#### **FACULTY VITAE**

1. Name : Dr. R.S.PONMAGAL

#### 2. Education:

- 2011, Ph.D, Faculty of Information and Communication Engineering, Anna University, Chennai, India
- 2004, M.E, Computer Science and Engineering, SRM Engg College, Anna University, Chennai, India.
- 1989, B.E., Instrumentation and control Engineering, Govt College of Technology, Bharathiar University, Coimbatore, India

# 3. Academic Experience:

- 2011 December-present Professor, Dept. of Computer Science and Engineering, Dr. M.G.R. Educational and Research Institute University, Chennai, India
- 2009 20111November Assistant Professor, Dept. of Computer Science and Engineering, Anna University of Technology, Tiruchirappalli.
- 2005-2008 Associate Professor, Dept. of Computer Science and Engineering, Easwari Engineering College, Chennai.
- 1999-2004 Assistant Professor, Dept. of Computer Science and Engineering, Easwari Engineering College, Chennai.

# 4. Non-Academic Experience

- Joint Controller of Examinations (Engineering & Technology), Dr. M.G.R. Educational and Research Institute University, Chennai, from 2.7.2012 to 20.11.2013
- Head of the Department (i/c), Department of Computer Science and Engineering & Information Technology, Anna University of Technology Tiruchirappalli., from March 2011 to October 2011.
- Director (i/c), Centre for Engineering Partnership, Anna University of Technology
  Tiruchirappalli, from October 2010 August 2011 looked after the affiliation
  related matters of 64 self financing Engineering Colleges, 10 MBA Institutions, 3
  MCA Institutions and 3 Architecture Institutions, affiliated to Anna University of
  Technology Tiruchirappalli.
- Deputy Director, Centre for Engineering Partnership, Anna University Tiruchirappalli, from October 2008 to September 2010

## 5. Certifications or Professional Registrations

- Wipro Mission 10X (2012) 5 days
- Intel IoT (2016) 4 days

## 6. Current Membership in Professional Organizations

- Life Member in Indian Society of Technical Education (ISTE) LM 74314
- Life Member in International Association of Engineers (IAENG) 110915
- Life Member in Association of Computer Electronics and Electrical Engineers(ACEEE) 7000310
- Life Member in International Association of Computer Science and Information Technology(IACSIT) -80340483



#### 7. Honors and Awards:

- Eminent Research Contributor Award for the year 2016, by Dr. M.G.R. Educational and Research Institute.
- Sir.C.V.Raman Research Award for the year 2014, by Dr. M.G.R. Educational and Research Institute University.
- Outstanding Research Contributor Award for the year 2015, by Dr. M.G.R. Educational and Research Institute University.
- Won Best Paper award (III Place) at IEEE International Conference UPCON2016, at IIT, Varanasi (Banaras Hindu University), during 9-11 December 2016.
- Won Best Paper award at National Conference on "smart cities" 2017, at Dr. M.G.R. Educational and Research Institute University, (Faculty of Architecture), during 17-18 February 2017.

#### 8. Service activities

- ABET core team member Department of CSE
- IIT PALS coordinator of the department
- Result Analysis in charge of the department CSE (UG & amp; PG),IT and ISDF
- Two files in charge for ISO (Result analysis and New course/New program) of the Department
- III year in charge of the department (CSE,IT and ISDF)
- Sun Java Lab & I Mac Lab in charge of the department
- Board of Studies Curriculum Development in charge of the department

# 9. Publications and Presentations, from past 5 years International Journal Publications

- 1. C.Menaka, R.S.Ponmagal (2018), Patient-Controlled Personal Health Record Enforcing Patient Privacy in Cloud based Healthcare System, International Journal of Pure and Applied Mathematics, Volume 119 No. 10,pp.375-392(SCOPUS h index17)
- 2. P.Dineshkumar, V.N.Rajavarman and R.S.Ponmagal,(2017), M-Caemon: Modified Cloud Access Execution and Monitoring for Big Data Analytics of Health Sensor System, International Journal of Applied Engineering Research ISSN 0973-4562 Volume 12, Number 23 (2017) pp. 13096-13103.(SCOPUS h-index 13)
- 3. Menaka, C, and Ponmagal, R.S, 2017. suitable protected encryption with access control in support of personal health records in cloud environments, *Journal of Advanced Research in Dynamical and Control Systems* .no.2, pp.1170-1180.
- 4. Sujatha, K, Ponmagal, R.S, Senthil Kumar, K, and Ramkumar, K.S, 2017. Fuzzy Controller for Automatic Tap Changing in Transformers for Power Quality Enhancement in a Smart Grid Distribution System. *International Journal of Control Theory and Applications*. 10(6), pp.471-482.

- **5.** Srividhya, V, Sujatha, K, & Ponmagal, R.S, 2016. Ethylene Gas measurement for ripening of fruits using Image Processing, *Indian Journal of Science and Technology*. 9(31), pp.1-7.
- 6. Ponmagal,R.S, Sujatha,K, Indumathi,U, Aiyshwariya Devi,R, Yuvarani,T, 2016. IoT based Secure and Efficient Health Care Management System. *International Journal of Engineering Research in Computer Science and Engineering*. 3(7), pp.39-45.
- 7. NaliniPoornima, Ponmagal, R.S., 2016. Secure preserving public auditing for regenerating code based on cloud storage. *CIIT International Journal on Networking and Communication Engineering*. 8(5), pp.200-204.
- 8. Saranya,P, Ponmagal,R.S,2016. Secure and Scalable Sensor Data Access Network with Delay Tolerance. *CiiT International Journal on Wireless Communication*.8(5), pp.196-201.
- 9. NaliniPoornima, Ponmagal, R.S., 2016. Secure preserving public auditing for regenerating code based on cloud storage. *International Journal of Emerging Technology in Computer Science & Electronics*. 21(4), pp.251-257.
- 10. Senthilkumar,R, Ponmagal,R.S, Sujatha,K, 2016. Efficient Health Care Monitoring and Emergency Management System using IoT. *International Journal of Control Theory and Applications*. 9(4), pp.137-145.
- 11. Sujatha ,K, Senthil Kumar,K, Godhavari,T, Ponmagal,R.S, Bhavani,N.P.G, 2016. An Effective Distributed Service Model for Image Based Combustion Quality Monitoring and Estimation in Power Station Boilers .Advanced Computer and Communication Engineering Technology, Lecture Notes in Electrical Engineering (LNEE). Vol. 362, pp. 33-49.
- **12.** Sujatha, K, Bhavani, N.P.G, Godhavari, T, Ponmagal, R.S, and Su-Qun Cao, 2015. Smart Sensor for NOx and SO2 Emissions in Power Station Boilers. *Indian Journal of Science and Technology*. 8(27), pp.1-7.
- 13. Srinivasan,N, Ponmagal,R.S, 2015. A Service Approach to preserve the heritage and culture through cloud storage. *International Journal of Applied Engineering Research*. 10(19), pp.40336-40341.
- 14. Ponmagal, R.S., Sujatha, K., Godhavari, T., & Jegadeeswari, S., 2015. Big Data Analytics Architecture for Secured Wireless Body Area Sensor Networks. *International Journal of Applied Engineering and Research.* 10(68), pp.160-166.
- 15. Ponmagal, R.S & C.Menaka, 2015. Big Data Analytics Architecture for Smarter Health Care System. *International Journal of Applied Engineering and Research*, 10(69), pp.63 68.
- 16. Premkumar, B., & Ponmagal, R.S.,2015. Bilinear Aggregate Signature and PDPEncryption in Audit Service for Cloud Storage. *International Journal of Advanced Research in Computer Science and Software Engineering*.5(4),pp5-9.
- 17. Dhanasekaran, C, Ponmagal, R.S, 2015. Risk Conscious Easing of Routing Attacks for Adhoc Networks . *ACS International Journal in Computational Intelligence*. 6(1), pp.1-5.
- **18.** Dhineshkumar,G, Ponmagal,R.S, Dineshkumar,P, 2015. A Keyword Sensitive Service Recommendation on Mapreduce for Hotel Information . *ACS International Journal in Computational Intelligence*. 6(1), pp.7-12.

- **19.** Ponmagal,R.S, Chitra,M.P, Dineshkumar,P, Rajavarman,V.N, and Dhineshkumar,G, 2015. CAEMON-Cloud Access Execution and MONitoring of Big-Data analytics for Sensor System. *ARPN Journal of Engineering and Applied Sciences*, 10(2), pp. 563-571.
- 20. Ponmagal,R.S, Dinesh,N, UmaRajaram, 2015. Design and Development of Secure Cloud Architecture for sensor services. <u>Distributed Computing and Internet Technology Lecture Notes in Computer Science</u>(LNCS) Volume 8956, pp. 339-344.
- 21. Sujatha, K, Kumaresan, Ponmagal.R.S, Vidhushini, 2015. Vision based Automation for Flame image Analysis in Power Station Boilers. *Australian Journal of Basic and Applied Sciences*. 9(2),pp.40-45.
- **22.** Bhavani, N.P.G, Sujatha, K., Kumaresan, M., Pongamal, R.S., and Brahmananda reddy, 2014. Soft Sensor for Temperature Measurement in Gas Turbine Power Plant. *International Journal of Applied Engineering Research*. 9(23), pp. 21305-21316.
- 23. Sujatha, K , Kumaresan, M, Ponmagal R.S, 2014. Brain Computer Interface for vehicle automation. *International Journal of Applied Engineering Research*. 9(24), pp. 29403-29419.
- 24. Dhanasekaran, C, Teja, R, Ponmagal, R.S, 2014. The Survey on Security Issues in Nxg Addressing. *Advanced Computing science International Journal of Computational Intelligence*. 5(2), pp. 86-89.
- 25. Menaka, C, Ponmagal, R.S, 2014. Secure Cloud Architecture for Hospital Information System. *Elysium Journal of Engineering Research and Management*. 1(1), pp.124-128.
- 26. Menaka, C, Ponmagal, R.S, 2014. Secure Cloud Architecture for Hospital Information System. *CiiT International Journal of Fuzzy systems*.6(3), pp.89-92.
- 27. KirubaDevi, T, Ponmagal, R.S, 2014. Service Based Intelligent Integration of Sensor Networks with Internet. *Advanced Computing science International Journal of Computational Intelligence*. 5(1), pp. 32-36.
- 28. Menaka, C, Ponmagal, R.S., (2014). A Survey on Security Issues in Cloud Services Innovative Computing Techniques. *Advanced Computing science International Journal of Computational Intelligence*. 5(1), pp.43-47.
- 29. Ponmagal, R.S., 2014. Architecting Service based Sensor Networks for the intelligent assimilation. *Chinese Journal of Engineering*, Hindawi Publications, Article ID 701829, 8 pages.
- 30. Ponmagal,R.S,2013. Integration of SOA-enabled Networked Sensors in Enterprise Systems via a web service Infrastructure. *International Journal on Emerging Trends & Technology in Computer Science*. 8 Pages.
- 31. Ponmagal, R.S., 2013. Architecting Service based Sensor Networks for the adept assimilation. *International Journal of Computer Trends and Technology*. 4(2), pp.135-141.

## **Presentations in the National and International Conferences**

- 1. Dr. K. Sujatha, V. Srividhya, Dr. R.S. Ponmagal, and Dr. T. Godhavarid, Soft Sensor for Capacitance Tracking in Quality Assurance of Fruit Ripening Process, Materials Today: Proceedings, (ICSEM2016)5 (2018) 20785–20792, pp.20785 20792
- 2. Deepalakshmi, B., Sujatha, K., Ponmagal, R.S., Reddy, T.K., (2018), An assessment of potential windmills using image processing and artificial intelligence (AI) based wind speed estimation, 2017 International Conference on Energy, Communication, Data Analytics and Soft Computing, ICECDS 2017 (SCOPUS)

- Sujatha, K., Ponmagal, R.S., Nallamilli, P.G.B., Kalpalatha, T.(2018), Impact of NOxemissions on climate and monitoring using smart sensor technology, 2017 International Conference on Energy, Communication, Data Analytics and Soft Computing, ICECDS 2017 (SCOPUS)
- 3. Bhavani, N.P.G., Sujatha, K., Ponmagal, R.S., Reddy, T.K.,(2018), Monitoring of SO2emissions in power plants using Internet of Things, 2017 International Conference on Energy, Communication, Data Analytics and Soft Computing, ICECDS 2017(SCOPUS)
- Sujatha, K., Ponmagal, R.S., Nallamilli, P.G.B., Kalpalatha, T.(2018), Impact of NOxemissions on climate and monitoring using smart sensor technology, 2017 International Conference on Energy, Communication, Data Analytics and Soft Computing, ICECDS 2017 (SCOPUS)
- 5. Bhavani, N.P.G., Sujatha, K., Ponmagal, R.S., Reddy, T.K.,(2018), Monitoring of SO2emissions in power plants using Internet of Things, 2017 International Conference on Energy, Communication, Data Analytics and Soft Computing, ICECDS 2017(SCOPUS)
- 6. Sujatha, K., Bhavani, N.P.G., Ponmagal, R.S.(2018), Impact of NOxemissions on climate and monitoring using smart sensor technology, Proceedings of the 2017 IEEE International Conference on Communication and Signal Processing, ICCSP 2017(Scopus)
- 7. K. Sujatha, R. S. Ponmagal, K. Senthil Kumar, R. Shoba Rani and Golda Dilip, (2018), IoT-Based Multimodal Biometric Identification for Automation Railway Engine Pilot Security System, Smart Innovation, Systems and Technologies, Volume 77, Springer Series/8767 Smart Computing and Informatics Proceedings of the First International Conference on SCI 2016, Volume 1.(Scopus)
- 8. Sandhya. D, Kanya.N,Ponmagal.R.S(2017), "Iot based Health care monitoring" at National Conference on Advances in Biotechnology and Health Science SARVASASTRA 2017 during 14th to 15th March 2017 at Dr. M.G.R.Educational and Research Institute University, Chennai.
- 9. N.Srinivasan, R.S.Ponmagal (2017), "Smart Governance of Rock Arts through IoT based processing and preservation", National conference on Smart Cities at the Faculty of architecture, Dr.M.G.R.Educational and Research Institute University, during 17-18th February 2017.
- 10. P.Dineshkumar, V.N.Rajavarman, R.S.Ponmagal(2017), Smart Governance of Health care monitoring through IoT based Big data processing, National conference on Smart Cities at the Faculty of architecture, Dr.M.G.R.Educational and Research Institute University, during 17-18th February 2017.
- 11. K.Sujatha,R.S.Ponmagal, K.Senthilkumar, K.S.Ramkumar(2017), "Fuzzy controller for Automatic Tap changing in Transformers for power quality enhancement in Smart Grid Distribution system", 2nd International Conference on Sustainable Computing Techniques in Engineering Science and Management (SCESM2017), during 27-28 January 2017 at Goa.

- 12. P.Dineshkumar,R.Senthilkumar,K.Sujatha,R.S.Ponmagal,V.N.Rajavarman,(2016), "Bigdata Analytics of IoT based Health Care Monitoring System", is presented at IEEE International Conference UPCON2016 during 9-11 December 2016, at IIT, Varanasi(Banaras Hindu University) and won Best paper award(III -Cash Prize)-SCOPUS
- 13. K.Sujatha,R.S.Ponmagal, T.Godhavari, (2016), "Automation of Solar System for Maximum Power Point Tracking using Artificial Neural Networks and IoT", is presented at IEEE International Conference UPCON2016 during 9-11 December 2016, at IIT, Varanasi(Banaras Hindu University).- SCOPUS
- 14. Dr.R.S.Ponmagal, Dr.K.Sujatha, U.Indumathi R.Aiyshwariya Devi, T.Yuvarani, (2016), "IoT based Secure and Efficient Health Care Management System", is presented at International Conference on Computer Science Electronics and Communication Engineering 16 at Ahmedabad on 24.7.2016.
- 15. Ponmagal,R.S.,Sujatha,K & Godhavari,T.(2016), "Cloud Computing for Autonomous Navigation of Unmanned Ground Vehicle", is presented at IEEE International Conference on Electrical, Electronics, and Optimization Techniques (ICEEOT) 2016, during March 3-5th 2016.- SCOPUS
- 16. Sujatha, K., Ponmagal, R.S., Srividhya, V., & Godhavari, T. (2016), "Feature Extraction for Ethylene Gas Measurement for Ripening Fruits", is presented at IEEE International Conference on Electrical, Electronics, and Optimization Techniques (ICEEOT) 2016, during March 3-5th 2016.- SCOPUS
- 17. Srividhya,V., Sujatha,K., & Ponmagal, R.S.,(2016), "Ethylene Gas measurement for ripening of fruits using Image Processing", is presented at International Conference on Recent Trends in Computing Technology (ICRTCT) at Madras University, Chennai, during February 22 23rd 2016.
- 18. Ponmagal,R.S., & Srinivasan, N.,(2016), "Machine Learning Approach for Exploring Rock Arts through the Cloud Infrastructure", is presented at IEEE International Conference on Computational Intelligence and Computing Research IEEE ICCIC2015, pp.195-200, at Vikram College of Engineering, Madurai, on 11.12.2015. (SCOPUS)
- 19. Ponmagal, R.S., & C.Menaka., (2015), "Big Data Analytics Architecture for Smarter Health Care System",is presented at ICCP 2015, at Don Bosco College, Guezou Nagar Yelagiri Hills, Vellore District, India during 24th and 25th July2015.
- 20. N.Dinesh, R.S.Ponmagal, (2015), "Ensuring security and Integrity in multi-cloud environment using secret key sharing algorithm", is presented at the ISTE sponsored National Conference Information and Communication Engineering ICE2015, at R.M.K.Engineering College, Chennai on 20.4.2015.
- 21. Ponmagal,R.S., Sujatha, K., Godhavari,T.,& Jegadeeswari, S., (2015), "Big Data Analytics Architecture for Secured Wireless Body Area Sensor Networks", is presented in the National Conference TIME2015 at Dr.M.G.R.Educational and Research Institute University, Chennai on 17.4.2015.
- 22. Premkumar,B & Ponmagal, R.S.,(2015), "Bilinear Aggregate Signature and PDP Encryption in Audit Service for Cloud Storage",is published in the proceedings of the National Conference NCICT2015 at Dr.M.G.R.Educational and Research Institute University, Chennai during 9-10 April 2015.

- 23. Dhanasekaran ,C., & Ponmagal, R.S.,(2015), "Risk Conscious Easing of Routing" is published in the proceedings of the National Conference NCICT2015 at Dr.M.G.R.Educational and Research Institute University, Chennai during 9-10 April 2015.
- 24. G. Dhineshkumar,G.,Ponmagal, R.S., & Dineshkumar,P.,(2015)," A keyword sensitive service recommendation on MapReduce for hotel information" is published in the proceedings of the National Conference NCICT2015 at Dr.M.G.R.Educational and Research Institute University,Chennai during 9-10 April 2015.
- 25. R.S.Ponmagal, N.Dinesh, UmaRajaram(2015), "Design and Development of Secure Cloud architecture for sensor services", presented in International Conference on Distributed Computing and Internet Technology ICDCIT2015, at Bubaneshwar, Odisha, during 5th to 8th February 2015.
- 26. R.S.Ponmagal, RupaDebnath, "A study on Big Data Analytics Security Issues", presented in the International workshop on Parallel computing IWPC 2014, at VIT University, Chennai on 11.12.2014.
- 27. R.S.Ponmagal, M.P.Chitra, P.Dineshkumar, V.N.Rajavarman, G.Dhineshkumar, "CAEMON-Cloud Access Execution and Monitoring of Big-Data analytics for Sensor System" is presented in the ADVCIT 2014 International Conference Advanced Information Technology 2014 held during 16th—18th December2014, at Bandung, Indonesia.
- 28. C.Menaka, R.S.Ponmagal, UmaRajaram, "Secure and service based mobile monitoring of Industrial Sensors" is presented in the International Conference on Green Technology for Environmental Pollution Prevention and Control" held on 27<sup>th</sup> 29th Sep 2014, at NIT, Trichy.
- 29. K.Sujatha, R.S.Ponmagal, UmaRajaram, "Sensor Cloud for autonomous Navigation of Unmanned Ground vehicles", is presented in International Conference on Defence and Security Technology, 24th-25th September 2014, at Malaysia.
- 30. C.Menaka, R.S.Ponmagal, "Secure Cloud Architecture for Hospital Information System", is presented in International Conference on Architecture, Software systems and Green computing held on 08th 09th May 2014, at Chennai.