ADMINISTRATIVE POST HELD:

1. Coordinator for our Founder Kalvithanthai Thiru. K.Ramasamy 5th Memorial Day (12th March 2024)
2. Convener of College Anti-Drug Committee since 13th September 2023
3. Department Placement Coordinator (DPC/EEE) since 2021.
4. Finance Committee Chair for the “IEEE International Conference on “Emerging Technologies and Applications for a Smart and Sustainable World” (ICEmTASS’21)” 16th to 18th December 2021.
5. Chairman Kalvithanthai Thiru.K.Ramasamy - Founders Day & Memorial Lecture Program Coordinator since 2020
6. Admin Member in Coursera for campus connectivity since March 2020.
7. Member in the Equal Opportunity Cell of our college since 2019.
8. Expert Member in the IPR cell for patent application review (Electrical domain) since 2019.
9. Coordinator for NCC Cadet & NSS Student Volunteers for Job Mela since 2018
10. Department Placement Coordinator since 2018.
11. Tutor and Class Incharge for PG M.E(HVE) Students since 2017
12. EEE Department Association Staff Coordinator (2017-2019).
13. Expert Member in the NewGenIEDC Projects review (2017-2019).
14. Social Awareness Cell – Faculty Incharge (2016-2019)
15. Expert Member in UG Project Review since 2015
16. Entrepreneurship Development Cell Department Coordinator (2015-2018).
17. Department Advisory Board (Industrial Institute Interaction) & Program Assessment Committee Convener (2014-2019).
18. NEC Staff Club Joint Secretary in (2013-2014) and Treasurer in (2012-2013).
19. Microprocessor and Microcontroller Lab In-Charge since 2012
20. Department Board of Studies Executive Member since 2012 (Autonomous Scheme).
21. NCC Officer in the rank of Lieutenant since 2009 (Present Rank – Captain).
22. Institutional Program Discipline Committee Convener since 2009.
23. As Gents Hostel Residential Tutor from 2002 – 2004.

COURSERA COURSES COMPLETED :

| S. No | Course Details | Date of Completion |
|-------|---|--------------------|
| 1. | Machine Learning with Python | 24.04.2020 |
| 2. | AI for Everyone | 13.05.2020 |
| 3. | Introduction to Data Science in Python | 19.05.2020 |
| 4. | Machine Learning Foundations: A Case Study Approach | 21.05.2020 |
| 5. | Network Security & Database Vulnerabilities | 21.05.2020 |
| 6. | Machine Learning for Business Professionals | 27.05.2020 |
| 7. | Programming for Everybody (Getting Started with Python) | 30.05.2020 |
| 8. | Basic Image Classification with TensorFlow | 05.06.2020 |
| 9. | Machine Learning for All | 18.06.2020 |
| 10. | Introduction to Augmented Reality and ARCore | 18.06.2020 |
| 11. | COVID-19 Contact Tracing | 19.06.2020 |
| 12. | Semantic Segmentation with Amazon Sagemaker | 20.06.2020 |
| 13. | Introduction to Python | 26.06.2020 |
| 14. | Machine Learning Pipelined with Azured ML Studio | 28.05.2021 |

PROFESSIONAL MEMBERSHIP:

| Organization | Year of Induction | Grade Of Membership |
|---|-------------------|------------------------|
| Institution of Engineers (India) IE(I) | Life Time | AMIE [AM096126-7] |
| Indian Society for Technical Education (ISTE) | Life Time | MISTE LM-41834 |
| Institution of Electronics and Telecommunication Engineers (IETE) | Life Time | MIETE M222242 |
| The Society of Innovative Educationalist & Scientific Research Professional – Chennai | Life Time | FSIESRP LM171899477 |

PROGRAMME ORGANIZED:

| S.NO | Name Of the Programme | Date / Duration |
|------|---|---|
| 1. | Organized International Conference on “Emerging Technologies and Applications for Smart and Sustainable World: ICEmTASS’21 as Finance Committee Chair @ NEC | 16-18 December 2021 |
| 2. | Webinar organized on the topic “System Applications and Products (SAP) in Modern IT and Electrical World” Mr.Selvakumar Pandian NEC EEE 2008 Alumni | 23.07.2020 10AM to 11AM |
| 3. | Webinar organized on the topic “Design and Development of High Power audio Amplifier for Home Theatre” Mr.S.V.Sreeraj Director EmCog Solutions, Chennai | 22.05.2020 |
| 4. | TESLA-2k18 – Intra College Technical Symposium ALTANZIA-2k19 – Inter College Technical Symposium | 18.09.2018 20.02.2019 & 21.02.2019 |
| 5. | TESLA-2k17 – Intra College Symposium and ALTANZIA-2k18 – Inter College Technical Symposium | 27.12.2017 13.03.2018 & 14.03.2018 |
| 6. | Entrepreneurship Bazaar Programme - NewGen IEDC | 28.02.2018 & 01.03.2018 |
| 7. | NSTEDB & DST Sponsored Faculty Development Programme on Entrepreneurship at NEC | 5 th to 17 th Dec. 2016 |
| 8. | NSTEDB & DST Sponsored Three Days Entrepreneurship Awareness Camp at NEC | 29 th to 31 st Dec. 2015 |
| 9. | | 8 th to 10 th March 2016 |
| 10. | Entrepreneur Awareness Programme on “Banking and Finance” by IOB Manager | 01.09.2015 |
| 11. | Entrepreneurship Bazaar Programme | 13 th and 14 th Oct. 2015 |
| 12. | An visit to Tuticorin District Tiny and Small Scale Industries Association (THUDITSSIA) Industrial Exhibition | 07.08.2015 |
| 13. | Entrepreneur Awareness Programme for EEE Dept. Students with Alumni Entrepreneur | 19.03.2015 |
| 14. | ERTPEPS-09 (Emerging Recent Trends in Power Electronics and Power Systems) | 2009 |
| 15. | ELCON-08 (Electrical Conference) | 2008 |

| S.NO | Name Of the Programme | Date / Duration |
|------|--|-------------------------------------|
| 16. | Social Awareness Programs (Indhradhanush, Digital Payment, Youth Day, Trekking, Tree Plantation etc) | Three Programs in a Semester |
| 17. | NCC Annual Day Celebration | Every Year on March month |
| 18. | ENGINEERS DAY Celebration | Every Year on 15 th Sep. |
| 19. | Electrical Energy Awareness Programme – Conservation and Safety | Once in a month |

COURSES HANDLED: UNDER GRADUATE COURSE: B.E (EEE)

| | | |
|--|--|---------------------------------------|
| Electric Circuits / Circuit Theory | Electron Devices and Circuits | Power Electronics |
| Measurements and Instrumentation | Microprocessor and Microcontroller | Environmental Science and Engineering |
| High Voltage Engineering | Electrical Machines – I | Electrical Engineering |
| Electrical Drives and Control Circuits | Electrical Engineering and Control Systems | Digital Signal Processing |
| Introduction to Engineering | Project Management and Finance | Soft Computing Techniques |
| Automotive Electrical and Electronics | Digital Electronics | Control Systems |

POST GRADUATE COURSE: M.E (HVE)

| | | |
|---|--------------------------------|---|
| Advanced Topics in High Voltage Engineering | Advanced Digital System Design | High Voltage Generation and Measurement |
| Soft Computing Techniques | High Voltage Equipments | High Voltage Engineering and its Applications |
| Research Methodology and IPR | | |

INDUSTRIAL CONSULTANCY/PROJECT UNDERTAKEN:

1. Energy Consultancy work has been carried out since 2009 for M/s. Kayaar Exports Private Limited – A spinning mill company located at Nalatinputhur village. Revenue has been generated to a tune of 1 lakhs to 1.25 lakhs rupees per year from consultancy.
2. Taking care of Windmill O&M, Power trading, Optimizations of power cost and open access power supply demand matching.
3. Developing of Industry Institute Interaction and Relationship towards MoU and Industry Oriented Projects for UG and PG Students

INDUSTRY KNOWS HOW PROGRAM:

1. Attended one week industrial training program at M/s. Quantanics Techserv Pvt Ltd, Madurai from 08.02.2022 to 12.02.2022
2. Attended one week industrial training program at M/s. Alcon Power Systems, Coimbatore from 15.03.2021 to 19.03.2021
3. Attended one week industrial training program at M/s. Associate Transformers Private Limited, Dindigul from 13.02.2018 to 17.02.2018

ACT AS REVIEWER IN THE FOLLOWING JOURNALS:

1. Analog Integrated Circuits and Signal Processing
2. Applied Artificial Intelligence
3. Applied Medical Informatics
4. Asian Journal of Research and Reports in Ophthalmology
5. Asian Journal of Research in Surgery
6. Biocybernetics and Biomedical Engineering
7. Biomedical and Pharmacology Journal
8. Bulletin of Electrical Engineering and Informatics
9. CMES: Computer Modeling in Engineering and Sciences
10. Cognitive Computation
11. COMPEL: The International Journal for Computation and Mathematics in Electrical and Electronic Engineering
12. Computers in Biology and Medicine
13. Electrical Engineering
14. Engineering Applications of Artificial Intelligence
15. IEEE Access Journals.
16. Intelligent Automation & Soft Computing
17. Intelligent Automation and Soft Computing
18. International Journal of Electrical and Computer Engineering

19. International Journal of Electrical Engineering Education
20. International Journal of Emerging Electric Power Systems
21. International Journal of Ophthalmology
22. International Journal of Research and Scientific Innovation (IJRSI)
23. International Journal of Advanced and Applied Sciences (IJAAS)
24. Journal of Applied Science and Engineering
25. Journal of Computer Engineering and Information Technology.
26. Journal of Medical Imaging and Health Informatics
27. Journal of Medical Internet Research
28. Ophthalmology Research: An International Journal
29. Qeios Forum
30. Research Patents on Computer Science.
31. Scientific Reports
32. Surface Review and Letters
33. The Imaging Science Journal
34. The Journal of Engineering Research
35. Uttar Pradesh Journal of Zoology

ACT AS REVIEWER IN THE FOLLOWING INTERNATIONAL CONFERENCES:

1. Reviewer for 2024 IEEE Third International Conference on Intelligent Techniques in Control, Optimization and Signal Processing (INCOS), Kalasalingam Academy of Research and Education, Virudhunagar, Tamil Nadu, 14th - 16th March 2024
2. Second International Conference on Electrical, Electronics, Information and Communication Technologies (ICEEICT 2023) during 05 to 07, April 2023. <http://iceict.in/>
3. IEEE International Conference on Interdisciplinary Approaches in Technology and Management for Social Innovation – IATMSI-2022, will be held during 21-23 December 2022. <https://www.iiitm.ac.in/index.php/en/>
4. 9th International Conference on Renewable Energy Research and Applications, ICRERA 2020, September 27-30, 2020 Glasgow, UK <http://icrera.org/>.

PROJECT GRANTS & FUNDING – RECEIVED (2014-15 & 2018-19)

| S.NO | Name of the Project | Student and Mentor | Project ID & Funded Year [FY] | Amount Received |
|------|---|--|--|----------------------|
| 1. | Real Time Implementation of Railway Track Fault Detection System Using IR and Ultrasonic Technology | EEE Student: Mr.P.Shanmugam (2012-2016) Mentor: Mr.N.B.Prakash M.E., (Ph.D) Associate Professor, EEE Dept. | ID: R.4/2/UG/2014-15/ UG2015045 FY: 2014-2015 | Rs.5,000/- |
| 2. | Smart Trolley Bag | EEE Students: Saranya.S (2016-2020) Priyadharshini.A (2016-2020) Kanika. K (2015-2019) Nishanthi.R (2015-2019) Padmavathi.V (2015-2019) Priyadharshini.S (2015-2019) Mentor(s): Mr.F.Antony Jeffrey Vaz M.E., Assistant Professor, EEE Dept. Dr.N.B.Prakash M.E., Ph.D., Associate Professor, EEE Dept. | ID: NewGen IEDC /2018-19/01 FY: 2018-2019 | Rs.2,00,000/- |

PROJECT'S SUBMITTED AND STATUS :

| S.NO | Name of the Project | Investigator(s) | Submitted to & Financial Year | Amount in Rs. |
|------|--|---|--|-----------------|
| 1. | Automated Fundus Image Analysis and Diagnosis of Retinal Diseases using Deep Learning Techniques | Principle Investigator: Dr.N.B.Prakash M.E., Ph.D., Co-Investigators: Dr.D.Santhi M.E., Ph.D., Ms.G.R.Hemalakshmi B.Sc., MCA., .Tech.,(Ph.D). | ICMR – Ad-hoc Extramural Research Project, New Delhi. FY: 2018-2019 | 15 Lakhs |

| S.NO | Name of the Project | Investigator(s) | Submitted to & Financial Year | Amount in Rs. |
|---|---|---|--|-----------------|
| STATUS: Full Proposal not got selected in the ICMR shortlisted references. | | | | |
| 2. | Development of an expert system for green house monitoring and irrigation scheduling in agricultural crops” | Principle Investigator: Dr.N.B.Prakash M.E., Ph.D., Co-Investigator: Dr.R.Muniraj M.E., Ph.D., | TNSCST Science & Technology Project Scheme FY: 2019-2020 | 5 Lakhs |
| 3. | Dual Segmentation and Classification (DSC) of COVID-19 in X-Ray Images using Deep Learning Techniques | Principle Investigator: Dr.N.B.Prakash M.E., Ph.D., Co-Investigator: Ms.G.R.Hemalakshmi B.Sc., MCA., .Tech.,(Ph.D) | TNSCST Science & Technology Project Scheme FY: 2019-2020 | 5 Lakhs |
| STATUS: The above submitted projects has not been shortlisted | | | | |
| 4. | Dual Segmentation and Classification of Lung Diseases on X-Ray & PPG Signals using Deep Learning Techniques | Principle Investigator: Dr.N.B.Prakash M.E., Ph.D., Co-Investigator: Ms.G.R.Hemalakshmi B.Sc., MCA., .Tech.,(Ph.D) Ms. R.K.Aishwaryalakshmi M.E., | TNSCST Science & Technology Project Scheme FY: 2021-2022 | 5 Lakhs |
| 5. | Hyper ViT: An Intepertable Vision Transformer Model for Early Detection of Hyperpyrexia in Covid-19 Patients Using Facial Thermal Imaging | Principle Investigator: Dr.N.B.Prakash M.E., Ph.D., Co-Investigator: Dr.B.Vigneshwaran M.E., Ph.D | ICMR (call for investigator-initiated research proposals (Advertisement No. BMI/ePMS/121273 Date: 01/03/2023) FY: 2022-2023 | 30 Lakhs |

| S.NO | Name of the Project | Investigator(s) | Submitted to & Financial Year | Amount in Rs. |
|------|--|---|---|-----------------------------------|
| 6. | Assessing the influence of climate change On pediatric ophthalmology: identifying Risk factors and developing interventions | Principle Investigator: Dr.N.B.Prakash M.E., Ph.D., Co-Investigator: Mr.B.Venkatasamy M.E., (Ph.D) | Chief Minister's Research Grant 2023 - 2024 Government of Tamilnadu Higher Education Department, DOTE | 30 Lakhs |
| 7. | PEyeGraML: Pediatric Eye Care with Graph Theory and Machine Learning Framework | Principle Investigator: Dr.N.B.Prakash M.E., Ph.D., | MATRICS DST-SERB | 2 Lakhs per year (3 Years) |
| 8. | Development and clinical validation of artificial intelligent model towards optimizing the CNN architecture in diagnosis of Oral Cancer. | Principle Investigator: Dr.N.B.Prakash M.E., Ph.D., Co-Investigator: Dr. Manjula Devi R M.E., Ph.D., | ICMR (call for investigator-initiated research proposals (Advertisement No. ICMR / BMI/ePMS/Call for Proposal / 2023 Date: 20/12/2023) FY: 2023-2024 | 22 Lakhs |

PROJECT SUBMITTED FOR FUNDS TO NEWGENIEDC (2019-2020):

| S.NO | Name of the Project | Student and Mentor | Reference Details |
|------|---|---|---|
| 1. | Thermal Imaging for Abnormality Classification in Health Care (TIFACHC) | Mentor(s): Dr.N.B.Prakash M.E., Ph.D., Associate Professor, EEE Dept. Dr.D.Santhi M.E., Ph.D., Associate Professor, EIE Dept. Ms.G.R.Hemalakshmi B.Sc., MCA., M.Tech., (Ph.D)., Assistant Professor (Sr.G), CSE Dept. | Circular: NewGen IEDC /2019-20/01/26.09.2019 FY: 2019-2020 |
| 2. | Automatic Table Cleaning Robot | Mentor(s): Ms.K.Gowthami M.E., (Ph.D)., Assistant Professor, EEE Dept. Dr.N.B.Prakash M.E., Ph.D., Associate Professor, EEE Dept. | Circular: NewGen IEDC /2019-20/01/26.09.2019 FY: 2019-2020 |

| S.NO | Name of the Project | Student and Mentor | Reference Details |
|------|--|---|--|
| 3. | Electro Cardiogram Based Human Authentication (ECG-HA) | Mentor(s): Dr.R.Muniraj M.E., Ph.D., Assistant Professor (Sr.G), EEE Dept. Dr.N.B.Prakash M.E., Ph.D., Associate Professor, EEE Dept. Dr.M.Willjuice Iruthayarajan M.E., Ph.D., Professor and Head, EEE Dept. | Circular: NewGen IEDC /2019- 20/01/26.09.2019 FY: 2019-2020 |

PROJECT GRANTS & FUNDING - RECEIVED (2019-2020)

| S.NO | Name of the Project | Student and Mentor | Project ID & Funded Year [FY] | Amount Received |
|------|--|---|--|---|
| 3. | Electro Cardiogram Based Human Authentication (ECG-HA) | EEE STUDENTS 1. GOMATHI ARASU.A (2018-2022) 2. GANESHKUMAR.M (2018-2022) 3. NAVEEN KUMAR P (2018-2022) 4. SELVAKUMAR.A (2018-2022) Mentor(s): Dr.M.Willjuice Iruthayarajan M.E., Ph.D., Professor and Head, EEE Dept. Dr.N.B.Prakash M.E., Ph.D., Associate Professor, EEE Dept. Dr.B.Vigneshwaran M.E., Ph.D., Assistant Professor (Sr.G), EEE | ID: NewGen IEDC /2019- 20/01/ 10.11.2020 FY: 2019-2020 | Rs.2,50,000/- Project Completed and filed Patent |

TECHNICALSESSION CHAIR / RESOURCE PERSON / PROGRAM COMMITTEE:

- Invited as Technical Program Committee Member in the *Springer Series International Conference on Soft Computing*, Baslios Mathews II College of Engineering, Kollam, Kerala-690520
- Invited as a Resource Person for Webinar in Machine Learning @ St.Mother Theresa Engineering College, Vagaikulam Thoothukudi District.
- Acted as Technical Session Chair in *International Conference on Recent Trends in Automation, Signal Processing and Energy Systems* (ICASE2020) conducted during 19th and 20th June 2020 in Virtual mode @ Kalasalingam Academy of Research and Education, Krishnankoil, Srivilliputtur.

NATIONAL ADVISORY COMMITTEE:

1. Advisory Board Member in 7th International Conference On Engineering Research and Innovations-(ICERI-2022) Virtual Conference ISBN : 978-93-92105-03-6 22nd & 23rd September-2022
2. Selected as **Bentham Open Ambassador** for the year 2019-2020.
3. Scientific Committee Member in the International Conference on Advances in Engineering, Technology, and Contemporary Management Trends [ICAETCMT], 20th September 2019, Kathmandu, Nepal. <http://icaetcmt.com/scientific.php>
4. Editorial Board Member in the *BioMed Research Journal* (ISSN: 2578-8892) <http://www.scitcentral.com/editorboard.php?journal=43>
5. Advisory Member in the 2nd International Conference on Power and Embedded Drive Control (ICPEDC-2019), 21st to 23rd August 2019, SSN College of Engineering, Kalavakkam, Chennai. <http://icpedc2019.com/iac.html>

COLLABORATIVE RESEARCH WORK:

1. Working in association with the Professor **A.M.Mutawa, Kuwait University** & with **Professor M.Murugappan, Kuwait College of Science and Technology, Kuwait** in the project grant approved with number: E004/18/27th July 2023.
2. Working in the research group under the project titled “**BIOMEDICAL TECHNOLOGIES TO IMPROVE CLINICAL DIAGNOSIS AND SUPPORT HEALTHCARE INDUSTRIES**” at Majmaah University, Saudi Arabia under project number RGP-2019-33.
3. Submitted consent letter to work in the project “**DESIGN AND DEVELOPMENT OF INTELLIGENT OBESITY ASSESSMENT SYSTEM FOR CHILDREN'S IN KUWAIT USING THERMAL IMAGES AND ARTIFICIAL INTELLIGENCE (AI)**” to Kuwait Foundation for Advancement in Science, Kuwait on 29.03.2022.

EDITOR / GUEST EDITOR / EDITORIAL BOARD MEMBERS ETC.. :

1. Editorial Board Member – Journal of BioMedical Advancement and Clinical Research <https://manuscriptscientific.com/editorialboard/4/journal-of-biomedical-advancements-clinical-research>
2. Hon. Editorial Board Member – Educationalist Consultant, Journal of Electrical, Electronics and Computer Engineering Research ISSN: 2229-9289, Innovative Scientific Research Professional, Malaysia

3. Editorial & Reviewer Board Member – Research, Engineering & Technology Board: International Scientific Journal of Contemporary Research in Engineering Science and Management. <https://www.isjcrem.com/index.php/isjcrem/about/editorialTeam>
4. Guest Editor for the Special Issue ***“EMERGING INTELLIGENT TECHNOLOGIES IN APPLIED SCIENCE AND COMPUTATIONAL ENGINEERING MATHEMATICS”*** <https://research-publication.com/amsj/call-for-papers/spec-issue-eitasacem-2020/> in the ***Advanced in Mathematics: Scientific Journal***, Print ISSN: 1857-8365
5. Guest Editor for the Special Issue ***“Recent Trends in Advanced Information and Communication Technology”*** 2020:13(2):01-167 in the ***Bioscience Biotechnology Research Communications Journal***, Print ISSN: 0974-6455 Online ISSN: 2321-4007 CODEN BBRCBA, www.bbrc.in, ***University Grants Commission (UGC) New Delhi, India Approved Journal, indexed in Thomson Reuters, Clarivate Analytics USA***

PATENT FILED DETAILS:

1. **Title of Invention:** *System and Method to Preserve Lifetime Personal Healthcare Big data Records (Patent Application No. 201941053817, Date of Filing Patent: 24/12/2019, Date of Publishing the Patent: 03/01/2020)*
2. **Title of Invention:** *IOT Based Personalized Healthcare System and Method Thereof (Patent Application No. 201941053821, Date of Filing Patent: 25/12/2019, Date of Publishing the Patent: 03/01/2020)*
3. **Title of Invention:** *Smart Carry-on Luggage (Patent Application No. 202041006563, App. No. TEMP/E-1/6981/2020-CHE Date of Filing Patent: 14.02.2020, Date of Publishing the Patent: 21/02/2020)*
4. **Title of Invention:** *Development of Image Processing based Fruit Spoiled Detection System (Patent Application No. 202141008722, Date of Filing Patent: 02/03/2021, Date of Publishing the Patent: 12/03/2021)*
5. **Title of Invention:** *Electric Car: Display the Charging Location, Charging Time (Fast-Slow), Charging Rate, Battery Life Detect and Notified. (Australian Patent Application No. 2021101068, Date of Filing Patent: 27/02/2021)*
<http://pericles.ipaustralia.gov.au/ols/auspat/quickSearch.do?queryString=Electric+Car+%3A+Display+the+Charging+Location%2C+Charging+Time+%28Fast-Slow%29%2C+Charging+Rate%2C+Battery+Life+Detect+and+Notified&resultsPerPage=>

6. **Title of Invention:** *A Device for Authenticating a Person (Patent Application No. 202241010734, Date of Filing Patent: 28/02/2022, Date of Publishing the Patent: 04/03/2022)*

BOOK PUBLICATIONS:

1. Published a Book titled “*Deep Learning*” with authors *Ms. D.Nasreen Banu, Jayaraman Kumarappan, Dr.sowjanya M N, Dr.N.B.Prakash and Dr.G.R.Hemalakshmi*, First Edition, RK Publications. ISBN: 978-81-970228-8-3.
2. Published a Book titled “*Design Principles and Engineering Practices of Real-Time Embedded Systems*” with authors *Prof. Mrunalini Buradkar, Dr.M.Hema, Dr.G.Ravikanth and Dr.N.B.Prakash*. First Edition, Scientific International Publishing House. ISBN: 978-93-94002-59-3. www.sipinternationalpublishers.com

SUPERVISOR STATUS – (GUIDING RESEARCH SCHOLAR)

1. Received Supervisor status under *Anna University, Chennai on 07.03.2019*.
2. Supervisor Reference Number: *3340036*.
3. Supervisor Department: *Information and Communication Engineering (ICE)*.

RESEARCH SCHOLAR DETAILS:

| S.NO | Name of the Scholar | University Affiliation and other Details of Scholar | Employment Details |
|------|--|---|--|
| 1. | Scholar Name: Ms.A.Geetha Email: neyageetha@gmail.com Mobile Number: 9442445833 | University: Anna University, Chennai Registration No: 17243897213 Registered Year: July 2017 PT/FT: Part Time Faculty: Electrical Engineering Supervisor: Dr.N.B.Prakash | Full Time Scholar w.e.f 24.05.2021 & has completed her viva voce on 26 th May 2023 and received Ph.D Degree by 2023 |
| 2. | Scholar Name: Mr. P.Nirmal Kumar Email: nirmalkumarxp@gmail.com Mobile Number: 9003951771 | University: Anna University, Chennai Registration No: 21143897177 Registered Year: July 2021 PT/FT: Part Time Faculty: Electrical Engineering Supervisor: Dr.N.B.Prakash | Assistant Professor Department of EEE AAA College of Engineering & Technology, Sivakasi |

| S.NO | Name of the Scholar | University Affiliation and other Details of Scholar | Employment Details |
|------|--|---|---|
| 3. | Scholar Name: Ms.P.Revathi Email: revravi09@gmail.com Mobile Number: 9843478529 | University: Anna University, Chennai Registration No: 22224891121 Registered Year: January 2022 PT/FT: Part Time Faculty: Information and Communication Engineering Supervisor: Dr.N.B.Prakash | Assistant Professor Department of IT Hindusthan College of Engineering and Technology, Coimbatore-641032 |
| 4. | Scholar Name: Ms.M.Kanthimathi Email: kanthisaranya@gmail.com Mobile Number: 8754172042 | University: Anna University, Chennai Registration No: 24244897272 Registered Year: July 2024 PT/FT: Part Time Faculty: Information and Communication Engineering Supervisor: Dr.N.B.Prakash | Assistant Professor Department of CSE National Engineering College, K.R.Nagar, Kovilpatti - 628503 |

| S.NO | Particulars of Identity Details | : | Number |
|------|--|---|---|
| 1 | Scopus Author ID | : | 56490089000 |
| 2 | Scopus URL Link | : | https://www.scopus.com/authid/detail.uri?authorId=56490089000 |
| 3 | AICTE Faculty ID | : | 1-455253283 |
| 4 | Anna University Faculty Code | : | 9576037 |
| 5 | Orchid Author ID | : | 0000-0002-9663-7625 |
| 6 | Researcher Author ID | : | G-3995-2018 |
| 7 | Research Gate | : | https://www.researchgate.net/profile/Prakash-N-B |
| 8 | Skype User ID | : | +919443414744 |
| 9 | LinkedIn | : | https://www.linkedin.com/in/dr-prakash-nattanmai-balasubramanian-03218033/ |
| 10 | Google Scholar Citation | : | https://scholar.google.com/citations?user=EumqbUgAAAAJ&hl=en |
| 11 | VIDWAN (Expert Database & National Researchers' Network) | : | https://vidwan.inflibnet.ac.in/profile/211492 |

I declare that the information above is correct & true to the best of my knowledge & belief.

Prakash. N.B.

Signature