


Name of the Faculty	Dr. G. Arun Sampaul Thomas		
Designation	Associate Professor & HOD		
Date of Joining	03-04-2018		
E - Mail	Arunthomas.ai_ml@jbiet.edu.in		
Educational Qualifications	Name of the Degree	Institute	Class
Ph. D	Doctor of Philosophy (Computer Science and Engineering)	Anna University Chennai	Awarded
PG	M. E. (Computer Science and Engineering)	SCAD College of Engineering & Technology, Tirunelveli, Tamilnadu	First class with Distinction
UG	B.E. (Information Technology)	Karunya Institute of Engineering and Technology, Coimbatore, Tamilnadu	First
Work Experience			
Teaching	16 Years		
Research	7 Years		
Industry	-		
Responsibilities held at the central level in college	<ul style="list-style-type: none"> • NAAC Criteria 2 Central Coordinator. • Member, Academic Council, from 01-08-2022 to till date. 		
Responsibilities held at the departmental level in college	<ul style="list-style-type: none"> • Head of the Department from 01-08-2022 to till date. • Chairman, Board of Studies from 01-08-2022 till date. • Member Board of Studies, from 03-04-2018 to till date. • UG Students Mentor & Project Incharge from 2018 to till Date. 		
Courses Handled at UG Level	<ul style="list-style-type: none"> • Big Data Analytics, Cloud Computing courses for Third year B.Tech – CSE students. • Data Science, Information Retrieval Systems courses for Third year B. Tech – AI&ML Students. 		
Courses Handled at PG Level	<ul style="list-style-type: none"> • Research Methodology & IPR, Distributed Systems, Data Analytics Courses for M. Tech CSE Students. 		
Area of Research	<ul style="list-style-type: none"> • Data Science, Big Data Analytics. 		

Research Guidance for M. Tech/ Ph. D Students	<ul style="list-style-type: none"> • Guided Five M. Tech Dissertations.
Books/ Book Chapters Published	<ul style="list-style-type: none"> • Arun Sampaul Thomas, et al. (2024). “A Review of Green IT, Computing-Enabled, Sustainability-Based Cities: Nurturing Living Standards” Green Computing for Sustainable Smart Cities: A Data Analytics Applications Perspective (1st ed.). CRC Press.. https://doi.org/10.1201/9781003388814. • Arun Sampaul Thomas, et al. (2024). “Unleashing the power of XAI empowering decision-making and overcoming challenges in smart healthcare automation” Explainable AI (XAI) for Sustainable Development: Trends and Applications (1st ed.). CRC Press, 2024, ISBN: 1040038832, 9781040038833, 334 pages, DOI: https://doi.org/10.1201/9781003457176. • Arun Sampaul Thomas, et al. (2024). “Artificial Intelligence governance and comprehensibility. In Renewable energy systems” Explainable AI (XAI) for Sustainable Development: Trends and Applications (1st ed.). CRC Press, 2024, ISBN: 1040038832, 9781040038833, 334 pages, DOI: https://doi.org/10.1201/9781003457176. • Arun Sampaul Thomas, et al. (2023). “Future of Medical Research with a Data-driven Federated Learning Approach” Handbook on Federated Learning: Advances, Applications and Opportunities (1st ed.). CRC Press. https://doi.org/10.1201/9781003384854. • Arun Sampaul Thomas, et al. (2023). “Predictive Analytics of Climate Change The Future of Global Warming Lies in Data Analytics” (2023). Predictive Analytics in Smart Agriculture (1st ed.). CRC Press. https://doi.org/10.1201/9781003391302. • Arun Sampaul Thomas, et al. (2023). “Broad Framework of Digital Twins in Agricultural Domain” (2023). Predictive Analytics in Smart Agriculture (1st ed.). CRC Press. https://doi.org/10.1201/9781003391302. • Arun Sampaul Thomas, “Green IoT use case approaches for blockchain technology taking industry 5.0 to the next level,” Elsevier Book Chapter- <i>Green Blockchain Technology for Sustainable Smart Cities, 2023</i>, PP 119-141, ISSN: 978-0-323-95407-5. • Arun Sampaul Thomas, (2023). ‘Revolutionizing Smart Grids with Big Data Analytics: A Case Study on Integrating Renewable Energy and Predicting Faults’ in <i>Data Analytics for Smart Grids Applications – A Key to Smart City Development. Intelligent Systems Reference Library, vol 247. Springer, Cham.</i> https://doi.org/10.1007/978-3-031-46092-0_11 • Arun Sampaul Thomas, G, “IoT, Big Data, Blockchain and

	<p>Machine Learning Besides Its Transmutation with Modern Technological Applications," Springer Book Chapter-Internet of Things and Big Data Applications-Part of the Intelligent Systems Reference Library book series (ISRL, volume 180), 25 February 2020, PP 47-63 , ISSN: 978-3-030-39118-8.</p>
<p>Prominent Research Publications in Conferences</p>	<ul style="list-style-type: none"> • "A novel feature selection method using WOA and MI technique for intrusion detection system in smart meter communication", at the International Conference on Devices, Intelligent Systems & Communications (DISC 2020) held at J.B. Institute of Engineering & Technology, Hyderabad on January 2020. • "Trust Threshold based neighborhood Trustworthy with Node certified Public key Management Scheme in MANET", at the International Conference on Recent advances in Engineering & Technology held at Arunachala College of Engineering for Women, Kanyakumari on March '18. • "Forecasting of Medicinal Leaf and its Exploitations using Chamfer image processing scheme", at the International Conference on Recent advances in Engineering & Technology held at Arunachala College of Engineering for Women, Kanyakumari on March '18. • "SPF-ECP: Self-structured Predictive cum Fast-adaptive Enhanced Clustering protocol for DTMN Routing", at the International Conference on Electrical, Electronics & Computer Engineering held at Vivekanandha College of Engineering for Women, Tiruchengode, Namakkal on March '15 • "PF-ECP: Predictive cum Fast-adaptive Enhanced Clustering protocol-based routing for DTMN", at the International Conference on Modeling, Optimization and computing held at Noorul Islam Centre for Higher education, Kumaracoil, Kanyakumari on April '14 • "Innovative Prototype Teaching Model: Enrichment Projected for Academic Classroom Teaching", at ICLDCM - 2010 held at Karunya University, Coimbatore on December '10. • "CAR: Context-Aware Adaptive Routing for Mobile Adhoc Networks Using Spray & Focus", at 2nd International Conference on Intelligent Science & Technology held at SUN Engineering College, Nagercoil on March '10.

Prominent Research Publications in Journals

- Arun Sampaul Thomas. G, et al., "Classification and Analysis of Pistachio Species Through Neural Embedding-Based Feature Extraction and Small-Scale Machine Learning Techniques," *International Journal of Image and Graphics* (Scopus , March 2023, Online ready, ISSN (print): 0219-4678 | ISSN (online): 1793-6756, <https://doi.org/10.1142/S0219467824500323>.
- Arun Sampaul Thomas. G, et al., "Fake news prediction of Text and Image with Report generation," *The International journal of analytical and experimental modal analysis*, September 2021, Volume: XIII, Issue: IX, ISSN: 0886-9367.
- Arun Sampaul Thomas. G, et al., "Fast and correspondence capable computation for scattered SVM," *The International journal of analytical and experimental modal analysis*, September 2021, Volume: XIII, Issue: IX, ISSN: 0886-9367.
- Arun Sampaul Thomas, G, "Intelligent Prediction Approach for Diabetic Retinopathy Using Deep Learning Based Convolutional Neural Networks Algorithm by Means of Retina Photographs," *Computers, Materials & Continua Journal, Tech Science Press*, 26 November 2020, Volume: 66, Issue: 02, ISSN: 1546-2218, SCI Indexwith IF 4.89, Scopus Indexed with IF 3.8.
- Arun Sampaul Thomas, G, "Discovery Of Compound Objects In Traffic Scenes Images With A CNN Centred Context Using Open CV," *ICTACT Journal On Image And Video Processing*, November 2019, Volume: 10, Issue: 02 , ISSN: 0976-9102 .
- Arun Sampaul Thomas, G, "Trust Threshold Based Neighborhood Trustworthy With Node Certified Public Key Management Scheme In MANET," *International Journal of Scientific Research & Review*, Vol. 5, Issue No 9, September 2018, ISSN: 0972-1347.
- Arun Sampaul Thomas, G, "Energy Aware Clustering Algorithm for Wireless Sensor Networks," *i-manager's Journal on Wireless Communication Networks*, Vol. 5 1 No. 4 1, January - March 2017, ISSN: 2319-4839, 2320-2351.
- Arun SamPaul Thomas, G, "SPF-ECP: Self-organized, Predictive, and Fast Adaptive - Enhanced Clustering Protocol for DTMN routing," *Wireless Personal Communications, Springer Publications*, August 2016, ISSN: 0929-6212, 1572-834X, IF - 0.7.
- Arun SamPaul Thomas, G, "MSC-ECP: Mean Shift Clustering-Enhanced Cluster-based Routing Protocol for Delay Tolerant Mobile Networks", *Institute of Integrative Omics and Applied Biotechnology*, November 2016, ISSN: 0976-3104.

Web of Science/Scopus ID/Orchid ID	https://orcid.org/0000-0002-5438-5781 https://www.scopus.com/authid/detail.uri?authorId=58755493400
Google Scholar ID	https://scholar.google.com/citations?user=UU42vyYAAAAJ&hl=en
H-Index (As per SCOPUS Database)	3
PROFESSIONAL MEMBERSHIPS	<ul style="list-style-type: none"> • Life member of ISTE (Indian Society for Technical Education) • Associate member of IET-UK (Institution of Engineering & Technology - UK)
Details of Short-Term Training Programs/Faculty Development Programs/Seminars/Workshops (Attended)	<ul style="list-style-type: none"> • Faculty Development Program on “Machine Learning with Python” organized by J.B. Institute of Engineering and Technology, Hyderabad, 05th August to 09th August 2019. • Online Course on “Unpacking the IoT” organized by Udemy certifications, 08th August 2018. • Faculty Development Program on “Data Science and Big Data Analytics” organized by ICT Academy at CMR College of Engineering and Technology, Hyderabad, 30th April to 4th May 2018. • Online IIRS outreach Program on “Hyper spectral Remote Sensing and its Application” organized by Indian Institute of Remote Sensing, Department of space, Govt. of India, 19th February 2018 to 14th March 2018. • Faculty Development Program on “Personality Development” organized by SCAD College of Engineering and Technology, Tirunelveli, 17th February 2018. • Faculty Development Program on “Artificial Intelligence” organized by Francis Xavier Engineering College - Tirunelveli, 24th November to 30th November 2017. • International Workshop on “Recent Trends in Indian Medicine - A Technological Overview” organized by Govt. Siddha Medical College at SCAD College of Engineering & Technology - Tirunelveli, 23rd & 24th September 2016. • Faculty Development Program on “Cloud Infrastructure and Services” organized by EMC² at Francis Xavier Engineering College - Tirunelveli, 30th May to 4th June. 2016.
Details of Short-Term Training Programs/Faculty Development Programs/Seminars/Workshops (Organized)	<ul style="list-style-type: none"> • Faculty Development Program on “Machine Learning with Python”, J.B. Institute of Engineering and Technology, Hyderabad, 05th August to 09th August 2019. • National Conference on Research & Applications of Information Technology '15, 19th March 2015, SCAD College of Engg. & Technology, Tirunelveli.

	<ul style="list-style-type: none"> • National Conference on Research & Applications of Information Technology '14, 19th March 2014, SCAD College of Engg. & Technology, Tirunelveli. • National Conference on Research & Applications of Information Technology '13, 13th March 2013, SCAD College of Engg. & Technology, Tirunelveli. • Workshop on "Proficient Document writing using LATEX", 11th October 2012, SCAD College of Engg. & Technology, Tirunelveli. • National Conference on Research & Applications of Information Technology '12, 2nd March 2012, SCAD College of Engg. & Technology, Tirunelveli. • Workshop on "Open-Source Linux", 24th September 2011, SCAD College of Engg. & Technology, Tirunelveli.
<p>Details of Guest Talk / Resource Person activity</p>	<ul style="list-style-type: none"> • Resource person for Seven days Faculty Development Training program sponsored by Anna University Chennai on "Operating systems" organized by CSE Department, SCAD CET, • "A Clustering Behavioral pattern for Node Prediction to improve the QOS in the DTMN", November 2016, for Engineering PG students of ECE Department at <i>Vel Tech High Tech Dr. Rangarajan Dr. Sakunthala Engineering College, Chennai.</i> • "Cluster-based routing techniques for Mobile Networks", February 2013, for Engineering PG students & Faculty members of ECE Department at <i>Sethu Institute of Technology, Kariapatti, Virudhunagar.</i> • "Advanced Wireless Communication Systems", for Engineering PG Students of ECE Department at <i>Sethu Institute of Technology, Kariapatti, Virudhunagar.</i>