Dr. (Mrs.) B. Janet

Brief Profile

Dr. Janet serves NIT, Trichy as Associate Professor in the Department of Computer Applications.

She graduated B.Sc. (Physics) with Distinction from Holy Cross College, Trichy affiliated to the Bharathidasan University, Tiruchirappalli, obtained a Master of Computer Applications from Bishop Heber College, with a third rank from Bharathidasan University, Tiruchirappalli. She cleared the National Eligibility Test for Lectureship by UGC in 2001.

She started her research in Information Retrieval with a first class in Master of Philosophy in Computer Science from Alagappa University, Karaikudi, and a Ph. D. degree by the National Institute of Technology, Tiruchirappalli.

Dr. Janet has set up Information Processing and Security Laboratory at NITT, with Industry involvement. She is a part of Nationwide Deployment of Honey Pot Devices for cyber threat intelligence generation for NCCC funded by Meity and implemented by CDAC Mohali. She was also part of Scalable Attack Data Capturing and Analysis Framework for Cyber Threat Intelligence Generation project by CDAC Mohali. She is the Coordinator of the IoT Lab. She is a consultant for CDAC, Trivandrum in the development of AI Solutions for Emergency Response Support System (ERSS) an indigenous integrated platform developed for intelligent emergency response 112 by Govt. of India.

She has guided 9 Ph. D. students successfully. She has published more than 80 research documents in International Journals, Conferences and Book chapters of repute in the field of Data Science. She is granted a patent which is developed as an Anganwadi device to teach numbers to little children. She has a number of awards to her credit.

She is a professional facilitator of students. Her teaching experience includes experiments on activity-based learning, Learner centric teaching and flipped classrooms. She is a champion of Open Source Open Community.

She has visited Malaysia to present one of her research papers in a conference. She is also a reviewer for International conferences and journals. She is presently the Life member of Computer Society of India, International Association of Engineers, ISTE, ISC and International Association of Computer Science and Information Technology. She is also an active senior member of IEEE and Professional member of ACM.

Name: B. Janet

Designation: Associate Professor

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LYCEUM 108,
Department of Computer Applications, NIT,
Trichy – 620015

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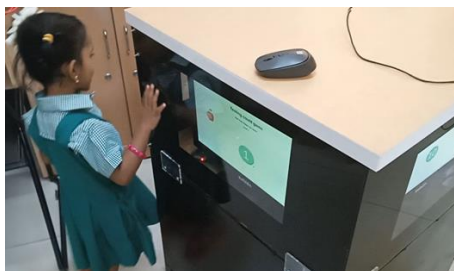**Field of Specialization**:   Data Science and Security

Employment Profile

Job Title	Employer	From	To
Associate Professor (13A2(1))	National Institute of Technology, Trichy**.**	12.03.2024	Till date
Assistant Professor (PB3 - 8000)	National Institute of Technology, Trichy.	12.03.2018	12.03.2024
Assistant Professor (PB3 - 7000)	National Institute of Technology, Trichy.	21.04.2011	11.03.2018
Assistant Professor (PB3 - 6000)	National Institute of Technology, Trichy.	21.04.2006	20.04.2011
Lecturer (UGC-FIP Leave Vacancy)	Bishop Heber College, Trichy.	11.02.2005	20.04.2006
Lecturer (Self-Financing Section)	Bishop Heber College, Trichy	24.07.2002	10.02.2005

Academic Qualifications

Examination	Board / University	Year	Division/ Grade	Subject
Ph. D.	National Institute of Technology, Trichy	2007 - 2012	First class with Distinction	Information Retrieval
M. Phil.	Alagappa University, Karaikudi	2003 -2005	I Class	Computer Science
MCA	Bishop Heber College, Trichy (Bharathidasan University)	1999 -2002	III Rank	Computer Applications
B. Sc.	Holy Cross College, Trichy (Bharathidasan University)	1996 -1999	First class with Distinction	Physics
Higher Secondary	Holy Cross Girls Higher Secondary School, Trichy	1996	86.75	Biology & Maths
High School	Holy Cross Girls Higher Secondary School, Trichy	1994	93.6	SSLC

Patent

Title: A MULTI-DIRECTIONAL DISPLAY DEVICE to ENABLE ACTIVEUSER SCREEN TIME and METHOD THEREOF **Ref.No.**202141002355 **Approval Date:** 2021-01-1 9 **Org.:** The Indian Patent Office, Government of India
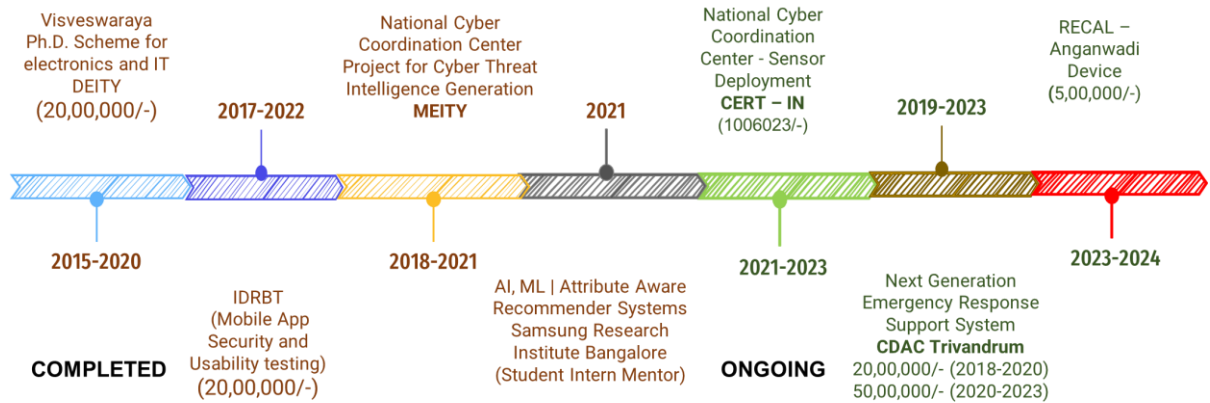
Awards

Sl. No.	Name of Award	Awarding Agency	Year
1.	National Scholarship Scheme Merit Certificate	MHRD	April 1994
2.	Third Rank in MCA	Bharathidasan University	2002
3.	National Eligibility Test for Lectureship (NET)	UGC	December 2001
4.	Young Faculty Research Fellowship	MEITY	June 2015
5.	Best Paper Award	IEEE 3rd Intl. Conf. ISMAC 2019 at Scad College of Tech	2019
6.	Best Performance in Teaching, Research and Institutional Development	NIT Trichy	2021, 2023
7.	Faculty Internship Supervisor	AICTE Margdarshan Scheme	2021
8.	Judge for Toycathorn	Innovation Cell, Govt. of India	2021
9.	Winner of HealthAthorn	RECAL Association	2022

R&D Projects

| Title of Project | Funding Agency | Duration | | Status |
		From	To	Ongoing/ Completed
Development of an Activity based Teacher Device for Helping Anganwadi Teachers	RECAL Association	2023	2024	Completed
Nationwide Deployment of Honey Pot Devices for CTI Generation for NCCC	Meity	2021	Till date	Ongoing
Scalable Attack Data Capturing and Analysis Framework for Cyber Threat Intelligence Generation	Meity	2018	2021	Completed

Consultancy

Sl. No.	Name of Organization	Year	Amount (Rs.)
1.	BHEL	2013	10,891/-
2.	IDRBT - Metric for Mobile Security and Application Testing.	2017-2021	20,00,000/-
3.	CDAC Trivandrum on Emergence response Support System for women safety	2019-2021	20,00,000/-
4.	CDAC Trivandrum Advanced Analytic Solutions Using Computational Intelligence	2020-2024	50,00,000/-

Ph. D Completed

Name of Scholar	Type	Title of Thesis	Role	Year of Award
T. Ravi Chandran	Part Time	Data Clustering and Classification Using Social Spider Optimization	Co- Supervisor	2020
K. Nirmal	External	Anti - Phishing Methodology to Enhance Online Security	Supervisor	2020
J. Sheela	Part Time	Text Summarization Using Fuzzy Rule and Deep Learning	Supervisor	2021
N. Karthika	Full Time (Diety)	Multi - Variate Data Indexing for Retrieval, Clustering and Classification	Supervisor	2021
Muraleedharan. N	Part Time	Slow Network Attacks Detection Using Flow Data	Supervisor	2022
Sanjeev Kumar	External	Image Visualization Based Malware Detection and Classification	Supervisor	2022
Srinadh Swamy Majeti	Full Time (IDRBT)	Security and Usability Metric Framework for Mobile Banking and Financial Service Applications	Supervisor	2023
D. Santhadevi	Full Time	Artificial Intelligence Framework for Malware Detection and Classification on IoT Edge	Supervisor	2023
Purshottaman Rao	Full Time	Enhancing Online Learner Recognition and Affective State Detection in Learning Environments	Supervisor	Thesis Submitted
K. Muthurekha	Full Time	Handwritten digits recognition for Cerebral Palsy people using Machine Learning Models	Co- Supervisor	Synopsis Submitted

Ph. D Ongoing

Name of the Scholar	Type	Area of Research	Role	Year of Joining
K. Nimmi	Part Time	Emotion Detection	Supervisor	2018
Supratim Basu	Full Time	Internet of Medical Things	Supervisor	2022

Research Profile

Scopus Author ID: https://www.scopus.com/authid/detail.uri?authorId=35786218500

Web of Science Researcher ID: https://www.webofscience.com/wos/author/record/1115660

ORCID ID: https://orcid.org/0000-0001-7030-9634

Google Scholar: https://scholar.google.com/citations?user=gLqPJLQAAAAJ&hl=en

IRINS: https://nitt.irins.org/profile/62616

Five recent Journal Publications

Sl. No.	Authors	Title of Paper	Journal	Volume (No.)	Page number	Year
1.	Santhadevi, D., Janet, B	HSDL-based intelligent threat detection framework for IoT network	Journal of Intelligent and Fuzzy Systems	45, (1)	1775 - 1790	2023
2.	Santhadevi, D., Janet, B	Stacked Deep Learning Framework for Edge-Based Intelligent Threat Detection in IoT Network	Journal of Supercomputing	79, (11)	12622 - 12655	2023
3.	Nimmi, K., Janet	PLE-MobileBERT: enhancing call content classification during emergencies using the ECP dataset	Social Network Analysis and Mining	13, (1)	1-14(149)	2023
4.	Nimmi, K., Janet, B., Selvan, A.K.	Pre-trained ensemble model for identification of emotion during COVID-19 based on emergency response support system dataset	Applied Soft Computing	122	108842	2022
5.	Kumar, S., Janet, B., Neelakantan, S.	Identification of malware families using stacking of textural features and machine learning	Expert Systems with Applications	208	118073	2022

Recent Five International Conference Proceedings

Sl. No.	Author(s)	Title of Paper	Title of the Proceedings	Page no.	Year	Venue
1.	Janet B; Joshua Arul Kumar R; Anisha Mitra; Titus S	Education Data Analysis using Ensemble Models	4th International Conference on Smart Systems and Inventive Technology (ICSSIT)	1612-1617	2022	Tirunelveli, India
2.	K. Nirmal; B. Janet; R. Kumar	Effectiveness of CertificateTransparency (CT) Check and OtherDatapoints in Countering Phishing Attacks	Proceedings of the 17th INDIACom2023 10th International Conference on Computing for Sustainable Global Development INDIACom 2023	1450-1455	2023	New Delhi, India
3.	Hiran Nandy, B. Janet	Credit Card Fraud Detection withUnbalanced Real and Synthetic datasetusing Machine Learning models	Proceedings of the 2022International Conference on ElectronicSystems and Intelligent Computing, ICESIC2022,	73-78	2022	Chennai, India
4.	Janet B; Annasha Ghosh; Joshua Arul Kumar R	End-to-End Encryption and Prediction of Medical Insurance Cost	2022 6th International Conferenceon Trends in Electronics and Informatics,ICOEI 2022 - Proceedings	846-850,	2022	Tirunelveli, India
5.	K. Purushottama Rao and B. Janet,	Teacher Assistance System to Detect Distracted Students in Online Classroom Environment	4th International Conference on Smart Systems and Inventive Technology (ICSSIT)	1743-1749	2022	Tirunelveli, India

Books Chapters

Sl. No.	Author(s)	Title of Book/ Chapter	Name of Publisher	Year of Publication
1.	Janet B., Reddy A.V., Domnic S.	An Image Index Model for Retrieval	Springer-Verlag Berlin Heidelberg	2010
2.	N. Karthika, B. Janet	Performance Analysis of Information Retrieval Models on Word Pair Index Structure.	Springer, Singapore	2018
3.	B. Janet and Pethuru Raj	Smart City Applications: The Smart Leverage of the Internet of Things (IoT) Paradigm	IGI Global	2019
4.	Nimmi K, Janet B, Akshi Kumar, Varun G Menon	Handbook of Research on Emerging Trends and Applications of Machine Learning	IGI Global	2019
5.	B. Janet and Pethuru Raj	The human body: A digital twin of the cyber physical systems	Advances in Computers	2019
6.	N. Karthika, B. Janet	Clustering Performance Analysis. Advanced Computing and Intelligent Engineering,	Springer Nature Singapore Pte Ltd.	2020
7.	Santhadevi, D. Janet, B.	EIDIMA: Edge-based Intrusion Detection of IoT Malware Attacks using Decision Tree-based Boosting Algorithms	Lecture Notes in Electrical Engineering, Springer	2022
8.	D. Santhadevi; B. Janet	NetFlow-based botnet detection in IoT edge environment using ensemble gradient boosting machine learning framework	CRC Press	2022
9.	RJA Kumar, S Titus, B Janet	A Review of Neuromorphic Computing: A Promising Approach for the IoT-Based Smart Manufacturing	Auerbach Publications	2022
10.	N. Karthika, J. Sheela, B. Janet	Phrase Level-Based Sentiment Analysis Using Paired Inverted Index and Fuzzy Rule	Scrivener Publishing LLC	2022

Academic/Administrative Responsibilities within the Institute

Responsibility	Time Period
Social Media Champion - PR Media Team	2021-2022
Co-ordinator - IoT Lab, Centre of Excellence	2020-2022
Social Media Manager, PR and Media Cell	2020 - 2022
Design Head, PR and Media Cell	2018 - 2020
Initiating Faculty, 360 Virtual Tour of NITT	2018 - 2019
Stock Verification Officer	2019, 2009-2013
Task Force for offering Online Courses on SWAYAM	2018-2020
Anti-Ragging Vigilance Committee	2019
Member, MIS Core Committee	2012 - 2018
Member Hospital Committee	2012 - 2015
Member, NITT Community Radio	2016- 2018
Department Rep., Convocation	2017 – 2022
Faculty Advisor, Akkara	2021-2023
Faculty Advisor, Apekshaa and Pupil for Pupil	2021 – till date
Faculty Advisor, Delta Club	2018 - 2021
Faculty Advisor, Open Source Club	2015 – till date

Academic/Administrative Responsibilities within the Department

Member, NBA Document Committee	2017
Faculty Advisor, Optima	2017- Till date
Ph. D Admission Committee	2013
Member, Board of Studies for M. Tech (DA)	2017 – Till date
Member, Board of Studies for MCA	2006 - Till date
Member, Board of Studies for M. Sc. (CS)	2006 - Till date
Chairman, Performance Analysis Committee	2013, 2015, 2017 – 2019, 2020
Department Library	2006 - 2007
NIMCET Admissions Committee	2006 - Till date
Information Processing and Security Lab	2012
IoT Lab	2018

Courses taught at Postgraduate and Undergraduate levels

Undergraduate

- C Programming
- Python Programming

Postgraduate

- Information Security
- Federated Learning
- Computer Organization and Architecture
- Internet of Things
- Deep Learning

Laboratory

- FOSS Lab
- Information Security Lab
- CASE Tools Lab
- Visual Programming Lab
- Graphics and Multimedia Lab

Outreach Activity

Date (s)	Title of Activity	Level of Event	Role	Event Organized by	Venue
17th July 2023	Physics Association Inauguration	Local	Chief Guest	Holy Cross College	Holy Cross College, Trichy
27th January 2020	UGC Sponsored Seminar on Cyber Feast	Local	Session Speaker	SRC College, Trichy	SRC College, Trichy
14th December 2019	9th IEEE International Advance Computing Conference IACC 2019	International Conference	Session chair	MAM College of Engineering Sirugunur	Ramyas, Trichy
11th July 2018	Inauguration of First years Program	Local	Chief Guest address	Holy Cross College	Holy Cross College
27th February 2018	CHITS, State level Technical Symposium	State	Chief Guest address	Department of Computer Science	Bishop Heber College, Trichy
24 January 2018	Two day National Conference on Transforming Technology	National	Session Speaker	Srimad Andavan Arts and Science College	Srimad Andavan Arts and Science College
6-9th November 2017	AICET Sponsored FDP on IOT	National	Session Speaker	MAM College of Engineering, Sirugunur	MAM College of Engineering, Sirugunur
25 and 26 September 2017	Multimedia Information Retrieval Issues and tools	National	Session Speaker	MAM College of Engineering, Sirugunur	MAM College of Engineering, Sirugunur
31.08.2017 and 01.09 2017	MCA and MSc Orientation Program	Local	Speaker	NIT, Trichy	NIT, Trichy
27th – 29th July 2015	MCA and MSc Orientation Program	Local	Speaker	NIT, Trichy	NIT, Trichy

05.08.2016	Orientation course of I year B. Tech	Local	Speaker	NIT, Trichy	NIT, Trichy
13-15 June 2014	International Mechanical Engineering Congress	International	Organizing committee member	NIT, Trichy	NIT, Trichy
August 30 and 31, 2014	Version, (Two day National MCA Symposium) paper presentation	National	Judge	Department of CA	NIT, Trichy
March 17 and 18, 2013	Infotreck 2012, UI Design, Annual ACM Student chapter	Local	Judge	Department of CA	NIT, Trichy
8th March, 2013	Women's day celebrations of Sadhana of Bishop Heber College	Local	Chief Guest address	Bishop Heber College	BHC
9th and 10th of May 2013	Two day workshop on Perspectives on Curriculum	Local	Participant	NITT	NITT
05.08.2013	Programming principles	Local	Lecture	NIT Trichy	NIT Trichy
13 and 14th December 2012	Paper Presentation Session of INCOSET 2012	Local	Session Chair	JJCET, Trichy	JJCET, Trichy
December. 6th and 7th 2012	FACT 2012	National	Technical committee member	Department of Mathematics and CA	NITT
10th and 11th November, 2012	Two day ISTE workshop on Akash for education conducted by IIT, Bombay	National	Participant	IIT Bombay	NITT
13.03.2010	Paper Presentation event, Infotreck 2010, Annual ACM Student chapter	Local	Judge	Department of CA	NIT, Trichy
13.03.2010	Paper Presentation event Infotreck 2010 Annual ACM Student chapter intra collegiate technical event	Local	Judge	Department of CA	NIT, Trichy
Feb. 25,26, 2010	National conference on Advanced pattern mining and	National	Organizing committee Member	Department of CA	NIT, Trichy

	Multimedia Computing				
26.03.10 to 27.03.10	BAIP 2010	International	Session Chair	Trivandrum	Trivandrum
August 28 and 29, 2010	Version (Two day National MCA Symposium) paper presentation	Local	Judge	Department of CA	NIT, Trichy
14th to 15th March, 2008	2 day workshop on Data Analytics and Data Mining	National	Participant	Department of Maths and Department of CA	NIT, Trichy
6th and 7th October 2008	3 day Training Programme on Thesis Preparation using LaTeX Software	Local	Participant	Department of CSE	NIT, Trichy
7th, 8th and 9th November, 2008	3 day workshop on Digital Image and Video Processing	National	Participant	Department of Maths and Department of CA	NIT, Trichy
8,9,10th August 2008	3 day workshop on Algorithms	National	Participant	Department of Maths and Department of CA	NIT, Trichy
14th August, 2008	Workshop on Mobile and Pervasive Computing	National	Participant	Department of CA	NIT, Trichy
13th to 17th March, 2007	Short term course under QIP for Engineering College Teachers on Recent trends in Processor Architecture	Local	Participant	Department of CSE	NIT Trichy
December 22nd, 2006	Seminar on Research Directions in Information Technology and Applications	National	Participant	Department of Management Studies	NIT Trichy
9th to 11 March, 2006	TANSCHE and UGC Sponsored 3 day Workshop on Curriculum development and Evaluation	Regional	Participant	Academic Staff College, Bharathidasan University	BHC, Trichy

27.06.2003 to 29.06.2003	Workshop on Christian Studies Sponsored by AIACHE	Local	Participant	BHC, Trichy	BHC, Trichy

Workshops/ Symposia/ Conferences/ Colloquia/Seminars Organized

Title of Activity	Level of Event	Dates	Role	Venue
First International Conference on Intelligent Solutions for Emergency Response and Disaster Management ISERDM-2023	International	9th - 11th January 2023	Organising Secretary	NIT Trichy
Centre for ERSS Sponsored Workshop on Essence of Emergency Response Support system	National	6th - 10th April 2022	Coordinator	NIT Trichy
Block Chain and Smart Contract Technology	National	25.06.2021 To 29.06.2021	Coordinator	NIT Trichy
Effective Online Teaching Learning Strategies Batch - 1	National	03.08.2020 To 08.08.2020	Coordinator	NIT Trichy
Effective Online Teaching Learning Strategies Batch - 2	National	22.06.2020 To 27.06.2020	Coordinator	NIT Trichy
Effective Online Teaching Learning Strategies Batch - 3	National	26.05.2020 To 31.05.2020	Coordinator	NIT Trichy
Cyber Security	National	01.07.2019 To 05.07.2019	Coordinator	NIT Trichy
IoT and Security	National	03.12.2018 To 07.12.2018	Coordinator	NIT Trichy
OPTIMA	National	19th and 20th October 2019	Faculty Advisor	NIT, Trichy
Cyber Security	National	1st to 5th July 2019	Coordinator	NIT, Trichy
TechnoFania	National	23rd and 24th March 2019	Faculty Advisor	NIT, Trichy

Recent Trends in Computer Applications	National Conference	26th ,27th April 2019	Secretary	NIT Trichy
Internet of Things	National	3rd to 7th December 2018	Coordinator	NIT Trichy
OPTIMA	National	27th , 28th October 2018	Faculty Advisor	NIT, Trichy
TechnoFania	National	11th March 2018	Faculty Advisor	NIT, Trichy
OPTIMA	National	13th October 2017	Faculty Advisor	NIT, Trichy
OSOC	Local	29th and 30th September 2017	Faculty Advisor	NIT, Trichy
Master your Moodle	Local	15th and 16th March 2017	Coordinator	NIT, Trichy
Internet Protocol standards with CDAC	Regional	29.07.2016	Coordinator	NIT, Trichy
Application of ICT Tools for Pedagogy development to technical education Teachers	National	4th to 8th April 2016	Coordinator	NIT, Trichy
Leadership Training	Local	11.03.2016	Coordinator	NIT, Trichy
Visual Sensor Networks	National	November 2015	Coordinator	NIT, Trichy
Tools and Techniques for Information Processing Research	Local	11th and 12th September 2015	Coordinator	NIT, Trichy
IBM Cloud workshop	Local	9.11.2013	Coordinator	NIT, Trichy
OSOC Workshop	Local	19.04.2013	Faculty Advisor	NIT, Trichy
OSOC Workshop	Local	17.10.2013	Faculty Advisor	NIT, Trichy
OSOC Workshop	Local	19.10.2013	Faculty Advisor	NIT, Trichy
OSOC Workshop	Local	22.10.2013	Faculty Advisor	NIT, Trichy

Invited Talks

Topic	Date	Inviting Organization
Data Science Using Python	2022	Rajiv Gandhi National Institute of Youth Development

Innovative Technologies Using IOT	24.08.2023	Srinivasan College of Arts and Science, Perambalur
Artificial Intelligence on Society	11th July 2023	Holy Cross College Innovation Council, Holy Cross College
Deep Networks Basics	24th July 2023	Saranathan College of Engineering
Python Programming	29.08.2019	Mam College of Engineering, Sirugunur
Data Security	2021	Manonmaniam Sundaranar University
AI, ML Attribute Aware Recommender Systems Implications of User Demographics, Context and Item characteristics	2021	Samsung Research Institute Bangalore
Board of Studies	2019	Bishop Heber College
Building Energy Management Using IoT	5th -9th February 2024	Department of Energy And Environment, NIT Trichy
Chief Guest Address	27th February 2018	Bishop Heber College
Disruptive Technologies	24th January 2018	Srimad Andavan Arts and Science College
IoT and Security	8th November 2017	Mam College of Engineering, Sirugunur
Multimedia Information Retrieval Issues and Tools	25th September 2017	Mam College of Engineering, Sirugunur
Indexing Textual Data	25.05.2009 To 6.06.2009	FDP on "Data Warehousing and Data Mining Conducted by the Department of Computer Applications, NIT, Trichy -15
Motivation for Fresher's	July 9, 2010	Bishop Heber College
C Programming	22.08.13	Orientation Programme of Bridge Course, NIT, Trichy
Motivation to Fresher's	7.8.2016	NIT, Trichy
Academic Ethics	07.08.2014 (Every Year)	NIT, Trichy
Lectures on Programming Languages	7.12.12 And 11.12.12	Finishing School Students in The Ukieri Projects on Preparing Graduates for Business Life, in NIT, Trichy

Membership of Learned Societies

Sl. No.	Type of Membership	Organization	Membership No.
1.	Life Member	ISC	L24000
2.	Senior Member	IEEE	91092990
3.	Professional Member	ACM	7800754
4.	Life Member	CSI	01153035
5.	Life Member	ISTE	LM95869
6.	Life Member	IAENG	109374
7.	Life Member	IACSIT	80337721
8.	Member	IBM Academic Initiative	
9.	Member	Open Source Initiative	

Academic Foreign Visits

Country	Duration of Visit	Programme
Malaysia	05.12.2010 to 07.12.2010	Paper presentation for Conference

B. Janet

Last Updated: July 2024