

Name of Faculty: Dr. M. SUBRAMANIAM

Designation: Professor

Nature of Job/Appointment: Contract

Date of Joining: 01-06-2022

E-mail: [msubramaniam\\_cse@cbit.ac.in](mailto:msubramaniam_cse@cbit.ac.in)



Education Qualifications:	Name of the Degree	Class
Ph. D	Doctor of Philosophy (CSE)	Awarded
PG	M. E. (Software Engineering)	First Class
UG	B. E. (CSE)	First Class

Work Experience:

Teaching	24+ Years
Research	16 Years
Industry	--
Others	--

Area of Specialization: Computer Networking, Software Engineering & AI & ML

Professional Memberships:

1. Life Member, ISTE. [LM 334455]
2. Life Member, CSI [00093652]
3. Member, IAENG [117537]

Responsibilities held at Institution Level: Cultural Committee – Co-Chairman (First Year Induction Program' 2022)

Responsibilities held at Department Level: NIRF – Data Validation & PPT Presentation

Ph.D – Research Guidance:

1. Ananthajothi.K, Jan'2015 "ENHANCED CLASSIFICATION OF MEDICAL DATA USING CLASS LEVEL INFLUENCE PROBABILITY" **Awarded**
2. Duraisamy.A, Jan'2015, "ATTACK, DETECTION AND SECURE IOT USING ADAPTIVE NEURO-FUZZY INFERENCE SCHEME", **Awarded**
3. Selvalakshmi.B, Jan 2016, "INTELLIGENT ONTOLOGY BASED SEMANTIC INFORMATION RETRIEVAL USING FEATURE SELECTION AND CLASSIFICATION", **Thesis Submitted** (Under review)
4. Sujatha.D, Jul'2015, "Multimedia big data retrieval enabled by deep feature learning and Adaptive Semantic Similarity Function", **Thesis Submitted** (Under review)
5. Hima Vijayan, Jul'2018, "Intelligent Clustering Model for Tackling Incomplete Mixed Data using Heuristic Algorithm", **Preparing Thesis**
6. Mohamed Imtiaz.N, Jul'2016, "A Novel Approach to Enhance the Security in Cloud Computing Based Big-Data Management System", Confirmation Completed

Awards Received: NA

Courses Handled at Undergraduate / Post Graduate Level: Computer Networks, Mobile Computing, Adhoc and WSN, Software Engineering, Software Testing, Artificial Intelligence, Data Structures, Operating Systems, DBMS, Theory of Computation, C Programming, SQL & PL/SQL, Group Theory and its Applications

No. of Papers Published: International & National Journals – 24

International & National Conference –09

Projects Carried out / Proposal Submitted	<ol style="list-style-type: none"> <li>1. <i>Proposal Submitted</i> to - Govt. of India, Dept. of Science and Technology (DST) under FIST Program' 2022. Requesting Fund Value <b>Rs. 150 Lakhs</b>, for establishing (i) Virtual/ Augmented Reality Lab (ii) Robotics &amp; Industrial Automation Lab (iii) AI, Big data storage &amp; Cloud Hypervisor Lab. (<b>Under consideration</b>)</li> <li>2. Improving R&amp;D Infrastructure for strengthening Research facilities in the field of Engineering &amp; Technology funded by Govt. Of India, Dept. Of Science and Technology (DST) under FIST Program' 2014. For Fund Value <b>Rs. 40 Lakhs</b>, Sanction Letter vide SR/FST/College-239/2014, dated 21-Nov-2014, and created, (i) Big-Data &amp; Cloud Computing Lab (ii) Robotics, Artificial Intelligence &amp; ML Lab (iii) IoT &amp; Automation Lab.</li> <li>3. Organized two weeks AICTE Sponsored FDP during 22<sup>nd</sup> Nov to 5<sup>th</sup> Dec 2019 on "Artificial Intelligence &amp; Advanced Machine Learning Using Data Science", Sanction order No: F.No.34-55/139/RIFD/Policy-1/2017-18, Grant Amount <b>Rs.4.61 lakhs</b>.</li> <li>4. Organized 6 days DST NIMAT sponsored "Entrepreneurship Awareness Camp", sanction order no. EDII/ DST-NIMAT /18-19/377 dated on 3<sup>rd</sup> July 2018, Grant Amount <b>Rs. 40,000</b>.</li> </ol>
Patents	NIL
Technology Transfer	NIL
Invited Speaker	<ol style="list-style-type: none"> <li>1. AICTE Sponsored 6 Days Virtual STTP on "Predictive Modelling and Data Analysis using Python based Machine Learning Technique" – Organised by Dep. Of CSE, SAIRAM INSTITUTE OF TECHNOLOGY, Chennai</li> <li>2. Entrepreneurship and Innovation as career opportunity", Workshop organized by Panimalar Engineering College, Chennai</li> </ol>
No. of Books/Chapter Published with details	<ol style="list-style-type: none"> <li>1. Subramaniam M, Sujatha D, &amp; Kathirvel.A, "Class Level Multi-Feature Semantic Similarity-Based Efficient Multimedia Big Data Retrieval", "Book- Artificial Intelligent Techniques for Wireless Communication and Networking" Wiley Online Library, Chapter 11, Online ISBN: 9781119821809, Print ISBN: 9781119821274, 26<sup>th</sup> Feb 2022 <a href="https://doi.org/10.1002/9781119821809.ch11">https://doi.org/10.1002/9781119821809.ch11</a></li> <li>2. Subramaniam M, Kathirvel.A &amp; Navaneethan.S, "EIDR Umpiring Security Models for Wireless Sensor Networks", "Book- Artificial Intelligent Techniques for Wireless Communication and Networking" Wiley Online Library, Chapter 19, Print ISBN: 9781119821274, 26<sup>th</sup> Feb 2022, <a href="https://doi.org/10.1002/9781119821809.ch19">https://doi.org/10.1002/9781119821809.ch19</a></li> </ol>

Details of Short-Term Training Programs/Faculty Development Programs/Seminars/Workshops. Other Trainings (Attended and/or Organized).

1. Organized 1-day National Workshop on Intellectual Property Rights Startup and Innovations on 25-03-2022 at Sree Vidyanikethan Engineering College
2. Organized two weeks AICTE Sponsored FDP during 22nd Nov to 5th Dec 2019 on "Artificial Intelligence & Advanced Machine Learning Using Data Science", Sanction order No: F.No.34-55/139/RIFD/Policy-1/2017-18, Grant Amount Rs.4.61 lakhs at S.A. Engineering College
3. Organized 6 days DST NIMAT sponsored "Entrepreneurship Awareness Camp", sanction order no. EDII/ DST-NIMAT /18-19/377 dated on 3rd July 2018, Grant Amount Rs. 40,000, at S.A.Engineering College.
4. Organized one day NATIONAL LEVEL TECHNICAL SYMPOSIUM, "NAKSHATRA' 18" on 11 Aug 2018 at S.A.Engineering College
5. Organized 3 days Faculty Development Program on, "Data Science – Clustering Analysis & Pattern Discovery", Dec'2017.
6. Organized 3 days Faculty Development Program on, "Python Programming", Jun' 2017.
7. Organized one day NATIONAL LEVEL TECHNICAL SYMPOSIUM, "NAKSHATRA' 18" on 12 Aug 2017 at S.A.Engineering College
8. Convener for "IEEE 6th/ 7th/ 8th International Conference on Information, Communication and Embedded Systems", <http://saec.ac.in/eee-forum/icices2019/>
9. Organized one day National Conference on "Recent Innovations in advanced Computing Technology-RIACT'12" on 2nd March 2012 in Karpaga Vinayaga College of Engineering & Technology.
10. Organized one day National Conf. "National Multi-conference on Innovative Computing Technology" on 18th April 2011 at Tagore Engg College.
11. Organized one day National level technical students Symposium "AURORA'09" on 23rd Sep 2009 at Tagore Engineering College.
12. Organized two-day workshop on "Workshop on Some Harder Problems on Theory of Computation" during 26th –27th Jun 04 at M.N.M.Jain Engineering College, Chennai - 96.

Books Published

Title:"MULTIPATH STATE AWARE CMT USING REDUNDANT TRANSMISSION FOR SCTP MULTI-HOMED HOSTS", Type: "Monograph", Publisher: Verlag Publisher, Scholars Press- Germany

### Details of Journal Publications/ Conferences (National and International)

#### International/National Journals:

1. Hima Vijayan, Subramaniam M, and Sathiyasekar K., "A Hybrid Intelligent Clustering Model for Tackling Incomplete Mixed Data Using Heuristic Algorithm with Artificial Intelligence", **Cybernetics and Systems** (2022), Publisher: © 2022 **Taylor & Francis Group**, LLC, Published: Online, 11 Nov 2022. <https://doi.org/10.1080/01969722.2022.2137649>
2. Sujatha. D, Subramaniam M, and Rene Robin.C.R "A new design of multimedia big data retrieval enabled by deep feature learning and Adaptive Semantic Similarity Function," **Multimedia Systems** (2022), © **Springer** Published: Online, 05 February 2022. <https://doi.org/10.1007/s00530-022-00897-8>
3. Selvalakshmi B, Subramaniam M, and Sathiyasekar K. "Semantic Conceptual Relational Similarity Based Web Document Clustering for Efficient Information Retrieval Using Semantic Ontology," **KSII Transactions on Internet and Information Systems**, vol. 15, no. 9, pp. 3102-3119, 2021. DOI: <https://10.3837/tiis.2021.09.001>
4. A Duraisamy, M Subramaniam and C R ReneRobin, "An Optimized Deep-Learning Based Security Enhancement and Attack Detection on IoT Using IDS and KH-AES for Smart Cities", **Studies in Informatics and Control**, ISSN: 1220-1766, Publisher: **National Institute for Research and Development in Informatics - ICI Bucharest**, Jun. 2021, Vol 30, Issue 2, Pg. No. 121 – 131
5. M.Subramaniam and A.Duraisamy, " Attack Detection on IoT based Smart Cities using IDS based MANFIS Classifier and Secure Data Using IRSA Encryption", **Wireless Personal Communication** (2021), Published Online: 17-March-2021 119:1913 – 1934, Publisher: © Springer Science+Business Media, LLC, part of Springer Nature. <https://doi.org/10.1007/s11277-021-08362-x>
6. M. Subramaniam, A. Kathirvel, E.Sabitha and H. Anwar Basha, "Modified Firefly Algorithm and

- Fuzzy C-Mean Clustering Based Semantic Information Retrieval”, **Journal of Web Engineering**, Vol.20\_1, 33-52. Publisher: © **River Publishers**, 15 Feb 2021, ISSN: 1540-9589 (Print Version),. ISSN: 1544-5976 (Online Version), <https://doi.org/10.13052/jwe1540-9589.2012>
7. M. Subramaniam, A. Kathirvel, S Navaneethan and C. Sabrinath, “Improved IDR Response System for Sensor Network”, **Journal of Web Engineering**, Vol.20\_1, 53-88. Publisher: © **River Publishers**, 15 Feb 2021, ISSN: 1540-9589 (Print Version),. ISSN: 1544-5976 (Online Version), <https://doi.org/10.13052/jwe1540-9589.2013>
  8. Subramaniam.M, Ponrajakumari M & Vimaladevi K,"A Novel Spectrum-aware clustering algorithm based on golden radio optimization and fuzzy clustering for cognitive radio networks", **International Journal of Communication Systems**, 2020; e4625. Publisher: © **John Wiley & Sons Ltd**. Online ISSN: 1099-1131, 15 Oct 2020, <https://doi.org/10.1002/dac.4625>
  9. Subramaniam M, Ponrajakumari M, & Vimala Devi K, “A Survey On Clustering Algorithms In Cognitive Radio Networks”, **Journal Of Critical Reviews**, ISSN: 2394-5125, Volume-7, Issue-19, 2020, DOI: <http://10.31838/jcr.07.19.88>
  10. Subramaniam M & B. Selvalakshmi, “Hierarchical Semantic Relational Coverage Measure Based Web Document Clustering Using Semantic Ontology”, **International Journal of Innovative Technology and Exploring Engineering (IJITEE)**, ISSN: 2278-3075, Volume-8, Issue-10, August 2019, DOI: <http://10.35940/ijitee.J1123.0881019>
  11. Subramaniam M & K. Ananthajothi, “CLDC: Efficient Classification of Medical Data Using Class Level Disease Convergence Divergence Measure”, **International Journal of Innovative Technology and Exploring Engineering (IJITEE)**, ISSN: 2278-3075, Volume-8, Issue-10, August 2019, DOI: <http://10.35940/ijitee.J9062.0881019>
  12. Subramaniam M & K. Ananthajothi, “Efficient Classification of Medical Data and Disease Prediction Using Multi Attribute Disease Probability Measure”, **Applied Mathematics & Information Sciences- An International Journal**, **Natural Sciences Publishing Cor. Appl. Math. Inf. Sci.** 13, No. 5, 1-7 (2019), <http://dx.doi.org/10.18576/amis/paper>
  13. Subramaniam.M & K. Ananthajothi,"Multi level incremental influence measure based classification of medical data for improved classification", **Cluster Computing – The Journal of Networks, Software Tools and Applications**, Publisher: **Springer US**.ISSN: 1386-7857 (Print) 1573-7543, Mar 2018, <https://doi.org/10.1007/s10586-018-2498-z>
  14. Subramaniam.M and B. Selvalakshmi, “Intelligent ontology based semantic information retrieval using feature selection and classification”, **Cluster Computing – The Journal of Networks, Software Tools and Applications**, Publisher: **Springer US**.ISSN: 1386-7857 (Print) 1573-7543, Jan 2018, <https://doi.org/10.1007/s10586-018-1789-8>
  15. Subramaniam.M and A.Duraisamy, “A Security Mechanism to Prevent SQL Injection Attacks by Using Attribute Value Removing Approach and Aho-Corasick Pattern Matching Algorithm”, **International Journal of Printing, Packaging & Allied Sciences**, Vol.4 No.2 Dec (2016)
  16. Subramaniam.M and A.Duraisamy, “Detection and Prevention of Cross Site Scripting Attacks using Concolic Testing and Pattern Filtering Approach in Web Application”, **Australian Journal of Basic and Applied Sciences**, Vol.10 No.18 Dec (2016)
  17. Subramaniam.M, A.Kathirvel, J.P.Josh Kumar, N.Kirubakaran and P.Sivaraman, “A unified approach for detecting and eliminating selfish nodes in MANETs using TBUT”, **EURASIP Journal on Wireless Communications and Networking and Springer Open** (2015) 2015:143, DOI <http://dx.doi.org/10.1186/s13638-015-0370-x>
  18. Subramaniam.M, S.K.Muthusundar, Mohana Geetha and A.Kathirvel, “Temporary Redundant Transmission Mechanism for SCTP Multihomed Hosts”, **"The World Scientific Journal"- Hindawi Publishers**, Volume 2015 (2015), Article ID 158697, 10 pages, <http://dx.doi.org/10.1155/2015/158697>
  19. Subramaniam.M and A.Duraisamy, “Detection And Prevention Of Clickjacking Attacks On Web Applications Using Link Guard (Lg) Algorithm”, **International Journal of Applied Engineering Research**, ISSN 0973-4562 Vol.10 No.72 (2015), URL: <http://www.ripublication.com/Volume/ijaerv10n72spl.htm>
  20. Subramaniam.M, E.A.Mary Anita and Mohana Geetha.D, “A Compact Microstrip Integrated E-Array Patch Novel Antenna for WLAN Applications” **Wireless Personal Communications** – April 2014, DOI: <http://10.1007/s11277-014-1798-8> , Print ISSN:0929-6212, Online ISSN:1572-834X, Publisher: Springer US.
  21. Subramaniam.M and Manjula.D, “Multipath State Aware Concurrent Multipath Transfer Using Redundant Transmission For Multi-Homed Hosts”, **International Journal of Internet Protocol Technology (IJIPT) - Inderscience Publishers**, Vol 7, No.2,(Nov'2012) pp. 120 – 133. DOI:

<http://10.1504/IJPT.2012.050222>

22. Subramaniam M and Dr. D.Manjula," Performance Metrics Of Multipath State Aware Concurrent Multipath Transfer Using Redundant Transfer In Stream Control Transmission Protocol Multihoming For Symmetric Paths" **Journal of Computer Science (JCS)**, Vol 7, Issue 12 (2011), pp. 1859-1866.
23. Subramaniam M, Dr. C. Rajabhusanam and Dr. A. Kathirvel, "Burglar Detecting System for Wireless Mobile Ad Hoc Networks" **European Journal of Scientific Research (EJSR)**, Volume 62 Issue 1.
24. Subramaniam M and Dr. D.Manjula,"Effective Transport Using Concurrent Multipath Transfer by Redundant Transmission during Path Failure" **European Journal of Scientific Research (EJSR)**, Vol.58 No.2 (2011), pp.247-256.
25. Subramaniam M and Dr.S.Prakash, "Optimized Molybdenum as Gate Metal in a-Si:H TFT's for Imaging and Display Applications" **International Journal of Recent Trends in Engineering and Technology**, 11/2010, Vol.4, No.4,pp.201-203.
26. Subramaniam M & Dr.D.Manjula, "Performance Enhancement in Concurrent Multipath Transfer using Limited- Receive Buffer" **CiiT International Journal of Networking and Communication Engineering**, Issue Feb 2010.

**International /National Conferences:**

1. National Conference (online) on Business Dynamics: LOCAL TO GLOBAL", Presented a paper on "Utilizing the energy efficiently in WSN", Dec' 2021
2. International Conference – ITDECC-21, Innovation and Technological Developments in Electronics, Computers and Communication – Presented a paper " WSN – A Survey", Dept. of ECE, SRMIST-Ramapuram.
3. Subramaniam M, Kathirvel A, S.Sivaraman and Vetriselvi, "Application of Mobile Banking in Today's Scenarios", International Conference on Biomedical Instrumentation, Engineering and Environmental Management (ICBEEM), 2011.
4. Subramaniam M and Manjula D,"Improved Performance in Concurrent Multipath Transfer using Limited – Receive Buffer" in International Conference on "Innovative Computing, Information and Communication Technology (ICICT09), organized by Sri Sairam Engineering College, Sponsored by AICTE, Chennai -44 on 16th – 18th Dec' 09.
5. Subramaniam M and Manjula D,"Design of concurrent-paths in Multihoming for concurrent transmission in SCTP" in IEEE Conference on "Communication systems, networks and Digital Signal processing (CSNDSP 08), organized by TECHNISCHE UNIVERSITAT GRAZ, Institut for Breitbandkommunikation, Austria and Graz University of Technology- 23rd – 25th July' 08.
6. Subramaniam M and Kathirvel A,"Knowledge Management – A Brief Overview" at "IPCOM-07" a National Level Workshop on Intelligent Pervasive Computing - organized by Department of Computer Science and Engineering, S.R.M. Valliammai Engineering College 16th Feb 07.
7. Subramaniam M and Kathirvel A,"ASAI based parser for determining phrase boundaries for text-to-speech synthesis" at International Workshop In Phonetics Dedicated To The Memory Of Farkas Kempelen March 11-13, 2004, Budapest, Hungary.
8. Subramaniam M and Kathirvel A,"Tamil speech Synthesizer for Multimedia Applications" at "Emerging Technology and Applications" a National Level conference organized by Department of Computer Science and Engineering on 2 & 24 –Feb 2004, Sourashtra University, Rajkot, GUJARAT.
9. Subramaniam M and A.Kathirvel,"Enhancement of Knowledge Management an Overview", National Conference on Software, Telecommunications and computer networks(SOFTCOM), 2007