# FACULTY VITAE

1. **Name** : **Prof. Dr. VELLANKANNI CYRIL RAJ**

2. **Education** :

- Ph.D in Computer Science & Engineering from Jadavpur University , Kolkata , 2009 .
- M.E in Computer Science Engineering from Govt College of Technology in December 1995 , Coimbatore .
- B.E in Electronics & Communication Engineering from PSNA College of Engineering & Technology in 1988.

3. **Academic Experience:**

- October 2014 to till date Dean (Engg & Tech) & Prof. CSE/IT, Dr. M.G.R. Educational and Research Institute University, Chennai.
- Feb 2014 – Oct 2014 Addln Dean (Engg & Tech )- Dr. M.G.R. Educational and Research Institute University, Chennai
- 1997 – Feb 2014 HOD Dept CSE/IT
- 1988 – 1994 Lecturer at PSNA College of Engineering & Technology, Dindigul.

## 4. Non-Academic Experience

- 1997 - Assistant Manager (System & Training) Silver Line Software Technologies, Chennai
- 1996 - System Consultant City Information Technology, Kualalumpur

## 5. Certifications or Professional Registrations

- National Cyber Safety and Security Standards (NCSSS)

## 6. Current membership in professional organizations

- CSI : N1037009, IEEE (Computer Society ) : 90902400,
- IE, IET-1100239485, Chairman of IET Computing Science
- IEI M - 1236355

## 7. Honors and awards

- Outstanding Research Contributor award for the year 2015- Instituted by Dr.M.G.R. Educational Research Institute
- **SIR C.V.RAMAN RESEARCH AWARD** for the year 2014  - Instituted by Dr.M.G.R. Educational Research Institute, University

- Recipient of **IET MEN ENGINEER AWARD** IN 2012.

**8. Service activities**

- **Responsible** for recognition of the University as Business Incubator (BI) / Host Institute (HI) for implementation of the scheme "Support for Entrepreneurial and Managerial Development of SMEs through Incubator " – 2015 to still date obtained 26.35 Lakhs.

- Obtained 3 crore funding to establish NEWGEN IEDC to support startups from Department of Science & Technology.

  **Research Activities - Thesis Supervision / Guide Ship**

  Supervisor recognition in a number of leading universities in South India.
  - Jawaharlal Nehru Technological UniversityJNTU (Kakinada)
  - Sathyabama University
  - Dr. M.G.R. Educational and Research Institute University
  - St.Peter's University
  - No. of Ph.D produced: 8
  - No. of Ph.D Pursuing: 6

**9. Publications and Presentations, from past 5 years.**
   **International Journals**

**International Publication**

1. An innovative hybrid mathematical hierarchical regression model for breast cancer diseases analysis, CLUSTER COMPUTING [INTERNATIONAL], Vol. -, no. -, pp.1-14 B. Monica Jenefer., V. Cyrilraj 2018

2. Location based security architecture evaluated using ATAM, INTERNATIONAL JOURNAL OF ENGINEERING AND TECHNOLOGY(UAE) [INTERNATIONAL], Vol. 7, no. 1.7, pp.87-90 Begum A., Cyril Raj V. 2018

3. A genetic algorithm based protein signal pathway analysis, INDIAN JOURNAL OF PUBLIC HEALTH RESEARCH AND DEVELOPMENT [NATIONAL], Vol. 9, no. 1, pp.402-406 Jeyabalan S., Cyril Raj V., Nallusamy S. 2018

4. An adaptive e-learning environment centred on learner"s emotional behaviour, ALGORITHMS, METHODOLOGY, MODELS AND APPLICATIONS IN EMERGING TECHNOLOGIES [NATIONAL], Vol. -, no. -, pp.--- A. Kanimozhi., V. Cyril Raj 2017

5. Spark framework: A review, INTERNATIONAL JOURNAL OF PURE AND APPLIED MATHEMATICS [INTERNATIONAL], Vol. 117, no. 20 Special Issue, pp.861-866 Ilamchezhian J., Cyril Raj V. 2017

6. A computational model of cognitive tutor using cognitive architecture-ACT-R for implementing an effective E-learning system, JOURNAL OF COMPUTATIONAL AND THEORETICAL NANOSCIENCE [INTERNATIONAL], Vol. 14, no. 3, pp.1599-1608 Kanimozhi A., Cyrilraj V. 2017

7. Consistency features and fuzzy-based segmentation for shadow and reflection detection in digital image forgery, SCIENCE CHINA INFORMATION SCIENCES [INTERNATIONAL], Vol. 60, no. 8, pp.--- Cristin R., Cyril Raj V. 2017

8. A novel idea to improve pedestrian safety in Black Spots using a hybrid VANET of vehicular and body sensors, PROCEEDINGS 2015 - IEEE INTERNATIONAL CONFERENCE ON INNOVATION, INFORMATION IN COMPUTING TECHNOLOGIES, ICIICT 2015 [INTERNATIONAL], Vol. -, no. -, pp.--- Sam D., Evangelin E., Raj V.C. 2016

9. A novel technique for analysis of protein to protein interaction using efficientminimum spanning tree techniques, INDIAN JOURNAL OF SCIENCE AND TECHNOLOGY [NATIONAL], Vol. 9, no. 41, pp.--- Jeyabalan S., Cyril Raj V. 2016

10. Exposing image manipulation with curved surface reflection, INDIAN JOURNAL OF SCIENCE AND TECHNOLOGY [NATIONAL], Vol. 9, no. 38, pp.--- Cristin R., Cyril Raj V. 2016

11. Optimization of digitalized document verification using E-Governance service delivery platform (E-SDP), INTERNATIONAL JOURNAL OF APPLIED ENGINEERING RESEARCH [NATIONAL], Vol. 11, no. 4, pp.2535-2543 Raghunathan V.S., Cyril Raj V., Eswaran S., Ambika A., Sangeetha R.U. 2016

12. Design of malicious activity detection & prevention system for enterprise network, INTERNATIONAL JOURNAL OF CONTROL THEORY AND APPLICATIONS [NATIONAL], Vol. 9, no. 6, pp.2799-2808 Kavitha P., Tamilarasi S., Cyrilraj V. 2016

13. Performance evaluation of extended EXACT algorithm for analyzing breast cancer using fractal dimension, LECTURE NOTES IN ELECTRICAL ENGINEERING [INTERNATIONAL], Vol. 362, no. -, pp.1125-1138 Monica Jenefer B., Cyrilraj V. 2016

14. AN ADAPTIVE REUSABLE LEARNING OBJECT FOR ELearning USING COGNITIVE ARCHITECTURE, ADVANCED COMPUTING: INTERNATIONAL JOURNAL [NATIONAL], Vol. 7, no. 1, pp.19-28 A.Kanimozhi .,V.Cyrilraj. 2016

15. Accurate and stable feature selection powered by iterative backward selection and cumulative ranking score of features, INDIAN JOURNAL OF SCIENCE AND TECHNOLOGY [NATIONAL], Vol. 8, no. 11, pp.--- Victo Sudha George G., Cyril Raj V. 2015

16. Improving road safety for pedestrians in black spots using a hybrid vanet of vehicular sensorsand pedestrian body unit, ARPN JOURNAL OF ENGINEERING AND APPLIED SCIENCES [INTERNATIONAL], Vol. 10, no. 10, pp.4639-4644. Sam D., Evangelin E., Cyril Raj V. 2015

17. A cognitive e-learning system using arousal valence emotional model, JOURNAL OF THEORETICAL AND APPLIED INFORMATION TECHNOLOGY [INTERNATIONAL], Vol. 78, no. 3, pp.431-440 Kanimozhi A., Cyril Raj V. 2015

18. Multi-class abnormal breast tissue segmentation using texture features and analyzing the growth factor using power law, BIOSCIENCES BIOTECHNOLOGY RESEARCH ASIA [NATIONAL], Vol. 12, no. 1, pp.653-660 Jenefer B.M., Cyrilraj V. 2015

19. Architectural analysis for improving security using LBS with ATAM, INTERNATIONAL JOURNAL OF APPLIED ENGINEERING RESEARCH [NATIONAL], Vol. 10, no. 8, pp.19967-19975 Begum A., Cyrilraj V. 2015

20. An accelerated feature subset selection using discriminative function allied with large margin distribution based ranking, INTERNATIONAL JOURNAL OF APPLIED ENGINEERING RESEARCH [NATIONAL], Vol. 10, no. 3, pp.5537-5550 Victo Sudha George G., Cyril Raj V. 2015

21. Classification of breast tumor using fractal based fourier transform method, INTERNATIONAL JOURNAL OF APPLIED ENGINEERING RESEARCH [NATIONAL], Vol. 10, no. 1, pp.1151-1160 Jenefer B.M., Cyrilraj V. 2015

22. Construction by configuration (CbC) in e-Governance service delivery platform (eSDP), INTERNATIONAL JOURNAL OF APPLIED ENGINEERING RESEARCH [NATIONAL], Vol. 10, no. 21, pp.42055-42062 Raghunathan V.S., Cyrilraj V., Anu K.C., Anitha M., Divya S. 2015

23. An enhanced intelligent learning environment for elearner using cognitive architecture - ACT-R, INTERNATIONAL JOURNAL OF ENGINEERING AND TECHNOLOGY [NATIONAL], Vol. 7, no. 1, pp.177-185 Kanimozhi A., Cyril Raj V. 2015

24. Exposing Image Manipulation with Consistent Shadows Using Vanishing Points, INTERNATIONAL JOURNAL OF ADVANCEMENTS IN COMPUTING TECHNOLOGY [INTERNATIONAL], Vol. 7, no. 3, pp.79-89 R.Cristin.,V.Cyril Raj. 2015

25. A time synchronized hybrid vehicular Ad hoc network of roadside sensors and vehicles for safe driving, JOURNAL OF COMPUTER SCIENCE [INTERNATIONAL], Vol. 10, no. 10, pp.1617-1627 Sam D., Cyril Raj V. 2014.

26. An efficient image processing methods for mammogram breast cancer detection, JOURNAL OF THEORETICAL AND APPLIED INFORMATION TECHNOLOGY [INTERNATIONAL], Vol. 69, no. 1, pp.32-39, Monica Jenefer B., Cyrilraj V. 2014

27. VANETs-A platform for the future intelligent transport system (ITS), ASIAN JOURNAL OF INFORMATION TECHNOLOGY [INTERNATIONAL], Vol. 13, no. 1, pp.38-45 Sam D., Cyril Raj V. 2014

28. Game theoretic analysis of cooperation relay nodes in cognitive radio ad hoc networks, ASIAN JOURNAL OF INFORMATION TECHNOLOGY [INTERNATIONAL], Vol. 13, no. 9, pp.454-463 Babiyola A., Cyril Raj V. 2014

29. Multi-class abnormal breast tissue segmentation using texture features, 2014 INTERNATIONAL CONFERENCE ON SCIENCE ENGINEERING AND MANAGEMENT RESEARCH, ICSEMR 2014 [INTERNATIONAL], Vol. -, no. -, pp.---Jenefer B.M., Cyrilraj V. 2014

30. Adaptation oriented "resource" modeling for course-based E-learning environment, INTERNATIONAL JOURNAL OF EMERGING TECHNOLOGIES IN LEARNING [INTERNATIONAL], Vol. 9, no. 1, pp.73-77 Sudhana K.M., Raj V.C., Ravi T. 2014

31. Performance analysis of cooperation and non cooperation of relay nodes in cognitive radio Ad hoc networks - A game theoretic approach, JOURNAL OF THEORETICAL AND APPLIED INFORMATION TECHNOLOGY [INTERNATIONAL], Vol. 64, no. 2, pp.531-539 Babiyola A., Cyril Raj V. 2014

32. Robust feature selection from micro array data using linear kernel SVM-RFE allied with bootstrapping, JOURNAL OF THEORETICAL AND APPLIED INFORMATION TECHNOLOGY [INTERNATIONAL], Vol. 68, no. 2, pp.323-330 George G.V.S., Raj V.C. 2014

33. An Adaptive Consistent Architecture to Enhance Reusable Learning Object System for E-Learning, ACS - INTERNATIONAL JOURNAL IN COMPUTATIONAL INTELLIGENCE [NATIONAL], Vol. 5, no. 2, pp.31-36 A.Kanimozhi .,V.Cyrilraj. 2014

34. Cancer Tumor Simulation Model using Fractal and DDE Growth Rate, INTERNATIONAL JOURNAL IN COMPUTATIONAL INTELLIGENCE [INTERNATIONAL], Vol. 5, no. 2, pp.37-42 B.Monica Jenefer.,V. Cyril Raj. 2014

35. Expanding Network Coverage and Maximization of Throughput in Cognitive Radio Ad Hoc Networks, ACS - INTERNATIONAL JOURNAL IN COMPUTATIONAL INTELLIGENCE [NATIONAL], Vol. 5, no. 1, pp.73-79 A.Babiyola.,V.Cyril Raj. 2014

36. Novel Architecture for Improving Security Using LBS in Mobile Devices, ACS - INTERNATIONAL JOURNAL IN COMPUTATIONAL INTELLIGENCE [NATIONAL], Vol. 5, no. 2, pp.81-85 A Begum., V Cyrilraj. 2014

37. A Study on Challenges and Issues in Cloud Computing, INTERNATIONAL JOURNAL OF COMPUTER APPLICATIONS [INTERNATIONAL], Vol. -, no. pp.9-12 V.Cyril Raj.,Justin J Sam. 2014

38. Clustering in wireless sensor networks: Performance comparison of EAMMH and LEACH protocols using MATLAB, ADVANCED MATERIALS RESEARCH

[INTERNATIONAL], Vol. 705, no. -, pp.337-342 Mundada M.R., Thimmegowda N., Bhuvaneswari T., Cyrilraj V. 2013

39. An Architectural-model for Context aware Adaptive Delivery of Learning Material, INTERNATIONAL JOURNAL OF ADVANCED COMPUTER SCIENCE AND APPLICATIONS [NATIONAL], Vol. 4, no. 10, pp.80-87 V. Cyril Raj.,T.Ravi.,Kalla. Madhu Sudhana. 2013

40. An Ontological Approach to Support Personalized E-Learning System, INTERNATIONAL JOURNAL OF COMPUTER APPLICATIONS [INTERNATIONAL], Vol. 61, no. 2, pp.1-6 Kalla Madhu Sudhana.,V. Cyril Raj. 2013

41. Cluster Head Location based Base Station Mobility in Wireless Sensor Network, INTERNATIONAL JOURNAL OF COMPUTER APPLICATIONS [INTERNATIONAL], Vol. 67, no. 17, pp.45-48 T Bhuvaneswari.,V CyrilRaj.,Pallavi B. Kamble.,Shubhra = Kejriwal.,Yashaswini Nag M N.,Monica R Mundada. 2013

42. Hybrid Energy Efficient Protocol for Stable Concentric Clustering in Heterogenous Wireless Sensor Networks, INTERNATIONAL JOURNAL OF COMPUTER APPLICATIONS [INTERNATIONAL], Vol. 73, no. 2, pp.48-52 Cyril Raj.,Thippesh K S.,Nishanth Thimmegowda.,Avinash S.,T Bhuvaneswari.,Monica R Mundada. 2013

43. An ontological approach for enriching metadata of learning objects to support effective e-learning, INTERNATIONAL JOURNAL OF COMPUTER SCIENCE AND NETWORK SECURITY [INTERNATIONAL], Vol. 12, no. 10, pp.68-73 Kalla. Madhu Sudhana.,V. Cyril Raj.,R.M. Suresh. 2012

44. Applicaton of ViBe algorithm for people counting in a crowded environment, INTERNATIONAL JOURNAL OF ADVANCED RESEARCH IN COMPUTER SCIENCE [NATIONAL], Vol. 3, no. 2, pp.183-187 Minu S; Raj V Cyril Raj. 2012

45. A Study on Metadata Standards for Semantic Annotation of Learning Objects, INTERNATIONAL JOURNAL OF ADVANCED RESEARCH IN COMPUTER SCIENCE [NATIONAL], Vol. 3, no. 5, pp.234-- Kalla. Madhu Sudhana., V. Cyril Raj., T.Ravi. 2012

46. Maximization of throughput in Cognitive Radio Ad Hoc Networks (CRAHNs) using relay nodes-a cross layer way, EUROPEAN JOURNAL OF SCIENTIFIC RESEARCH [INTERNATIONAL], Vol. 72, no. 3, pp.474-481 Babiyola A., Cyril Raj V. 2012

47. Review on feature selection techniques and the impact of SVM for cancer classification using gene expression profile, INTERNATIONAL JOURNAL OF COMPUTER SCIENCE & ENGINEERING SURVEY [NATIONAL], Vol. 2, no. 3, pp.16-27 G. Victo Sudha George., V.Cyril Raj. 2011

48. Performance issues on AODV and DSDV for mnaets, JOURNAL OF THEORETICAL AND APPLIED INFORMATION TECHNOLOGY [INTERNATIONAL], Vol. 17, no. 2, pp.123-128 Balakrishna R., Jeyabalan S., Rajeswar Rao U., Basak T.K., Cyrilraj V. 2010

49. Modeling of capacitance relaxation phenomena in a malignant membrane, WIT TRANSACTIONS ON BIOMEDICINE AND HEALTH [INTERNATIONAL], Vol.13, no. -, pp.247-253 Basak T.K., Bhattacharya K., Halder S., Murugappan S., Cyril Raj V., Ravi T., Gunasekaran G., Shaw P. 2009

50. A distributed aspect model for composite service, INTERNATIONAL WORKSHOP ON SERVICE-ORIENTED ENGINEERING AND OPTIMIZATION [NATIONAL], Vol. -, no. -, pp.1-6 Kumaravel Ganesan .,Swarup Kumar Mohalik.,Cyril Raj. 2008

**Presentations in the National and International Conferences**

1. Proceedings of International Conference on Knowledge based Computing Technologies (ICKCT'16)" A Novel Hybrid Iterative Backward Feature Selection Framework for Intrusion Detection System" R. Venkatarathinam[1] , Dr. V. Cyril Raj[2] , and Dr. G. Victo Sudha George[3]

2. An ontology-based framework for context-aware adaptive e-learning system,2013 INTERNATIONAL CONFERENCE ON COMPUTER COMMUNICATION AND INFORMATICS, ICCCI 2013 [INTERNATIONAL], Vol. -, no. -, pp.--- Sudhana K.M., Raj V.C., Suresh R.M.