

Academic Research(20)

Ph.D Awarded Faculty Members

S.No	Name of the Faculty	Academic Year
01	Dr.K.Manikanda Kumaran	2020-21
02	Dr. S. Manikandan	2020-21

Ph.D Pursuing Faculty Members

Sl. No	Name
1	Mrs. K. Nagalakshmi
2	Mr. V.M. Suresh
3	Mrs. R.G. Gokila
4	Mr. R. Anand Babu
5	Mrs. R. Lavanya
6	Mr. K. Raju

Book Chapter

S.No	Chapter Title	Chapter Name	Authors Name	ISBN No	Online Link
1	Enterprise Java Beans (EJB) Running Procedure	International Society for Green, Sustainable Engineering and Management, National Board of Quality Promotion, QCI, Govt of India	S.Manikandan	978-81-930406-6-9	Hard Copy
2	APPLICATIONS OF IT AND ITeS IN TODAY'S WORLD	Technical Pages, IEI - TLC - NEWS, In-House News Letter of Institution of Engineers (India), Tiruchirappalli Local Centre,	S.Manikandan	2018/01-02	https://drive.google.com/file/d/1k_xWIHx-bdRJi6KydHjSUrUml9WIBILS/view
3	Deep Learning in Artificial Intelligence	IEEE India Council	S.Manikandan M.Chinnadurai	Vol.13, No.2, July'2018	https://site.ieee.org/indiacouncil/newsletter/
4	Review of Momo attack in WhatsApp	IEEE India Council	S.Manikandan	Vol.13, No.3,	https://site.ieee.org/indiacouncil/newsletter/

				September'2018	
5	Driving Artificial Intelligence into IT and ITES	The Institution of Engineers (IEI) Annual Technical Volume of Computer Engineering Division Board	S.Manikandan M.Chinnadurai	978-81-938404-4-3, Vol.2, 2018	https://drive.google.com/file/d/14y412BjVthMDY319TjFHgsVZQxiy/view
6	Artificial Intelligence in Education Using Gaming and Automatization with Courses and Outcomes Mapping	Empowering Artificial intelligence Through Machine Learning Apple Academic Press, CRC Taylor and Francis Book	S.Manikandan M.Chinnadurai	9781771889308	https://www.appleacademicpress.com/empowering-artificial-intelligence-through-machine-learning-9781771889308?fbclid=IwAR2rKEx2_p0cUqdVkjKjEE2cgnSt1KSFCCZ4XdoLbBJGaNX2srKTPg

Journal Details

SCI:

S.No	Paper Title	Journal Name	Authors Name	Volume Number, Issue No and Page No	Online Link
1	Evaluation of Students' Performance in Educational Sciences and Prediction of Future Development using TensorFlow	International Journal of Engineering Education	S.Manikandan M.Chinnadurai	Vol. 36, No. 6, pp. 1–8, 2020, 0949-149X/91, TEMPUS Publications	https://www.ijee.org/
2	Cloud-based robotic system for crowd control in smart cities using hybrid intelligent generic algorithm	Journal of Ambient Intelligence and Humanized Computing, Springer	K. Manikanda Kumaran & M. Chinnadurai	https://doi.org/10.1007/s12652-020-01758-w	https://link.springer.com/article/10.1007/s12652-020-01758-w
3	A Competent Ad-hoc Sensor Routing Protocol for Energy Efficiency in Mobile Wireless Sensor Networks	<i>Wireless Personal Communications</i> , Springer	K. Manikanda Kumaran & M. Chinnadurai	https://doi.org/10.1007/s11277-020-07741-0	https://link.springer.com/article/10.1007/s11277-020-07741-0
4	Effective Energy Adaptive and Consumption in Wireless Sensor Network Using Distributed Source Coding and Sampling Techniques	<i>Wireless Personal Communications</i> , Springer	Manikandan, S, Chinnadurai, M,	https://doi.org/10.1007/s11277-021-08081-3	https://doi.org/10.1007/s11277-021-08081-3
5	<u>An Identity-Based Secure and Optimal Authentication Scheme for the Cloud Computing Environment</u>	Computers, Materials & Continua	K. Raju, M. Chinnadurai	<i>Vol.69, No.1, 2021, pp.1057-1072,</i>	doi:10.32604/cm.2021.016068

6	An IoT based Green Home Architecture for Green Score Calculation towards Smart Sustainable Cities	KSII Transactions on Internet and Information Systems	K. Manikanda Kumaran, . Chinnadurai, S. Manikandan, S. Palani Murugan, E. Elakiya	VOL. 15, NO. 7, Jul. 2021	https://doi.org/10.3837/tiis.2021.07.00
7	Tour Planning Design for Mobile Robots Using Pruned Adaptive Resonance Theory Networks	Computers, Materials & Continua	Palani Murugan, Chinnadurai, M., Manikandan, S.	70(1), 181–194, doi:10.32604/cmc.2022.016152	doi:10.32604/cmc.2022.016152
8	User Interaction Behavior Analysis for Insider Attack Detecting with Deep Belief Neural Network in Cloud Computing	Computer Systems Science and Engineering	A.S.Anakath R.Kannadasan	Accepted DOI:10.32604/csse.2021.019940 2021	---
9	Computationally efficient and secure anonymous authentication scheme for cloud users	Personal and Ubiquitous Computing	A.S.Anakath S.Rajakumar	https://doi.org/10.1007/s00779-021-01566-9 2021	https://doi.org/10.1007/s00779-021-01566-9
10	A novel RSA algorithm for secured key transmission in a centralized cloud environment	International journal of Communication System	S. Ambika, S.Rajakumar A.S.Anakath	Vol 33, PP 1-9, 2020.	https://onlinelibrary.wiley.com/doi/abs/10.1002/dac.280
11	Virtualized Load Balancer for Hybrid Cloud Using Genetic Algorithm	<i>Intelligent Automation & Soft Computing</i>	Manikandan, S, Chinnadurai, M,	32(3), 1459–1466	doi:10.32604/iasc.2022.022527
12	Intrusion Detection System for Energy Efficient Cluster Based Vehicular Adhoc Networks	<i>Intelligent Automation & Soft Computing</i>	R.Lavanya Kannan.S	32(1), 323-337	DOI:10.32604/iasc.2022.021467

Scopus:

S.No	Paper Title	Journal Name	Authors Name	Volume Number, Issue No and Page No	Online Link
1	Intelligent and Deep Learning Collaborative method for E-Learning Educational Platform using TensorFlow	Turkish Journal of Computer and Mathematics Education	Manikandan S	Vol.12 No.10 (2021), E-ISSN: 1309-4653, 2669-2676	https://turcomat.org/index.php/turcomat/article/view/4881/4104
2	Computation of Automatic Logistic Handling Using Artificial Intelligence in Data Mart Applications	Annals of the Romanian Society for Cell Biology	Manikandan S	25(6), 9422–9426, E-ISSN: 1583-6258	https://www.annalsofrscb.ro/index.php/annals/article/view/7233

3	Prediction of Human Motion Detection in Video Surveillance Environment Using Tensor Flow	International Journal of Advanced Science and Technology	Manikandan S, Chinnadurai M, Thiruvenkatasuresh M.P, Sivakumar M	Vol. 29 No. 05 (2020)	http://sersc.org/journals/index.php/T/article/view/11386
4	Real Time Traffic Flow Prediction and Intelligent Traffic Control from Remote Location for Large-Scale Heterogeneous Networking using TensorFlow	International Journal of Future Generation Communication and Networking	S.Manikandan, M.Chinnadurai, D.Maria Manuel Vianny and D.Sivabalaselvamani	ISSN: 2233-7857, Vol.13, No.1, (2020), pp.1006-1012	http://sersc.org/journals/index.php/CN/article/view/7557/4410
5	Dynamic Cued Click Point Algorithm to Provide Cryptographic Password Authentication	International Journal of Pure and Applied Mathematics	P. Ashok,R.R. Prianka, R. Lavanya, R.G. Gokila	Volume 117 No. 21 2017, 961-965	https://acadpubl.eu/jsi/2017-117-22/articles/21/85.pdf
6	A Comparison survey paper on Block chain technology, Bit coin and Ethereum	International Journal of Psychosocial Rehabilitation	Ashok. P, Lavanya. R, Vidhya V, Karthick. K, Mohammed Sanjarkhan	Volume 24, Issue 6, page no 6448-6452,2020	https://www.psychosocial.com/art/R260649/18414/
7	Evolution of Nature-inspired Intelligent Robots – A Review	International Journal of Computer Science and Information Security (IJCSIS)	V. Sathiya, Dr. M. Chinnadurai R. Anand Babu, K. Nagalakshmi	Vol. 15, No. 10, October 2017 pp. 257-263	https://sites.google.com/site/ijcsis/15-no-10-oct-2017
8	Criticality-aware partitioned task scheduling with limited migratory on multicore platforms	Journal of Industrial Pollution Control	Nagalakshmi, K Gomathi, N	33(2)(2017) pp 1745-1753	https://www.icontrolpollution.com/-reviewed/criticalityaware-partitioned-task-scheduling-with-limitedmigratory-on-multicore-platforms-86777.html
9	Criticality-cognizant Clustering-based Task Scheduling on Multicore Processors in the Avionics Domain	International Journal of Computational Intelligence Systems	Nagalakshmi, K. Gomathi, N	Volume 11, Issue 1, 2018, Pages 219 - 237	https://doi.org/10.2991/ijcis.11.1.1
10	Recognition of Font and Tamil Letter in Images using Deep Learning	Applied Computer Science	Manikandan SRIDHARAN, Delphin Carolina RANI ARULANANDAM, Rajeswari K CHINNASAMY, Suma THIMMANNA, Sivabalaselvamani DHANDAPANI	vol. 17, no. 2, pp. 90–99, 2021,	doi: 10.23743/acs-2021-15

11	Creating a Novel Consensus Algorithm for Distributed Computing use Cases	International Journal of Innovative Technology and Exploring Engineering	R.Kannadasan, A.S.Anakath	Volume-9 Issue-1S, November 2019.	https://www.ijitee.org/wp-content/uploads/papers/v9i1S/A1091S19.pdf
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Patent:

1. End to End Food Safety and Quality Control System - Application Number- 202041036571, Journal Number- 37/2020, Journal Date- 11/09/2020 - Published - [Link](#)
2. A novel Multiple-Access Edge Computing technique for ultra-reliable low-latency communication (URLLC), and massive Internet of Things (IoT) in 5G networks - 202041014796 - Published - [Link](#)
3. Automated vegetation mapping approach of crops through satellite image fusion and convolution neural networks-based classification - 202041014696 - Published - [Link](#)
4. Solar Lantern Powered Solar Chulla - Docket No: CBR No-38473, 201741044998, 14-12-2017 ([Link](#)) ([Details](#))
5. PORTABLE EGG QUALITY ASSESSMENT AND MONITORING SYSTEM USING IOT - Application Number: 202041047668, 13/11/2020 ([Details](#))
6. IOT Based Real Physico-Chemical Parameters Monitoring System in Mangrove Zone, Application No. 202141031081 A, The Patent Office Journal No. 29/2021 Dated 16/07/2021
7. AGRY-DRONE: A DYNAMIC WEB BASED DRONE DRIVEN CROP YIELD ESTIMATION MODEL FOR AGRICULTURE FARMS - Application Number - 202241001415, 11/01/2022
8. GREEN SCORE CALCULATION APPARATUS AND METHODS TOWARDS SMART SUSTAINABLE CITIES - Application Number: 202141032008, 30/07/2021

International Participation:

1. **S.Manikandan**, Presented paper on "Intelligent Genetic Algorithm Usage and Implementation", International Seminar on Innovations in Engineering and Sciences at Multimedia University, Melaka Campus, Malaysia, 22/06/2018
2. **S.Manikandan**, Presented paper on "Measuring Life Time of Electro Magnetic Computation in Wireless Sensor Network using NP-Complete Optimization" at International Congress on Super Computing 2018 (ICSC 2018) in Association of Scientists Developers and Faculties (ASDF) held at Holiday Inn Bangkok, Silom, Kindom of Thailand dated from 18-October-2018 to 20-October-2018
3. **S.Manikandan**, Invited Talk, 8th International Symposium on Innovative Multidisciplinary Research in Green Development at South Eastern University of Sri Lanka on 17th& 18th December'2018 on the topic of "Intelligent Genetic Algorithm Usage and Implementation in Library Dataset using Amazon Red Shift"
4. **K. Raju**, Invited Talk, 8th International Symposium on Innovative Multidisciplinary Research in Green Development at South Eastern University of Sri Lanka on 17th& 18th December'2018 on the topic of "Secure Deduplication with Identity based broadcast Encryption technique "
5. **S.Manikandan** and Dr.M.Chinnadurai, "A SURVEY ON INTELLIGENT SYSTEM IN IT AND ITES", International Conference on Emerging Trends in Engineering , Science and Technology, Bangkok, Thailand at the conference on 20th Jan - 21st Jan'2020, International Institute of Education, Research and Development, pp.51-53 (proceedings)
6. **K.Manikanda Kumaran** and Dr.M.Chinnadurai, "Improved Consistency and Efficiency in WSN", International Conference on Emerging Trends in Engineering , Science and Technology, Bangkok, Thailand at the conference on 20th Jan - 21st Jan'2020, International Institute of Education, Research and Development, pp.47-50 (proceedings)
7. **S.Manikandan**, "Block Chain Technology: Myths, Ethics and Current Trends in IT and ITES", 9th Annual Research Session - 2020 on 25/11/2020, Integrated Applied Sciences and Smart Technologies for Sustainable Development at South Eastern University of Sri Lanka ([Link](#))

8. R. Kannadasan, R. S. Kumar, K. S. Devineni, N. Prabakaran, **A. S. Anakath** and A. Jayanthiladevi, "Vehicle Navigation Protocol in Real-Time Fleet Management," 2020 International Conference on Emerging Smart Computing and Informatics (ESCI), 2020, pp. 248-251, doi:10.1109/ESCI48226.2020.9167608.

9. **A.S.Anakath**, R. Kannadasan, S.Rajakumar and S.Ambika, "Trust Information Management System for Cloud Service Providers", Proceedings - 9th South Eastern University International Arts Research Symposium – 2020, Faculty of Arts and Culture, South Eastern University of Sri Lanka, 19th January 2021, ISBN: 978-955-627-253-6.

Citations Details

Sl. No	Name	Citations	h-Index	i10-Index
1	Dr. P. Vijayalakshmi	4	1	-
2	Dr. A.S. Anankath	5	1	-
3	Dr. S. Manikandan	98	7	5
4	Dr. K. Manikanda Kumaran	21	3	1
5	Mrs. K. Nagalakshmi	5	2	-
6	Mr. V.M. Suresh	45	2	2
7	Mrs. R.G. Gokila	6	1	-
8	Mr. R. Anand Babu	2	1	-
9	Mrs. R. Lavanya	9	2	-
10	Mr. K. Raju	6	1	1

<http://egspec.org/itvac.php>

Change to Industry Initiatives

Initiatives, Implementation and Impact Analysis related to Industry Interaction

S.No	Initiatives	Implementation	Impact Analysis
1	Industry Supported Laboratories / Memorandum of Understanding (MoU)	MoU is signed between the industries with mutual benefits by sharing knowledge, consultancy, students internship, in- plant training, teaching collaboration, Research and Development, publications.	<ul style="list-style-type: none"> ✓ Support in designing the curriculum and syllabus ✓ Supporting in setting of new laboratories ✓ Training for students and faculty ✓ Internship for students ✓ Support in research projects ✓ Consultancy work ✓ Placements ✓ Guest lectures ✓ Industrial Visits

2	Design of Curriculum and Syllabi	Industry Experts Invited for BoS Meeting to involve in the process of design of curriculum and syllabi	Suggestions given by the industry experts are incorporated while finalizing the curriculum and syllabi of B.Tech IT Programme
3	One Credit Course / Value Added Courses	Courses related to the recent trends are identified and offered to the students by the experts from Industry.	Students developed their skills and knowledge in recent trends and practices in industry. Students' gain knowledge on the subject and confidence to face the core placements.
4	Industrial Visits	Faculty and Students visit the industries as a part of teaching and learning process.	Industry visits help the students to relate their knowledge gained in classroom and laboratory.
5	Internships	Students are encouraged to do an internship in industries during vacation period and virtual internship also supported	Students able to learn industrial practices and to enhance the employability.
6	Consultancy	Faculty approaches the industry to collect industry related problems Industry problems are solved collaboratively with the students and staff	<ul style="list-style-type: none"> ✓ Student's will gain experience in solving industry problems. ✓ Interacting with industry officials improves student interpersonal skills

MoU with industries

S.No	Name of the Industry / Organization Signed MOU	Year	Purpose
1.	Infosys, Bangalore	2021	Training & Placement, Guest Lectures
2.	Garuda Aerospace Private Limited	2021	Training & Placement, Guest Lectures
3.	Touchmark Descience Pvt Ltd	2021	Training & Placement, Guest Lectures, Industrial Visits & Internship
4.	Wahmi Software and Solutions Private Limited	2021	Training & Placement, Guest Lectures, Industrial Visits & Internship
5.	Coding Ninjas	2021	Learning Platform & Training Program, Certification Courses
6.	Larsen & Toubro Limited	2021	Learning Platform, Training & Placement and Internships
7.	UiPath Academic Alliance	2020	L:earning Platform

8.	SOLVERMINDS Solutions & Technologies Private Limited	2020	Training & Placement and Internships
9.	Amazon Web Services	2018	Learning Platform
10.	Redhat Academy, Chennai	2018	Learning Platform
11.	Palo Alto Networks	2018	Training & Placement
12.	College of Fisheries Engineering College, Nagapattinam	2017	Industrial Visits
13.	South Eastern University of Srilanka	2017	Research and Development Project, Conference And Workshops, Exchange Of Invitation Of Professors, Researchers, Students For Conferences, Seminars, Workshops, Lab Visits And Short Term Projects, Exchange Of Teaching Material And Scientific Publications
14.	Sales Force, Bangalore	2017	Training & Placement
15.	UTL Technologies Limited, Bangalore	2016	Training & Placement
16.	University Telecom SDN.BHD, Multimedia University, Malaysia	2016	Research and Development Project, Conference And Workshops, Exchange Of Invitation Of Professors, Researchers, Students For Conferences, Seminars, Workshops, Lab Visits And Short Term Projects, Exchange Of Teaching Material And Scientific Publications
17.	VMware IT Academy, Bangalore	2015	Learning Platform
18.	Oracle Academy	2014	Learning Platform
19.	ICTACT, Chennai	2013	Learning Platform
20.	CISCO Academy, Chennai	2013	Learning Platform

Industry Initiatives, Support and Contributions

S.No	Name of the Lab/Activity	Industry Name	Contribution	Courses Name
1	Open Source Lab	Linuxpert Systems	Open Source Platform	Operating Systems, Computer Networks, Grid and Cloud Computing
2	Date Centre Lab	VMWare IT Academy	VMware	Data Centre and Virtualization, Information
3	Cloud Computing Lab	EMC Corporation	Training Programme	Cloud Infrastructure and Services, Knowledge Management
4	Java Programming Lab	Oracle Academy	Programming	Java Programming, Object Oriented Programming,
5	Data Science and Big Data Analytics	Dell EMC	Data Centre – Data	Data Analytics, Big Data, SMAC
6	CISCO Network Academy	CISCO Academy	CCNA Courses	Networking, Distributed Systems, Data

7	PL/SQL	Oracle Academy	PL/SQL	Database Management Systems
8	Cyber Security	Palo Alto	Cyber Security	Cryptography, Network Security, Cyber Forensics
9	Problem Solving and Programming	Skill Rack	Programming	Problem Solving using C, C++, Java, Python
10	Programming	E-Box	Programming	Problem Solving using C, C++, Java, Python
11	Internship and Placement	Solver minds	Internship	Internship and Placement
12	Internship and Placement	Wahmi	Internship	Internship and Placement
13	Coding and Placement	Code Ninja TCS	Internship	Internship and Placement

List of One Credit Courses

S.No	Academic Year	Course Name	Industry	Number of Students	Impact
1	2019-2020	Procedural Language / Structured Query Language	Oracle Academy	60	POs: PO1 to PO5 PSOs: PSO1 to PSO3 Students worked in Oracle iLearning Platform and Earned batches and certificate
2		Java Fundamentals and Java Programming	Oracle Academy	60	POs: PO1 to PO5 PSOs: PSO1 to PSO3 Students worked in Oracle iLearning Platform and Earned batches and certificate

3	2020-2021	Procedural Language / Structured Query Language	Oracle Academy	62	POs: PO1 to PO5 PSOs: PSO1 to PSO3 Students worked in Oracle iLearning Platform and Earned batches and certificate
4		Java Fundamentals and Java Programming	Oracle Academy	62	POs: PO1 to PO5 PSOs: PSO1 to PSO3 Students worked in Oracle iLearning Platform and Earned batches and certificate
5	2021-2022	Procedural Language / Structured Query Language	Oracle Academy	63	POs: PO1 to PO5 PSOs: PSO1 to PSO3 Students worked in Oracle iLearning Platform and Earned batches and certificate