# Dr. E.Grace Mary Kanaga

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## Curriculum Vitae

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### EDUCATION AND CREDENTIALS

**PhD in Computer Science and Engineering,** 2011

Anna University of Technology, Coimbatore, India
*PhD Thesis: "Hybrid Coordinated Multi Agent Optimization Techniques for Patient
    Scheduling"*

**Masters in Technology (Computer Science and Engineering),** 2002

Vellore Institute of Technology (VIT), Vellore, India
*Master's Thesis: "Computer Aided Diagnosis for Mammograms"*
*Graduated with Distinction*

**Bachelors in Engineering (Computer Science and Engineering),** 1997
Adhiyamaan College of Engineering,Hosur, India
Affliated to Madras University, Chennai.
*Graduated with First Class*

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### PROFESSIONAL EXPERIENCE

KARUNYA UNIVERSITY, Coimbatore, India

**Associate Professor,** 05/2012 to Present;
**Assistant Professor (SG),** 9/2009 to 4/ 2012
**Assistant Professor,** 4/2007 to 12/ 2008
**Senior Lecturer,** 3/2003 to 3/2007
**Lecturer,** 6/2002 to 2/ 2003

Taught undergraduate and postgraduate students in groups of 60 to 66and 25 to 30
individuals respectively; taught Big Data Platforms, Big Data and Analytics, Distributed
Computing, Mobile Communication and Computing, Windows Programming, Database
Management Systems, Programming in C++, Java Programming, Artificial Intelligence,
Real Time Systems, Software Agents, Visual Programming, Advanced Database
Technologies, System Software and Fundamentals of Programming Languages Created
course material and lab manuals; Planned and directed student projects; graded
performance and tests. Conducted labs in Windows Programming, Java, C++, DBMS,

Computer Graphics, Visual Programming,Advanced Databases, Compiler Design and System Software, Software Development and Flash.

- Mentored and tutored students to improve success
- Big Data Core team member
- School Research committee coordinator
- Academic Council member for three years
- Board of studies and Curriculum Development Cell member and contributed towards curriculum formation and syllabus updating
- PG programme coordinator for CSE department till 2016
- Research group coordinator for "Computational Intelligence and Software Engineering " research group
- PG Entrance Examination and Admission coordinator
  - ➤ Prepared the entrance exam questions for PG to be uploaded in LMS
  - ➤ Conducted interviews for PG students during admission
- Excelled in executive role organizing 2005 National Conference on Multimedia Systems
- Department NBA coordinator from 2012 to 2016, currently responsible for criteria 3

SRIRAMAKRISHNA ENGINEERING COLLEGE, Coimbatore, Tamil Nadu
**Lecturer,** 7/1998 to 7/2001

Delivered English-language lectures to groups of 60 to 70 Engineering Undergraduate and Master of Science students; taught Artificial Intelligence , Windows Programming, Robotics, Data Structures, System Software and Programming Languages; Prepared course material and lectures, developed assignments and problem sets. Developed and administered tests; evaluated and tracked student performance.

- Encouraged students to present papers at national symposiums and conferences
- Provided one-to -one mentoring and assistance to students.

PRIYADARSHINI ENGINEERING COLLEGE, Vaniyambadi, Tamil Nadu

**Lecturer,** 10/1997 to 4/1998;

Served as Lecturer for courses such as Programming Languages( Pascal, C, C++) for second-year Computer Engineers and Engineering Economics for third-year Computer Engineers. Conducted tutorial classes. Assisted students in programming labs. Graded presentations, quizzes and exams.

## FUNDED PROJECT

Project proposal titled, "Design and Development of an Adaptive Brain Computer Interface (BCI) based Assistive Tool for Paralytic People" has been sanctioned for funding by DST- ICPS for the duration of 3 years and the budget is Rs. 38.9 lakhs.

## PUBLICATIONS

### BOOK CHAPTERS

[1]. E. Grace Mary Kanaga, J. Anitha, D. Sujitha Juliet (2020), "4D medical image analysis: a systematic study on applications, challenges, and future research directions", Advanced Machine Vision Paradigms for Medical Image Analysis- A volume in Hybrid Computational Intelligence for Pattern Analysis and Understanding , Chapter – 4, pp. 97 -126, Elsevier

[2]. Paul, S.T., Raimond, K., **E. Grace Mary Kanaga**.(2019), "An IoT-Enabled Hadoop-Based Data Analytics and Prediction Framework for a Pollution-Free Smart-Township and an Asthma-Free Generation", Advances in Intelligent Systems and Computing, Vol. 750, pp. 577-587, Springer (Scopus Indexed)

[3]. Preethi S. H. Darius, **E. Grace Mary Kanaga** (2018), "Bag-of-Tasks Intelligent Scheduling Agent (BISA) in Cloud Computing", Advanced Computational and Communication Paradigms, Advances in Intelligent Systems and Computing, (AISC) vol 706 pp 239-24., Springer. (Scopus Indexed)

[4]. Shaji A., Belfin R.V., **Grace Mary Kanaga E.** (2018) An Innovated SIRS Model for Information Spreading. In: Rajsingh E., Veerasamy J., Alavi A., Peter J. (eds) Advances in Big Data and Computing. Advances in Intelligent Systems and Computing, pp.405 – 413, vol 645. Springer, Singapore. (Scopus Indexed)

[5]. **E.Grace Mary Kanaga**, M.L .Valarmathi, Preethi.S.H.Darius, (2012) " A Novel 3D Approach for Patient Scheduling Using Multi-agent Coordination", *Cross-Disciplinary Applications of Artificial Intelligence and Pattern Recognition: Advancing Technologies,* Chapter -27*,* pp. 544 – 563, IGI Global publishers

## INTERNATIONAL JOURNAL

[1]. S. Seetha, Sharmila Anand John Francis, **E. Grace Mary Kanaga**, Esther Daniel (2020), "ESAM - Energy Saving Slot Allocation Based Multicast Routing in Wireless Mesh Network", EAI Endorsed Transactions on Energy Web, Scopus indexed, Impact Factor: 0.38, ISSN: 2032944X.

[2]. S. Seetha, Sharmila Anand John Francis, **E. Grace Mary Kanaga**,(2020) "PDSCM: Packet Deliverance aware Secured Channel Selection using Probability Estimation based Multicast Routing in Wireless mesh networks", (communicated )

[3]. Sminesh, C.N., **Grace Mary Kanaga, E**., Sreejish, A.G. (2020), A multi-controller placement strategy in software defined networks using affinity propagation, International Journal of Internet Technology and Secured Transactions, 10(1-2), pp. 229-253. (Scopus Indexed – SJR : 0.314)

[4]. C. N. Sminesh, **E. Grace Mary Kanaga**, and A. G. Sreejish (2020), Augmented Affinity Propagation-Based Network Partitioning for Multiple Controllers Placement in Software Defined Networks, Journal of Computational and Theoretical Nanoscience ,Vol. 17, 228–233. (Scopus Indexed)

[5]. Sminesh, C.N., **Mary Kanaga, E.G**., Roy, A. (2019), Optimal multi-controller placement strategy in SD-WAN using modified density peak clustering, IET Communications, 13 (20), pp. 3509-3518 (SCI indexed IF : 1.779)

[6]. Hepsiba, P. S., & **Grace Mary Kanaga, E**. (2019). Intelligent scheduling of bag-of-tasks applications in the cloud. International Journal of Advanced Computer Science and Applications, 10(5), 473-480. (SCIE indexed)

[7]. Seetha, S., Sharmila Anand, J. F., & **Grace Mary Kanaga, E**. (2019). RFSMPF: Rank based forwarder selection in MCAST with fuzzy optimized path formation in wireless mesh network. *Wireless Networks,* doi:10.1007/s11276-019-02091-7 Impact Factor: 2.45., (SCI indexed)

[8]. Belfin, R.V., **Grace Mary Kanaga, E**. (2018), Parallel seed selection method for overlapping community detection in social network Scalable Computing, 19 (4), pp. 375-385. (Scopus Indexed)

[9]. Sminesh, C.N., **Grace Mary Kanaga, E**., Ranjitha, K. (2018), "A proactive flow admission and re-routing scheme for load balancing and mitigation of congestion propagation in SDN data plane", International Journal of Computer Networks and Communications, pp.117 - 134, vol.6. (Scopus Indexed)

[10]. Belfin. R.V., **E. Grace Mary Kanaga** and Piotr Bródka (2018), "Overlapping Community Detection using Superior Seed Set Selection in Social Networks", Journal of Computers & Electrical Engineering, Vol 70, pp. 1074-1083. Elsevier.(SCI indexed) (SJR: 0.490)

[11]. M. Lavanya and **E. Grace Mary Kanaga** (2017), "An Efficient Patient Scheduling System with the Leader and Follower Particle Swarm Optimization", Journal of Advanced Research in Dynamical and Control Systems,11, pp.374 -382. ISSN: ISSN: 1943 – 023X (Scopus indexed) (SJR: 0.136)

[12]. J.Srija, Rose Rani John, **E. Grace Mary Kanaga** (2017), "An Element Search Ant Colony Technique for Solving Virtual Machine Placement Ploblem", Journal of Physics: Conference Series (892), PP. 1 – 9. [doi:10.1088/1742-6596/892/1/012007) (Scopus indexed)

[13]. Cidharth.S, **E. Grace Mary Kanaga** (2014) " Brain Computer Interface: The Present and Future Technology ", International Journal of Engineering Research & Technology (IJERT) , Vol. 3 (1) , pp. 1179 – 1182, ISSN: 2278-0181.

[14]. Greeshma Gopal., **E. Grace Mary Kanaga** (2013) "A Study on Enhancement Techniques for Mammogram Images", International Journal of Advanced Research in Electronics and Communication Engineering (IJARECE), Volume 2, Issue 1, pp 36-39.

[15]. Amar Jukuntla, **E. Grace Mary Kanaga** (2013) "Flowshop Scheduling Using Multiagents with Adaptive Auction", International Journal of Computational Engineering Research, vol. 3, no. 3, pp. 238-242.

[16]. Nisha Wilvicta J. and **E.Grace Mary Kanaga** (2013) "Agent Based Decision Support System for Identifying the Spread of Nosocomial Infections in a Rural Hospital", International Journal of Engineering Research and Applications, Vol.3 (2), pp.1628-1633.

[17]. G. Mageswari, **E. Grace Mary Kanaga** (2012) "Literature Review on Patient Scheduling Techniques," International Journal on Computer Science and Engineering Vol.4, No.3, pp.397- 401. ( ISSN: 0975-3397 )

[18]. G. Mageswari, **E. Grace Mary Kanaga** (2012), "A Distributed Optimized Patient Scheduling using Partial Information," International Journal of Artificial Intelligence & Applications, Vol.3, No.3, pp.83-94. ( ISSN: 0976-2191 ) DOI : 10.5121/ijaia.2012.3307

[19]. **E.Grace Mary Kanaga**, M.L .Valarmathi, Preethi.S.H.Darius," Dynamic Multi-agent Based Patient and Resource Scheduling, " International Journal of Computer Science and Engineering Systems,Vol.4,No.2,pp.1-11, April 2010 ( ISSN:0973-4406 )

[20]. **E.Grace Mary Kanaga**, M.L.Valarmathi, Juliet.A.Murali, "Agent Based Patient Scheduling Using Heuristic Algorithm," International Journal on Computer Science and Engineering,Vol.02,No.01S,pp.77-83, 2010. (ISSN: 0975-3397)

[21]. **E.Grace Mary Kanaga**, M.L.Valarmathi, Juliet.A.Murali, "Survey on Scheduling with Learning Techniques," International Journal of Recent Trends in Engineering, Vol. 3, No.2,pp. 160-162, 2010 (ISSN 1797-9617)

[22]. **E.Grace Mary Kanaga**, M.L.Valarmathi, J.Dhiviya Rose, "Coordinated Multi-Agents Based Patient Scheduling Using Genetic Algorithm," International Journal of Recent Trends in Engineering, Vol. 3, No.2,pp. 177-179, 2010 (ISSN 1797-9617)

[23]. **E.Grace Mary Kanaga**, M.L.Valarmathi, Juliet.A.Murali,"An Agent Based Approach to Patient Scheduling Using Experienced Based Learning," International Journal of Agent Technologies and Systems,Vol.02,No.04,pp.,October 2010. (ISSN: 1943-0744)

[24]. **E.Grace Mary Kanaga** , Muniappan Lakshapalam Valarmathi, Octet Roselin, "A Multi-agent System for detection of micro-calcification in Mammograms," International journal on Atti Della Fondazione Giorgio Ronchi. Vol. LXIV – N.3, pp. 407 – 417, 2009 ( ISSN:0391 2051 )

## INTERNATIONAL CONFERENCE

[1]. Grace Mary Kanaga, E., & Jacob, L. R. (2021). *Smart solution for waste management: A coherent framework based on IOT and big data analytics* , Advances in Intelligent Systems and ComputingVolume 1167, 2021, Pages 97-106 , Springer [ Scopus Indexed]

[2]. Seetha, S., Francis, S. A. J., **Kanaga**,.(2019, March). "A Framework For Multi-Constraint Multicast Routing In Wireless Mesh Networks." In *2019 5th International Conference on Advanced Computing & Communication Systems (ICACCS)* (pp. 445-451). IEEE. –[**Scopus indexed.**]

[3]. S. Seetha, Sharmila Anand John Francis, **E. Grace Mary Kanaga**,(2019, December), Optimal placement techniques of mesh router nodes in Wireless Mesh Networks" in Springer International Conference on Big Data Innovation for Sustainable Cognitive Computing, [**Web of Science indexed**]

[4]. **E. Grace Mary Kanaga**, Sthuti, J., Sharon, C. B., & Reethu, J. K. (2019). A comparitive analysis of classification algorithms on different stimuli for EEG based BCI applications. Paper presented at the *Proceedings of the International Conference on Trends in Electronics and Informatics, ICOEI 2019,* 1424-1428. doi:10.1109/ICOEI.2019.8862678 [Scopus Indexed]

[5]. Belfin, B. R., **Grace Mary Kanaga, E**., & Brodka, P. (2018). Regional clustering of indian hospitals for better health. Paper presented at the *2018 International Conference on Circuits and Systems in Digital Enterprise Technology, ICCSDET 2018,* doi:10.1109/ICCSDET.2018.8821072 [Scopus Indexed]

[6]. Christy Mariam Issac and **E. Grace Mary Kanaga** (2017), " Probing on Classification Algorithms and Features of Brain Signals Suitable for Cancellable Biometric Authentication", in the IEEE Conference on Computational Intelligence and Computing Research(ICCIC 2017), December 2017, pp. 561 – 564. (ISBN:978-1-5090-6620-9) (Scopus Indexed)

[7]. Preethi S H Darius and **E. Grace Mary Kanaga** (2017), **"**Bag-of-Tasks Intelligent Scheduling Agent (BISA) in Cloud Computing", in the International Conference ICACCP 2017, Sep 2017

[8]. J Srija, Rose Rani John and **E. Grace Mary Kanaga** (2017), "A Multi-Objective Direct Guidance Ant Colony System for Virtual Machine Placement Problem", in the 6th International Conference on Computer Science and Computational Mathematics (ICCSCM 2017), Malaysia, pp. 141-145.

[9]. Sherin Tresa Paul, Kumudha Raimond**, E. Grace Mary Kanaga** (2017), "A Survey on Pediatric Asthma Exacerbation and its Correlation with Atmospheric Pollutants" , in the International Conference on Intelligent Computing and Control(I2C2), June 2017, pp. 275 – 279.(DoI: 978 -1- 5386-0373-4)

[10]. **E. Grace Mary Kanaga**, Muthu Kumaran, M. Hema, R.Gowri and Tina (2017), "An Experimental Investigations on classifiers for Brain Computer Interface based Authentication", in the International Conference on Trends in Electronics and Informatics (ICEI 2017), May 2017, pp.1066 – 1071(DoI: 978-1-5090-4257-9/17)

[11]. Srija, Rose Rani and **E.Grace Mary Kanaga** (2017), " A Delve into Ant Colony Optimization for Virtual Machine Placement Problem", in the proceedings of International conference on Big Data and Cloud Computing (ICDBCC17), April 2017,pp. 185 – 196.

[12]. Albin Shaji, Belfin and **E. Grace Mary Kanaga** (2017), "An Innovated SIRS Model for Information Spreading" , in the proceedings of International conference on Big Data and Cloud Computing ( ICDBCC17), April 2017.

[13]. Sminesh C. N. , **E. Grace Mary Kanaga** and Ranjitha K(2017), "Flow Monitoring Scheme for Reducing Congestion and Packet Loss in Software Defined Networks", 2017 International Conference on Advanced Computing and Communication Systems (ICACCS -2017), Jan. 06 – 07, 2017, Coimbatore, INDIA ,pp. 1374 – 1378.( IEEE ISBN No. 978-1-5090-4558-7 1378)

[14]. Nisha Wilvicta J. and **E. Grace Mary Kanaga** (2013) "A Survey on Healthcare Models", Proceedings of the International Conference on Computer Science and Information Technology, pp. 110-114.

[15]. Amar Jukuntla, **E. Grace Mary Kanaga** (2013) "Flowshop Scheduling Mechanism  using Artificial Bee Colony algorithm and Auction Mechanism" , proceedings of WCSET2013 - 2nd World Conference on Applied Sciences, Engineering  & Technology 2013, in GITAM University,8-9 March'13.

[16]. Greeshma Gopal., **E. Grace Mary Kanaga** (2013) "Effective Detection of Breast Cancer by Mammogram Enhancement", International Conference on Electrical Engineering & Computer Science (ICEECS), pp 84-87.

[17]. **Grace Mary Kanaga .E.** and Valarmathi .M.L. (2011), "Multi-agent based Patient Scheduling Using Particle Swarm Optimization", International conference on Communication Technology and System Design, Procedia Engineering, Elsevier. pp.396 – 403, December 2011.

[18]. **E.Grace Mary Kanaga**, M.L.Valarmathi, "Synergy of Multi-Agent Coordination Technique and Optimization Techniques for Patient Scheduling," Proc. of International conference on Advances in Information Technology and Mobile Communication-2011, Springer LNCS-CCIS 147, pp. 317-322 .

[19]. **Grace Mary Kanaga. E**., Valarmathi, M.L, Darius,P.S.H., "An Efficient Multi-agent Patient Scheduling Using Market Based Coordination Mechanism," In Proceedings of International conference on Intelligent Agents and Multi-agent Systems , India July 2009. (ISBN : 978-1-4244-4710-7- Published in IEEE Explorer)

[20]. **Grace Mary Kanaga. E**., Valarmathi, M.L, Darius, P.S.H, "Coordinated Multiagent based Framework for Patient and Resource Scheduling" In Proceedings of International conference on Intelligent SystemsandAgents, pp. 108 -115, June 2009 Algarve, Portugal. (ISBN :978-972-8924-87-4)

[21]. **Grace Mary Kanaga. E**., Valarmathi, M.L, Darius, P.S.H, "An auction based coordinated multi-agent patient scheduling framework using integer programming optimization, "In Proceedings of  International conference on Operation Research in Engineering and Management, pp 2054 -2059, May 2009 , India

[22]. **E.Grace Mary Kanaga**, M.L.Valarmathi, Rose Rani John, "An Intelligent Naval Defense System Using Multi Agent Coordination Techniques ", *Proc. of International Conference on Sensors, Security, Software and Intelligent Systems,*.pp  1 – 6 , January 2009, India

## NATIONAL CONFERENCE

[1]. Preethi Sheba Hepsiba and **E. Grace Mary Kanaga**, "Harnessing the power of the cloud for scientific computing", Proc. National Conference on Technological Revolution in Intelligent Computing(TRIC), pp. 201 – 206, MVJCE, Bangalore, 2014

[2]. Cidharth.S, **E.Grace Mary Kanaga**, "Brain Computer Interface: The Current Technology" 4th National Conference on Knowledge based Scientific Research and Communication Engineering (KSRCE"14) in March 2014.

[3]. Rose Rani John, **E.Grace Mary Kanaga**, Dr.M.L.Valarmathi. ," Coordination Techniques in MAS: A Brief Overview," *Proc. National Conference on Emerging Trends* pp 5 –7 , March 2008, Integral University, Lucknow.

[4] **E.Grace Mary Kanaga**,Ajith Prasad.V,"A Reliable Distributed Location Monitoring Service," *Proc. National Conference on Information Technology,Feb 8-9 ,2008.*

[5]. Smitha Tom and **E. Grace Mary Kanaga**, "Locating Object Boundary Using Skippy Greedy snakes," *Proc.National Conference on recent advances in computer Vision and Information Technology*, March 2007.pp.367-370.

[6] R. Medona Selin, **E. Grace Mary Kanaga**,"Perceptual segmentation of Natural Scenes Based on Color and Texture,"*Proc. of National Conference on Modeling Analysis and Simulation of Computers and Telecommunication Systems (MASCOT '07) ,*March 2007.pp.155-159.

[7] C.V.Veena, **E.Grace Mary Kanaga**," Image Stitching in the Gradient Domain," *Proc. of National Conference on advances in Computer Science and Engineering,* March 2007.pp.133-137.

[8] R. Medona Selin,**E. Grace Mary Kanaga**," Spatial Approach – Segmentation of Natural Scenes Based on Color and Texture," *Proc. of National Conference on Advances in Computer Science and Engineering,* March 2007.pp.69-73

[9] I.Jeena Jacob, **E.Grace Mary Kanaga**,"Automatic Removal of Objects from Images and Videos," *Proc. National Conference on Computing and Applications(NACC '06),*February 2006.

[10] S.Mano Sheeba, **E. Grace Mary Kanaga**,"Image Orientation Detection,"*Proc.National Conference on Signals,Systems & Security (NCSS 2006),* February 2006.

[11]  G.S.Beni,**E.Grace Mary Kanaga**," Intelligent Eyeglasses Editing," *Proc.National Conference on Networking and Distributed Computing*,March 2005.

[12] A.S.Raja,**E. Grace Mary Kanaga**," PCA Based Multimodel biometric using Ear ,Face & hand geometry," *Proc.National Conference on ETES* ,March 2005

## AWARDS

- Received "**The Best Computer Science Faculty Award**" for the year 2013 by ASDF.
- Received **"Innovative Professional Award"** from Society of Professional Engineers, 2016
- Received "**National Young Leaders Programme Award**" from Ministry of youth affairs and sports, NSS Regional Directorate Chennai for the outstanding contribution of community service through NSS, 2017

## PROFESSIONAL ASSOCIATION

1. Member of CSI       – 0072873
2. Member of IADIS   - 20090137
3. Member of IEEE     -  92177445
**4.** Member of ASDF   -  4357700016860829
5. Member of MIR Lab (Machine Intelligence Research Lab)

## RESEARCH

- Core Committee member of IBM Big Data Centre of Excellence
- Recognized PhD Supervisor in Karunya University and currently guiding 6 part-time PhD research Scholars
- Coordinator of Computational Intelligence and S/W Engineering research group
- Coordinator of School Research Committee
- Member of School Research Committee
- Member of Machine Intelligence Research Lab : Scientific Network for Innovation and Research Excellence

## PROJECTS GUIDED

Guided more than 40 PG projects and 15 UG projects in the following areas

- Evolutionary Optimization Techniques
- Intelligent Agents

- Computational Intelligence
- Distributed Systems
- Image Processing
- Mobile Computing
- Brain Computer Interface
- Big data Analytics

## OTHER ACCOMPLISHMENT

- Serving as a member in Governing council of Nehru Institute of Engineering and Technology, Coimbatore from 18th January 2016.

- Serving as a member in Academic council of Kalaignar Karunanidhi College of Engineering, Coimbatore from 2015

- Served as a BOS member in Jothi Nivas College , Bangalore.

## JOURNAL AND CONFERENCE REVIEWER

- Reviewed Papers in various International Conferences
- Reviewer of the international journal Physica , Elsevier Publication
- Reviewer of the international journal, "Mathematical Problems in Engineering", Hindawi Publishing Corporation
- Reviewer with the Indian Journal of Science and Technology
- Reviewer of the international journal, " Journal of Scheduling", Springer
- Reviewer of DEXTRA -National Symposium 2005
- Editorial Advisory Board for *"Handbook of Research on Network Security Attacks and Counter Measures"*, IGI Global
- Co-Editor for the CSE News Letter

## CONFERENCE SESSION CHAIR AND INVITED TALKS

- Track Chair of Cloud and Data Analytics in the International conference on Big Data and Cloud Computing, April 2017
- Invited talk on " Cloud Sourcing and Agent Development using JADE" in the QIP short term course on Next Generation Computing conducted by CSE Department of Coimbatore Institute of Technology, Coimbatore during 28 - 4- 2017

- Invited talk on "Data Science and Big Data and Analytics" in the workshop conducted by Jeyaraj Annapackiam College of Engineering, Nazareth during 23-6-17.
- Invited talk on " Open source Software Tools for Big Data Analytics ", in the FDP Conducted by Government Engineering College, Trissur, 13-7-2016
- Invited talk on " NoSQL Databases: MongoDB and Cassandra", in the DST sponsored FDP Conducted by Kongu Engineering College, 15-6-2016
- Special lecture delivered on "NoSQL Databases" in the Text Analytics and Stream Computing  Workshop conducted by KU during 17 March 2016
- Invited talk on IoT and Big Data Analytics in the International Conference on Innovations in Science and Technology conducted by  SriGuru Institute of Technology during  31 March 2016
- Invited talk on "Distributed Systems" in the FDTP conducted by Sri Ramakrishna Engineering College, Coimbatore during December, 2015
- Invited talk on " Big Data and Analytics" in the Seminar conducted by Jeyaraj Annapackiam College of Engineering, Nazareth during October, 2015
- Keynote Speaker for the National Conference conducted by CARE Engg. College, Trichy during March 2014
- Invited talk on FDTP conducted by Akshaya Enggg. College, Coimbatore during June, 2014
- Key note address on National Level Seminar conducted by SRIT, during March 2014
- Chair the session in National Conference conducted by CARE Engg. College, Trichy during March 2014
- Judge for Paper presentation in National Level Symposium – Techagon – '14, conducted by KU, during March 2014
- Co-Chair the Session for Paper Presentation in International Conference - ICICTS -14 conducted by KU, Coimbatore during March 2014
- Chair the Session in International Conference  on Innovations In Intelligent Instrumentation, Optimization And Signal Processing, conducted by KU, March 2013
- Judge forNational Level Project Contest conducted by CSI, February, 2013
- Invited talk on FDP conducted by PSG Tech, during June, 2013
- Special lecture delivered on "Software Agents and Cloud Computing" in the Cloud Computing and Software Agents  Workshop conducted by KU during  September 2012
- Advisory Committee member for national conference on Information Computing & Management Challenges in Contemporary Business, Bangalore, October 2011
- Session  chair in National Level Symposium – Elements, February 2012
- Gave the Inaugural Address for the Association Inauguration in ASL Paul Engineering College, March 2012
- Special Lecture delivered in a Workshop conducted by Karpagam University, during July 2010

## STP, FDP AND WORKSHOPS ATTENDED

- Participated in the two days workshop on Deep Learning – Academic and Research Perspectives" conducted by PSG College of Technology held during 24-25 January 2018.
- Participated in the TEQIP –III sponsored workshop on "Industrial IoT and Automation from Prototyping to Reality" organized by Department of CSE, PSG College of Technology during 7th to 9th September 2017.
- Participated in a faculty development Programme entitled "Mentoring the Millennial Engineering Students" conducted by KCDC, KU during 19th – 20th June 2017.
- Attended an FDP on "Health Analytics" conducted by Cognizant during 28th June 2017
- Attended a one day workshop on "Biological Signal Processing" , organised by ECE, KU during 24th February 2017
- Attended the FTP on "Effective Teaching Learning Methodology for Engineers", conducted by CST, KU, during 28th June 2016
- Attended the FDP on "Lecture Capturing" conducted by KCDC during 24-8-16
- Attended the FDP on "Mastering YouTube for Education" conducted by KCDC during 8-9-16
- Attended the Workshop on "Latex", conducted by KU during 2nd April 2016
- Faculty Development Program on "Data Science and Big Data Analytics" conducted by ICT Academy of Tamil Nadu from 18th July to 22nd July 2016
- FEP (Faculty Enablement Program) on "Big Data and Analytics", Conducted by Infosys Limited, Bangalore from 10th – 14th August, 2015.
- Participated in the training of IBM Netezza and Big Data tools like IBM Infosphere Big Insight, Info sphere Data Stage and Info sphere Streams conducted during June 2015.
- UGC sponsored one week workshop on "Research Issues and Challenges in IoT on Cloud Computing", conducted by CIT, Coimbatore during 06th to 10th October 2014.
- International Collaboration in Academics, Research and Industry conducted by Karunya University and Israel University, Israel, November 2013.
- UGC sponsored two weeks FDP on Named Data Network conducted by GCT, Coimbatore, June 2013
- One week Wipro Mission 10x train the trainer programme during 2010
- Two days, Faculty Development Programme on "Intelligent software Agents for Knowledge Engineering" conducted by IEEE Madras Section was attended during 24,25 April 2009.

- Two days, Workshop on "Network Security" conducted by Govt. College of Technology , Coimbatore was attended during 30 & 31 March 2009
- Participated in International Conference on "Sensors, Security, Software and Intelligent Systems" held at Coimbatore Institute of Technology, during $8^{th}$ – $10^{th}$ January 2009.
- Two days Conference on "Women in Technology", an Asian Pacific summit Conducted by IBM in Bangalore was attended during 3rd & 4th November 2008
- Two days "Orientation Programme for the research Scholars" conducted by Anna University Coimbatore was attended during $7^{th}$ & $8^{th}$ June 2008
- Fifteen days, Staff Development Programme on "Advanced Optimization Techniques for Solving Multidisciplinary Research" conducted by PSG College of Technology was attended during $5^{th}$ – $17^{th}$ May 2008.
- Two days Workshop on "Journal Paper Writing" conducted by Karunya University was attended during $29^{th}$ & $30^{th}$ April 2008.
- Two days Workshop on "Funded Project Proposal Writing" conducted by Karunya University was attended during $29^{th}$ & $30^{th}$ April 2008.

## CONFERENCE AND WORKSHOP ORGANISED

- South Zone Vice Chancelor's Meet (Program and Agenda committee convener) during April 2013.
- Organized a national workshop on Evolutionary Optimization Techniques for Multi Disciplinary Problems, December 2013
- Conducted a seminar on "How to do quality Engineering Research", August 2013
- Organized a national workshop on Software Agents and Cloud Computing, September, 2012
- Technical & Debugging Committee Member for DEXTRA & ACE, Annual National Symposium 2005

## TECHNICAL EXPERTISE

### PLATFORMS USED

| | | |
|---|---|---|
| Languages | : | C, C++, Pascal , Fortran, COBOL, Core Java |
| Markup Language | : | HTML,XML |
| Scripting Languages | : | Java Script, VB Script |
| Web/Application Servers | : | Tomcat, WAS 6.1 |
| Database | : | Oracle 9i/10g, MS access, MySQL |
| NoSQL Databases | : | MongoDB, Cassandra, Neo4j |

| | | |
|---|---|---|
| Tools and Packages | : | Python, MATLAB, JADE, JACK, R |

## VOLUNTEER & COMMUNITY SERVICE

- Received "**National Young Leaders Programme Award**" from Ministry of youth affairs and sports, NSS Regional Directorate Chennai for the outstanding contribution of community service through NSS, 2017
- NSS Programme Officer
- Conducted Train the Trainer Program for Computer Literacy using Scratch during 11/2/17
- Conducted the Transcendence programme for the school children during January 2017
- Conducted the Dengue awareness rally during October 2016
- Conducted the swachh Bharat campaign and rally during August 2016
- Conducted the computer literacy programme in the Mathavarayapuram school during August 2015
- Camp Coordinator for the NSS Special camp conducted at Mundandurai during February 2014
- Camp Coordinator for the NSS Special camp conducted at Perumalkoilpathi during January 2013
- "Wealth out of waste" training camp conducted for the first year students during March 2013
- Conducted a Rally in the Nallorpathi village against alcoholism during December 2012

## PERSONAL DETAILS

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