

**Dr S. SOUNTHARRAJAN**

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Attur(Tk).Pin: 636109Mobile: 9786066776

Salem District.

## Details of Experience

Teaching Experience : **14 Years 7 Months in Engineering Colleges / University**

|  |  |  |  |
| --- | --- | --- | --- |
| **Organization** | Designation | **Years** | **Duties and Responsibilities** |
| **VIT University, Bhopal**  Madhya Pradesh, India  May 2018 to Till date | SeniorAssistantProfesor | 2 Years and 2 Month | Program Chair of Artificial Intelligence and Machine Learning @ VIT University, Bhopal. |
| Bannari Amman Institute of Technology, Sathyamangalam.  May 2010 to April 2018 | Asst.Prof(Sl.G) | 8 | Handled Theory and Lab Classes and involved in the in-house development of the Institution |
| Dr.Mahalingam College of Engg. & Tech., Pollachi.  June 2005 to May 2008 | Lecturer | 3 | Handled Theory and Lab Classes and involved in the in-house development of the Institution |
| Sri Krishna College of Engg and Technology, Coimbatore.  June 2004 to May 2005 | Lecturer | 1 | Handled Theory and Lab classes and  Network Engineer |
| Hardware and Networking System at Preethi System & Solutions, Attur.Salem District  (May 2003-May 2004) | Hardware Engineer | 1 | PC Troubleshooting and Assembling |

Anna University Supervisor No  **: 3040048**

Faculty : Information and Communication Engineering

**VIT University, Bhopal, Recognized Supervisor (Letter : VIT/2018/068)**

Faculty: School of Computing Science and Engineering

**PhD Guidance:**

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| --- | --- | --- | --- |
| **No of Scholoars** | **Full Time**  **(VIT University,Bhopal)** | **Part Time**  **(VIT University, Bhopal)** | **As DC Member** |
| 4 | 1 | 3 | 7 |

**Academic Record**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **S.No** | **Course &**  **Specialization** | **Month &**  **Year of Passing** | **Regular**  **/Distance**  **Education** | **Name of the**  **Institution** | **% of**  **Marks** | **Class**  **Obtained** |
| 1 | PhD (ICE) | May 2017 | Part-Time | Anna University,  Chennai | 9.0 | Highly Recommended |
| 2 | ME (CSE) | June 2010 | Regular | Government College of Technology,  Coimbatore | 81% | I  (First class  with Distinction) |
| 3 | BE (IT) | May 2003 | Regular | Sona College of Technology,  Salem | 76% | I  (First class  with Distinction) |

# Extramural Research:

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **S.no** | **Funding Agency** | **Topic** | **Year of Section/ Applied** | **Amount Sanctioned in (Rs)** | **Role** | **Status** |
| 1 | DST - TIDE (SEED) | Making Education Accessible to the Visually Impaired through an Affordable [SEED/TIDE/2019/720] | 2019 | 34,21,500 | PI | Under Processing |
| 2 | Core Research Grant  (SERB) | Smart Bus Shelter using Solar and Wind Energy | 2020 | 40,05,000 | Co-PI | Accepted for Evaluation |
| 3 | DST | Project Entitled “Compilation and Skill Analysis for IT Professionals” (Co-PI) | 2012-2104 | 13,63,000 | Co-PI | Completed |
| 4 | AICTE | Establishment of Cloud Computing Lab - MODROBS Scheme | 2012-2013 | 6,50,000 | Co-PI | Completed |
| 5 | AICTE | Utility Based Cloud Mining in Social Applications - RPS Scheme | 2012-2014 | 6,00,000 | Co-PI | Completed |
| 6 | AICTE | Two week FDP on “Data Science and Big Data Analytics” | 2017- 2018 | 6,30,000 | Co-PI | Completed |
| 7 | ICMR | Two day National Level Workshop on Cybersecurity for Medical Devices and Healthcare | 2017-2018 | 40,000 | Co-PI | Completed |
| **Total** | | | | **32,83,000** |  | |

**National / International Journals Published:( SCI : 2 / Scopus : 14)**

1. Sountharrajan, S, Palani Raja N, ’High Utility Itemset Mining Using Dolphin Echolocation Optimization’, Journal of Ambient Intelligence and Humanized Computing, Springer. DOI: 10.1007/s12652-020-02571-1. **Impact Factor: 4.5. (SCI)**

2. Sountharrajan, S, Palani Raja N, ‘High Utility Itemset Mining: A Boolean Operators Based Modified Grey Wolf Optimization Algorithm’, Journal of Soft Computing, Springer. Accepted.10.1007/s00500-020-05123-z. I**mpact Factor: 3.5 (SCI)**.

3. Sountharrajan,S, Sathis kumar B, “Big Data Projects Requirement Understandability using Big Data Use Case Diagram Approach”, International Journal of Computational and Theoretical Nano science, Vol. 16, 1–6, 2019. (Scopus)

4. Gowtham R, Sountharrajan S, Shishir Kumar , Sanjay , Praveena, “A Cognitive Personal Assistant System - To Enhance the Individual Centric Research Capabilities”, Journal of Web-Based Learning and Teaching Technologies, 2021 (Accepted).Scopus.

5. Sountharrajan,S, Shishir K Shandilya, Smita Shandilya, ’Big Data Analytics Framework for Real-Time Genome Analysis: A Comprehensive Approach’, International Journal of Computational and Theoretical Nano science, Vol. 16, 3419–3427, 2019.(Scopus)

6. Sountharrajan, S, Shishir K Shandilya, Karthiga M, ‘Mobile Cancer Prophecy System to assist patients: Big Data Analysis and Design’, International Journal of Computational and Theoretical Nano science, 16(8):3623-3628. (Scopus)

7. Sountharrajan, S, Suganya, E, Aravindhraj, N, and Rajan, C, 2017,’Automatic Classification for Preventing Duplication of Online Multimedia Data in Secure Cloud Infrastructure’, International Journal of Advanced Intelligence Paradigms.16(3-4):DOI:10.1504/IJAIP.2020.10028402. Inderscience Publishers. (Scopus).

8. Sountharrajan, S, Suganya, E, Aravindhraj, N, and Rajan, C, 2017, ‘HDFS Based Parallel and Scalable Pattern Mining Using Clouds for Incremental Data’, International Journal of Computer Aided Engineering and Technology. DOI: 10.1504/IJCAET.2020.10029059, Inderscience Publishers. (ESCI).

**9.** Sountharrajan, S,Suganya, E, Karthiga, M and Rajan, C, 2018, ’Automatic Glioblastoma Multiforme detection using Hybrid SVM with Improved Particle Swarm Optimization’, International Journal of Biomedical Engineering and Technology’. Vol. 26, Nos. 3/4, 2018. Inderscience Publishers. (ESCI).

10.Sountharrajan, S, Karthiga, M, Suganya, E and Rajan,C, 2017, ‘Automatic Classification on Bio Medical Prognosis of Invasive Breast Cancer’, Asian Pacific Journal of Cancer Prevention, Volume 18, Issue 9, Page 2541-2544.(ESCI).

11.Sountharrajan, S, Suganya, E, Vijayakumar, K, 2018, Synthesis, Characterization, and Evaluation of Cancer Prevention Activity of Novel Modified Heterocyclic Compounds’ Asian Pacific Journal of Cancer Prevention, Volume 19, Issue 1, January 2018, Page 247-252.Impact Factor:0.27.(ESCI).

12.Sountharrajan, S and Thangaraj, P 2016, ‘Optimized Feature Selection technique for automatic Classification of MRI Images for Alzheimer’s Disease’, Journal of Medical Imaging and Health Informatics, Vol. 6, 2057–2062. **Impact Factor: 0.6 (ESCI).**

13.Sountharrajan S, P Thangaraj, E Suganya, (2016). ‘Particle Swarm Optimized Feature Selection for Alzheimer’s Classification’. IIOAB Journal. Vol.7.Issue: 7. Pages: 787-794. **(Scopus)**

14. Harshala Shingne, Sountharrajan S, Karthiga M, Rajan C. Lasso And Ridge Regression For Optimized Resource Allocation in Cloud Computing, International Journal of Advanced research and Dynamic Systems, Issue2, Pages: 1740-1756. **(Scopus)**

15.Sountharrajan, S, Suganya, E, Archana, M and Rajan,C, 2017, ‘Metaheuristic Optimization Technique for Feature Selection to Detect The Alzheimer Disease From MRI’, International Journal of Advanced research and Dynamic Systems, Pages:1368-1381.Impact Factor:0.27, **Scopus**.

16.Sountharrajan S, Abilash R (2015). Open Platform Cloud Infrastructure Model with Enhanced Virtualization’. ARPN Journal of Engineering and Applied Sciences. Vol.10. No.5. March 2015.**Scopus**.

**International Conferences: (Scopus: 3)**

1. Sountharrajan, S, Karthiga M, Nandhini S S, Sathis kumar B, “Machine Learning Based Diagnosis of Alzheimer’s disease”, Springer: Advances in Intelligent Systems and Computing Series. International Conference on Image Processing and capsule Networks (ICIPCN 2020).<https://doi.org/10.1007/978-3-030-51859-2_55>. (Scopus)

2. Natarajan, S. and Sehar, S., 2013, December. A novel algorithm for distributed data mining in HDFS. In 2013 Fifth International Conference on Advanced Computing (ICoAC) (pp. 93-99). IEEE. (Scopus)

3. Natarajan, S. and Sehar, S., 2013, December. Distributed FP-ARMH algorithm in Hadoop map reduce framework. In 2013 International Conference on Green Computing, Communication and Conservation of Energy (ICGCE) (pp. 264-270). IEEE. (Scopus)

**BOOK CHAPTER (Scopus Indexed: 3)**

1. Sountharrajan S, Karthiga M, Nandhini S S, Sathis kumar B,“On-the-Go Network Establishment of IoT Devices to Meet the Need of Processing Big Data Using Machine Learning Algorithms”, Business Intelligence for Enterprise Internet of Things, Springer. May 2020. (Scopus)

2. Sountharrajan S, Ghazanfar Latif Jaafar M. Alghazo, Maheswar Rajagopal,”IoT in the Field of the Future Digital Oil Fields and Smart Wells”, Internet of Things in Smart Technologies for Sustainable Urban Development, Springer, 1-17, March 2020. DOI: 10.1007/978-3-030-34328-6\_1.(Scopus)

3. Sountharrajan S, Karthiga M, and Nivashini M “Dynamic Detection of Phishing URLs using Deep Learning Techniques”, Advances in Cyber Security Analytics and Decision Systems, Springer-USA Jan 2020.(Scopus)

4. Sountharrajan S, Karthiga M, , IoT in Agriculture: Investigation on Plant diseases and nutrient level using and Image Analysis“ Internet of Things in Biomedical Engineering, Elsevier, USA, June 2019.

5. Sountharrajan S, Karthiga M, Sankarananth S, Sathis Kumar B, Nandhini S S “Challenges and Opportunities of Big Data Integration in Patient Centric Healthcare Analytics using Mobile Networks”, Demystifying Big Data, Machine Learning and Deep Learning for Healthcare Analytics, Elseiver.(Accepted) July 2020.

6. Sountharrajan S, R.M.Thatsanee, R.S.Soundariya, A.Saran Kumar and M Karthiga, "Deep Convolutional Neural Network Based Image Classification for Covid-19 Diagnosis", Data Science for COVID-19 “ Elsevier. Accepted. September 2020.

7. A.Sampathkumar, B. Sathis Kumar, S. Sountharajan, N. Yuvaraj, Manas Kumar Mishra and Jafar A. Alzubi, “Analysis of False Data Detection Rate in Generative Adversarial Networks Using Recurrent Neural Network”, Generative Adversarial Networks for Image-to-Image Translation, Elseiver. (Accepted) November 2020.

**Subjects Handled :**

* Database Management Systems
* Free open source Software
* Cloud Computing
* Big Data Analytics
* Programming Languages - C,C++,Java
* Open Stack Deployment
* Data mining and Data warehousing
* Computer Networks
* Machine Learning
* Data Structures and Algorithms
* Artificial Intelligence

# Areas of Exposure

Operating Systems : Windows 10 /Linux (Ubuntu Dsitributions)

Languages : C, C++, Java, Python

Web Technologies : HTML, XML, JSP, Google App Scripting

Bigdata Technologies : Hadoop Technologies

AI & ML Domain : Artificial Intelligence , Mahine Learning

**Workshops/Seminar Organized:**

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| --- | --- | --- | --- | --- |
| **S.No** | **Type of programme organized (Workshop/ FDP/ Seminar )** | **Title of the programme** | **Duration** | **Date** |
| 1 | MHRD–ISTE Funded Workshop | Introduction to Design of Algorithms | 5 | 24th - 30th May 2015 |
| 2 | Workshop | Data Warehousing With Informatica ETL Tool | 2 | 19th-20th September 2015 |
| 3 | Workshop | OpenStack Deployment | 2 | 9th- 10th October 2015 |
| 4 | Two Week FDP on  Data Science and Bigdata Analytics | Data Science and Bigdata Analytics | 14 | Nov 6-19 , 2017 |
| 5 | Two day ICMR Sponsored workshop on “Cybersecurity and Medical devices for Healthcare” | Cybersecurity and Medical devices for Healthcar | 2 | Dec 22-23rd , 2017 |
| 6 | Five days National level training program. | Cyber Security: Malware Threats & Ethical Hacking” [CSMTEH] | 5 | Sep 12-16th,  2018 |
| 7 | IIT Bombay | FDP101.X Foundation Program on ICT Tools | 3 Weeks | Aug-Nov 2018 |
| 8 | IIT Bombay | FDP 201.X - Pedagogy for Online and Blended Teaching-Learning Process | 4 Weeks | Aug - Nov 2018 |
| 9 | Three Day National Workshop on Artificial Intelligence Using Python | Artificial Intelligence Using Python | 3 | September 20-22 , 2019 |

**National Conference and International Conference/ Paper Presented**

|  |  |  |  |
| --- | --- | --- | --- |
| **S.no** | **Topic** | **Institution** | **Year** |
| 1 | Distributed Data mining in Medical Big Data, National Conferences on Bio-informatics in Health Care using Big Data (NCBHB’17) | Vivekanandha College of Engineering for Women,Tiruchengode. | 9th August 2017 |
| 2 | An Investigation on Alzheimer‟s Disease and the various techniques used in its Diagnosis,International Conference on Frontiers of Computational Intelligence – ICFCI‟16. | K.S.Rangasamy College of Technology, Triuchengode. | 5th March 2016. |
| 3 | Implementing Frequent Pattern Mining Algorithm in Hadoop Platform for Many-Task Computing Environment | Velalar College of Engineeringand Technology, Erode. | 2015-2016 |
| 4 | Fifth International Conference on Advanced Computing “Distributed FP-ARMH Algorithm in Hadoop Map reduce Framework” | Madras Institute of Technology, Chennai. | 2013-20147 |
| 5 | International Conference on Green Computing, Communication and Conservation of Energy “ A Novel Algorithm for Distributed Data Mining in HDFS” | RMD Engineering College, Chennai. | 2013-2014 |
| 6 | An Efficient Approach To Mine High Utility Itemsets | Info Institute of Engineering, Coimbatore | 2012-2013 |
| 7 | Enhanced Fast Utility Mining | K.S.R.College of Technology,  Thiruchengode. | 2011-2012 |
| 8 | Resource Allocation for Infrastructure as a service in Cloud Computing” | JKKN College of Engineering, Sathyamangalam. | 2012-2013 |
| 9 | Policy Based Resource Allocation for Infrastructure as a service in Cloud Computing | K.S.R.College of Technology,  Thiruchengode. | 2012-2013 |
| 10 | Optimizing Rekeying Cost for Contributory Group Key Management | Government College of Technology, Coimbatore. | 2009-2010 |
| 11 | Utility Based Mining Techniques | Velalar College of Engineering and Technology, Erode | 2009-2010 |

**Guest Lectures Delivered**

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| --- | --- | --- | --- |
| **S.No** | **Topic(s)** | **Institution** | **Date(s)** |
| 1 | Pre-face Cloud Computing  Cloud Virtualization  Hadoop Installation  Google App Engine | Nandha Engineering College, Perundurai.  Erode. | 16.08.2013 |
| 2 | Cloud Computing and Software as a Service | KSR College of Engineering, Thiruchengode,Erode. | 29.05.2013 |
| 3 | Enterprise Application Integration : Case Study : Web Services and Enterprise Application Integration | CSI Chapter – Coimbatore. | 06.07.2013 |
| 4 | Google App Scripting – Developing UI in App Script | Bannari Amman Institute of Technology, Sathyamangalam. | 01.02.14  &  26.02.14 |
| 5 | Hadoop –Installation and Configuration –Single and Multi node Creation | Bannari Amman Institute of Technology,  Sathyamangalam. | 01-03-2014 |
| 6 | Recent Trends in Cloud Computing | Sona College of Technology, Salem. | 28.04.2014 |
| 7 | Cloud Computing | The Institution of Engineers, India. | 11.08.2014 |
| 8 | Open Nebula Installation | KSR College of Engineering, Thiruchengode,Erode. | 08.12.2015 |
| 9 | Cloud Computing | Mother Teresa Women's University,Kodikanal University. | 09.08.2015 |
| 10 | Hadoop and Cloud Computing | Vivekandha Engineering College for Woman,Tiruchengode. | 22.02.2016 |
| 11 | Essentional of Learning Trusty Skills in vision IT | Dhanalakshmi Srinivasan Engineering College, Trichy. | 05.04,2016 |
| 12 | Bigdata Analytics | Hindusthan College of Technology, Coimbatore. | 23.05.16 & 24.05.16 |
| 13 | Hadoop and Open Nebula Technology | M P Nachimuthu M Jaganathan Engineering College, Erode. | 09.09.16 |
| 14 | Cloud Computing - An Pratical Approach | Sri Guru Engineering College, Coimbatore. | 06,01,2017 |
| 15 | C ++ - Object Oriented Programming | Excel Enginering College, Erode. | 28.05.17 |
| 16 | Cloud Computing | Excel Enginering College, Erode. | 06.07.17 |
| 17 | Research Methodology | Mother Teresa Women's University,Kodikanal University. | 30.10.17 |
| 18 | Hadoop - Installation Single / Multinide | Bannari Amman Institute of Technology, Sathyamangalam | 06.09.17 |
| 19 | Data Science and Big Data Analytics | AICTE Sponsored Workshop @  Bannari Amman Institute of Technology, Sathyamangalam | 08.11.17 |
| 20 | Industrial IoT and Cloud Computing | Vivekandha Engineering College for Woman, Tiruchengode. | 08.04.2018 |
| 21 | Art of Tinkering and use of Life Skills to serve the needs of the society | Kenyandra Vidyala Hi Sec School, Diburgarh, Assam | 31.10.2018 |
| 22 | Machine Learning in Hadoop - AICTE FDP - MARGADARSI SCHEMES | Bannari Amman Institute of Technology, Sathyamangalam | 05.01.2019 |

**Involved in Application Development in-house Projects/Certification/ Lab :**

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| --- | --- | --- | --- |
| **S.No** | **Title of the Application / Technology** | **Uses of the Application** | **Team Size** |
| 1 | Seminar Hall Booking Application /  Google app Script / Google Calendar  Link : https://sites.google.com/a/bitsathy.ac.in/bsh | This Application designed for booking/Cancel the seminar Halls and Guest House in our College.  Designed Completely in Google Cloud Platform and Cloud SQL | 2 |
| 2 | Bit Forum – This Department Website running on Cloud Platform (VM).  Etablished Cloud Computing Lab through AICTE-MODROBS with Open Stack Framework | Students are using the forum to communicate and develop their Technical Knowledge.  Placement / Aptitude test also conducted | 3 |
| 3 | Cloud Computing Laboratory - In Charge | Students can simulate the Open stack Technology and VM based Deployments. | - |
| 4 | Internet of Things Laboratory established with C-DAC , November 2016 | Develop a IoT based Applications / Projects | - |
| 5 | Established Center for Excellence on Data Science and Big Data Analytics  DELL EMC Corporation | Co-ordinator and Trainer  (100 Students Trained) | - |
| 6 | Certification on Information Stroage management, EMC Corporation | EMC ISM Associate | - |
| 7 | Certification on Cloud Infrastrure and Services, EMC Corporation | EMC Cloud Associate | - |
| 8 | Certification on Data Science Bigdata Analytics - DELL EMC Corporation | DELL EMC, Data Science Associate | - |
| 9 | Associate Analytics | NASSCOM Certification | - |

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| **y Other relevant information (if any)** |
| **JOURNAL EDITORIAL BOARD / REVIEWER:**  Reviewer Board Member of International Journal of Environment and Sustainable  Development (IJESD) Reviewer Board Member of International Journal of Medical Engineering and Informatics(IJMEI)Reviewer Board Member of International Journal of Web Engineering(JWE)Reviewer Board Member of IETE Journal of Research Reviewer Board Member of Journal of Computational and Theoretical Nanoscience  Reviewer Board Member of International Journal of Web-Based Learning and Teaching Technologies (IJWLTT)  International Journal of Wireless Networks |
| **Highlights of major contributions in past 3 years (within 300 words)** |
| 1. Organized 15 workshops and 1 value added courses to the students. 2. Divisional Chair for Artificial Intelligence and Machine Learning from 2018-2020. 3. Time Table Coordinator of SCSE @ VIT, Bhopal. 4. Acted as Academic Staff College (ASC) Coordinator at Vellore Institute of Technology, Bhopal, Sathy. |

**CONTACT INFORMATION**

Dr S.Sountharrajan,

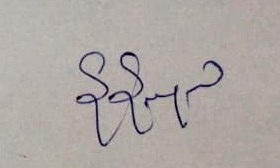
Senior Assistant Professor,

School of Computing Science and Engineering,

VIT Bhopal University, Bhopal

Madhya Pradesh.

I hereby declare all the above details are true and correct to the best of my knowledge.



Place:Bhopal (S.SOUNTHARRAJAN)