

Faculty Profile

Dr. J Sebastian Terence, M.Tech., Ph.D

Assistant Professor,

Department of Computer Science and Engineering

sebastian@karunya.edu



Academic Background

Degree	University	Year
Ph.D	Vellore Institute of Technology – Vellore	2013-2021
M.Tech.	Karunya Institute of Technology and Sciences – Coimbatore	2008-2010
B.E	Maharaja Engineering College – Avinashi	2004-2008

Courses Taught

- Data Structure & Algorithms
- Object Oriented Programming
- Design and Analysis of Algorithms
- Web Technology
- Programming for Problem Solving

Research Interests

- Wireless Sensor (WSN)
- Internet of Things (IoT)
- Machine Learning

Most recent Publications

- Sebastian Terence, Geethanjali.P, “Systematic Review of Internet of Things in Smart Farming”, *Transactions on Emerging Telecommunications Technologies*, 2020. e3958. <https://doi.org/10.1002/ett.3958>.
- Sebastian Terence, Geethanjali.P, “Behavior based Routing Misbehavior Detection in Wireless Sensor Network”, *KSII Transactions on Internet and Information Systems*, Vol. 13, no.11, pp. 5354-5369, Nov, 2019.
- Sebastian Terence, Geethanjali.P, “A Novel Techchnique to Detect Malicious Packet Dropping Attacks in Wireless Sensor Network”, *Journal of Information Processing*, Vol. 15, No. 1, pp. 203-216, Feb, 2019.
- Jude Immaculate, Evanjelin. E, Sebastian Ternce, “On d-homeomorphism in intuitionistic fuzzy topological spaces”, *Journal of Physics*, 1139(1), December 2018.
- Jude Immaculate, Evanjelin. E, Sebastian Ternce, “A new similarity measure based on cotangent function for multi period medical diagnosis”, *International Journal of Mechanical Engineering and Technology*, Vol. 9, Issue 10, October 2018.
- Vasanth Williams, Sebastian Terence, Jude Immaculate, “Survey on Internet of Things based Smart Home”, in *International Conference on Intelligent Sustainable Systems*, held at SCAD Institute of Technology, Palladam, Tamil Nadu, during 21-22 February 2019.
- Kannan, Sebastian Terence, Shibin, “ Modular Logistic Function for Rijndael Encryption key Transportation” in *International Conference on Emerging Trends and Innovations in Engineering and Technological Research*, held at Toc H Institute of Technology, Ernakulam during 11th – 13th July 2018.
- Annie Mathew, Sebastian Terence, “A Survey on Various Detection Techniques of Sinkhole Attack in WSN”, in *International conference on Communication and Signal Processing*”, held at Chennai during 6th to 8th April 2017.
- Althiya Eby Irish, Sebastian Terence, Jude Immaculate, “Efficient Data Collection using Dynamic Mobile sink in Wireless Sensor Network” in *International conference on NextGen Electronic Technologies: Silicon to Software* held at VIT Chennai during 23rd – 25th March 2017.

Projects Guided

- Smart Product Suggestion using Machine Learning
- Coimbatore Smart Buy
- Smart Cradle
- Agriculture Monitoring against Plastic Mulching using Internet of Things (IoT)
- Efficient load balancing in sensor networks using wormhole tunnels and optimal number of clusters
- Dynamic sink mobility for data collection in wireless sensor network

Significant achievements:

- Sebastian Terence, “Secure Route Discovery against Wormhole Attacks in Sensor Networks using Mobile Agents”, in *Trends in Information Sciences and Computing (TISC2011)* held at Sathyabama University on 8th-9th December 2011 and won **BEST PAPER AWARD**.
- Gate Qualified in 2011.

