

BIO DATA

Name : **M.MANIMEGALAI**
Designation : Assistant Professor (Sr.Grade)
Department : Information Technology
Address for Communication : Assistant Professor/IT, National Engineering
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1. Personal Details:

Date of Birth & Age : 11-03-1990 & 31
Sex & Marital Status : Female & Married
Nationality : Indian
Qualification : M.E.

Degree	Programme and Specialization	Class /CGPA	Month & Year of Passing	Institute/University
B.E.	Computer Science and Engineering	First Class With Distinction	April 2011	Mepco Schlenk Engineering College, Sivakasi.
M.E	Computer Science and Engineering	First Class with Distinction	May 2013	Mepco Schlenk Engineering College, Sivakasi
Ph.D	Information and Communication Engineering	-	Pursuing	Anna University, Chennai

Academic Achievements:

- Secured 38th University Rank in Master Degree (Anna University)
- Disciple Star NPTEL – Jul – Dec 2021 & Jul – Dec 2024.

Professional Experience :

Designation	Institution/ Organisation	Period	Nature of Duties
Assistant Professor	National Engineering College, Kovilpati	12.03.2021 Onwards	Teaching
Assistant Professor	Francis Xavier Engineering College, Tirunelveli	4.11.2020 to 11.3.2021	Teaching
Assistant Professor	P.S.R.Rengasamy College of Engineering for Women,Sivakasi	31.6.2016 to 30.10.2020	Teaching
Assistant Professor	P.S.R.Rengasamy College of Engineering for Women, Sivakasi	3.7.2013 to 14.5.2014	Teaching

Date of joining in Present Institution : 12.03.2021

Present status : Assistant Professor

Courses taught:

Course Title	U.G. or P.G.
1.Python Programming 2.Object Oriented Programming 3.Artificial Intelligence 4. Graph Theory and Applications 5. Data Structures and Algorithms 6. Computer Graphics	U.G
1. Advanced Data Structures and Algorithms 2. Soft Computing	P.G

2. Academic Achievement

Short term Courses / Seminars / Conference/ Workshops Attended:

S.no	Title	Programme	Date	Venue
1.	Workshop on Web 2.0	Workshop	8/3/2010	MEPCO Engineering college sivakasi
2.	Workshop on Recent trends and Research issues in Semantic Based Image analysis	Workshop	10,11/10/2012	MEPCO Engineering college sivakasi
3.	Workshop on Image Processing using MATLAB	Workshop	19,20/10/2012	National Engineering college, Kovilpatti

4.	Hands on Workshop on Python Programming	Workshop	21, 22/ 08/ 2017	Anna University Regional Campus, Tirunelveli
5.	Workshop on Internet of Things Using Rasperry Pi	Workshop	6,7 / 09/ 3018	Kalasalingam Academy of Research and Education, Krishnan Koil
6.	Workshop on Integrated Smart Energy Management System for Smart meters sensors, for Business Solutions	Workshop	11/07/2019	Hindusthan institute of Technology, Coimbatore
7.	Workshop on Productive Tools for writing journals and Articles	Workshop	7,8/01/2019	AAA College of Engineering and Technology, Amathur
8.	Workshop on Latex Document Preparation Language	Workshop	24,25 / 01/ 2020	Ramco Institute of Technology, Rajapalayam
9.	FDP on Instructional Design and Delivery System	FDP	22- 26/4/2013	P.S.R Engineering college, Sivakasi

10.	FDP on Entrepreneurship Development program	FDP	4-6/10/2017	Anna University Regional Campus. Tirunelveli
11.	Introduction to Artificial Intelligence, Machine Learning, Deep Learning Applications	FDP	18-22 Dec 2021	NIT Warangal
12.	Data Driven Strategies in Smart Power System and Control	FDP	Dec 26-30, 2022	NIT, Andra Pradesh
13.	Transfer Learning: Deployable AI Applications and Techniques	FDP	Dec 11 – 15, 2023	IIT Trichy
14.	AWS Academy Cloud Foundations	Technical STTP	Dec 26-30 2023	ICT Academy
15.	Universal Human Values	FDP	Nov 10-15 2024	AICTE

3. Publications:

International Journals : 05
International Conference : 13
National Conference : 2

JOURNAL PUBLICATIONS:

S.No	Title of the Journal	Authors	Journal	Volume, Pages and Year
1.	Measuring eartbeat Rate In Facial Video By Combining Gft And Sdm Methods	G.Annapoorani, M.Manimegalai	International Journal Of Advances In Electronics And Computer Science (IJAEC)	Issue 12, Vol 3, Dec-2016, ISSN - 2393-2835
2.	Assessment of Diabetic Foot wound by using wound Boundary Determination and Analysis Algorithm	G.Annapoorani, M.Manimegalai	International Journal of Advanced Research Trends In Engineering and Technology (IJARTET)	Issue 5, Vol 4, March 2017.

3.	A Novel ANN based Harmonics Mitigation and Monitoring Approach of Shunt Active Power Filter	M.Manimegalai, Dr.K.Sebasthirani	International Journal of Innovative Technology and Exploring Engineering (IJITEE) (SCOPUS INDEXED)	Issue 5, Vol 8, March 2018
4.	Power Quality Improvement and Monitoring Integrated with Cyber Security using Smart Meter for Household Applications	M.Manimegalai, Dr.K.Sebasthirani	GEDRAG & ORGANISTIE	Issue 3, Vol 33, Sep 2020.
5.	An optimal model for power quality improvement in smart grid using gravitational search-based proportional integral controller and node microcontroller unit	M.Manimegalai, K Sebasthirani,	Electric Power and Components systems (SCI)	Vol.50, No. 16.2022

INTERNATIONAL CONFERENCE:

S.No	Title of the Paper	Authors	Name of the Conference	Venue	Date
1.	Effective Image Object Retrieval and Tag Refinement by Augmenting Unsupervised Semantic Features	M.Manimegalai, Mrs. Vanitha Sivagami	International Conference on Signal Processing, Image Processing and Pattern Recognition(ICSIPR13)	Karunya University, Coimbatore	7 th & 8 th Feb 2013
2.	Image Object Retrieval By Completing Tag	M.Manimegalai, Mrs. Vanitha Sivagami	International Conference on Recent Innovations in Engineering	Sri Subramaniya College of Engineering And Technology, Palani	13 th & 14 th March 2014
3.	Measurement of stress by calculating heartbeat rate using video magnification method	G.Annapoorani, M.Manimegalai	International conference on Industrial Electronics and computer science (ICIECS – New Delhi)	New Delhi, India	26 th march 2017
4.	Study of GFT and SDM on Heart beat rate Measurement in Facial Video	G.Annapoorani, M.Manimegalai	International Conference on Electrical, Electronics and computer science (ICEECS)	Institute of Research and Journals,Chennai.	28 th August 2017

5.	Development of Lip Reading Recognition Algorithm for Hypo pharyngeal cancer patients	M.Manimegalai	International Conference on Recent Trends in Engineering, Computers, Information Technology and Applications	P.S.N.A College of Engineering and Technology, Dinigul.	23 rd March 2018
6.	Cyber Security Issues in Smart Grid	Usha, M.Manimegalai	International Conference on Recent Trends in Engineering Education (ICRTEE 2K 18)	P.S.R Engineering College, Sivakasi	5-10-2018
7.	Recent Advances in Shunt active Power filter with Recursive least square algorithm and its applications	M.Manimegalai, Dr.K.Sebasthirani	International Conference on Electronics and Informatics(ICOEI 2018) IEEE Indexed (Pages 1288-12903)	Scad Engineering college, Tirunelveli	11,12 may 2018
8.	Effective Harmonic Elimination by Controlling Shunt Active Power Filter using RLS Algorithm	M.Manimegalai, Dr.K.Sebasthirani	International Conference on Frontiers in Engineering, Applied Sciences and Technology	NIT , Trichy	Apr 27, 28 2018

9.	A Novel ANN based Harmonics Mitigation and Monitoring Approach of Shunt Active Power Filter	M.Manimegalai, Dr.K.Sebasthirani	International Conference on Electrical, Electronics, Instrumentation and Computer Communication.	Karpagam College of Engineering, Coimbatore	Jan 24, 25 2019
10.	Securing Smart meter Data in Smart Grid Transmission using Attribute Based Encryption	M.Manimegalai, Dr.K.Sebasthirani	International Conference on Recent Trends in Computing, Communication and Networking Technologies (ICRTCCNT'19)	Kings College of Engineering, Chennai	July 13,14 2019
11.	Performance Analysis of Smart Meters for Enabling a New era for Power and Utilities with Securing Data Transmission and Distribution using End to End Encryption(E2EE) in Smart grid	M.Manimegalai, Dr.K.Sebasthirani	5 th International Conference on Intelligent Computing and Applications (ICICA -2019)	SRM Institute of Science and Technology, Delhi	December 6 th – 8 th 2019

12.	Providing Cyber Security in SCADA Network by NTRU Key Management	M.Manimegalai, Ms. Vasanthi, Ms. Nellai Meenambika, Ms. Shivani	3 rd International Conference on Innovations in Electrical Information and Communication Engineering (ICIEICE'21)	Kongu Nadu College of Engineering And Technology, Nammakal	27 th Mar 2021
13.	Securing Smart Grids: Decentralized Anomaly Detection Using Federated Learning and Recurrent Neural Networks	M Manimegalai, K Sebasthirani, P Maruthupandi, G Rajesh	International Conference on Recent Trends in Computing	SRM Institute of Science and Technology, Delhi	6 th &7 th Jun 2024

NATIONAL CONFERENCE:

S.No	Title of the Paper	Authors	Name of the Conference	Venue	Date
1.	Effective Visual Dictionary creation by sparse coding	M.Manimegalai, Mrs.Vanitha Sivagami	National Conference on Emerging trends in Computing)	Govt Engineering college, Trissur.	13-15 June 2013
2.	Design of Novel based Smart meter for control and Monitoring System of Electric Billing System using IOT	M.Manimegalai, Dr.K.Sebasthirani	National Level Power Engineering Research Summit	Sri Ramakrishna Engineering College, Coimbatore	29 th February 2020

COURSES COMPLETION

S.No	Name of the Course	Organizer	Score	Academic Year
1.	Software Testing	NPTEL	48%	Jul – Sep 2016
2.	Introduction to Internet of Things	NPTEL	92%(GOLD)	Jan – Apr 2019
3.	Programming, Data Structures and Algorithms Using Python	NPTEL	78%	Jul – Sep 2019
4.	Cloud Computing and Distributed Systems	NPTEL	73%	Jan – March 2020
5.	Introduction to Operating Systems	NPTEL	63%	Sep – Nov 2020
6.	Introduction to Soft Computing	NPTEL	69%	Jan – Mar 2021
7.	Data Science for Engineers	NPTEL	61%	Jul – Sep 2021
8.	Ethical Hacking	NPTEL	62%	Jan – Apr 2022
9.	Advanced Distributed systems	NPTEL	61%	Jul – Oct 2022
10.	Foundation of Cloud IoT Edge ML	NPTEL	96%	Feb – Apr 2023
11.	Design Thinking - A Primer	NPTEL	77%	Jul – Aug 2023

12.	Cyber Security and Privacy	NPTEL	70%	Jul – Oct 2023
13.	Computer Networks And Internet Protocol	NPTEL	79%	Jan – Apr 2024
14.	Blockchain and its Applications	NPTEL	61%	Jan – Apr 2024
15.	Data Base Management System	NPTEL	64%	Jul – Sep 2024
16.	Azure Data Fundamentals	Microsoft	700/1000	2021-2022

INDUSTRIAL TRAINING

<i>S.no</i>	<i>Title</i>	<i>Organized by</i>	<i>Date</i>	<i>Venue</i>
1.	Oracle Apex Training	INOUAG	30 hours,2021	INOUAG & Vibhathi labs, Chennai (online)
2.	Application development using React and Node JS	Centizen Inc, Tirunelveli	5 days, 2022	Centizen Inc, Tirunelveli
3.	Smart Internz, Faculty Buildathon	IBM	12 days, 2023	Online
4.	Full stack development	Alpha Solutions pvt ltd, Tirunelveli	5 days. 2024	Alpha Solutions pvt ltd, Tirunelveli