

BIODATA

Dr.B.Shunmugapriya M.E., Ph.D

Assistant Professor (SG),
Department of Computer Science and Engineering.
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Personal Details:

Age : 35
Date of Birth : 05.02.1987
Sex & Marital Status : Female & Married
Citizenship : Indian

Educational Qualification:

Educational Qualification	Programme and Specialization	% of Marks	Month & Year of Passing	Institute/University	Class/ Division
PhD	Information and Communication Technology	-	October 2022	Anna University, Chennai	-
M.E	Computer Science and Engineering	81	2012	M.S University, Tirunelveli	I Class with Distinction
B.Tech	Information Technology	77	2008	Anna University, Chennai	I Class

Professional Experience :

Designation	Institution/ Organisation	Period	Nature of Duties
Asst. Professor (Senior Grade)	National Engineering college	06.04.2022 to Till date	Teaching, Administration & Research
Asst. Professor	National Engineering college	04.06.2012 to Till date	Teaching, Administration & Research
Lecturer	S.Veerassamy Chettiar College of Engineering and Technology	19.01.2009 to 09.11.2011	Teaching

Courses taught:

Course Title	U.G. or P.G.
Computer Graphics, Compiler Design, Computer Networks, Object Oriented Programming, Green Computing, Software Engineering Methodologies, Microcontroller and Embedded systems, Operating Systems, Cryptography and Network Security, Internet of Things, Nature Bio and Inspired Computing	U.G
Computer Graphics, Software Project Management, Information Retrieval Techniques, Pattern Recognition	P.G

Membership in Professional Bodies : - Life Time Membership - Indian Society for Technical Education

Academic Achievements

Student Funded Projects Guided

- NSTEDB-DST, New Delhi, EDII Ahmedabad NewGen IEDC sponsored funded project entitled on “Smart Trash Bin Management System using IOT” with a total cost of Rs.2,50,000/- (Completed)(2018-2019)
- NSTEDB-DST, New Delhi, EDII Ahmedabad NewGen IEDC sponsored funded project entitled on “Automated Cast Trolley for isolated Patients” with a total cost of Rs.2,50,000/- (Ongoing)(2021-2022)
- NSTEDB-DST, New Delhi, EDII Ahmedabad NewGen IEDC sponsored funded project entitled on “Smart Bi-Cycle” with a total cost of Rs.2,50,000/- (Ongoing)(2022-2023)

Ideation and Innovation Challenge Awards

- “Railway track fault detecting system” which participated and received an appreciation award and certificate in DST-TI IICDC 2018 (Texas Instruments Innovation Challenge India Design Contest 2018)
- “Women safety Device using IOT” which participated and received an appreciation award and certificate in DST-TI IICDC 2019 (Texas Instruments Innovation Challenge India Design Contest 2019)
- Received certificate of appreciation for the 'Idea Generation Challenge' conducted during the Azadi ka Amrit Mahotsav Iconic week from 10th- 16th January 2022
- Faculty Workshop on Embedded Systems-An application driven approach_ Ideathon_ Winner conducted by Arm Education, AICTE and STMicroelectronics from 25th to 27th August, 2021

Short term Courses / Seminars / Conference/ Workshops organized:

Title	Event Type	Convenor	Coordinator(s)	Sponsored	Funding Agency Name(s)	Amount Sanctioned	No. of Participants	Dates(s) [dd/mm/yyyy]
Modern computing methodologies on Affective Brain computer Interface (ABCI)	Workshop	Dr.B.Paramasivan & Dr.V.Gomathi	B.Shunmugapriya	Sponsored	DBT	50000	49	08/01/2016 & 09/01/2016
Regional Conference on Soft computing and Computational Intelligence (CONSCI'16)	Conference	Ms.M.Carmel Sobia & B.Shunmugapriya	B.Shunmugapriya	Sponsored	ISTE	10000	64	10/03/2016 & 11/03/2016

Brain Computer Interface- Integrating EEG and Gaze	Seminar	Ms.M.Carmel Sobia & B.Shunmugapriya	B.Shunmugapriya	Sponsored	ISTE	10000	35	28/09/2016 & 29/09/2016
Regional Conference on Soft computing and Computational Intelligence (CONSCI'17)	Conference	Ms.M.Carmel Sobia & B.Shunmugapriya	B.Shunmugapriya	Sponsored	ISTE	10000	55	02/01/2017 03/01/2017
"Research trends and innovations in vehicular networking and Intelligent vehicular communication"	Seminar	Dr.B.Paramasivan & Ms.J.Naskath	B.Shunmugapriya	Sponsored	AICTE	100000	33	12/10/2017 & 13/10/2017
Regional Conference on Soft computing and Computational Intelligence (CONSCI'18)	Conference	Ms.M.Carmel Sobia & B.Shunmugapriya	B.Shunmugapriya	Sponsored	ISTE	5000	44	27/02/2018 & 28/02/2018
Wireless Body area networks- values and challenges using IOT	Seminar	Ms.M.Carmel Sobia & B.Shunmugapriya	B.Shunmugapriya	Sponsored	ISTE	5000	45	28/12/2018 & 29/12/2018
PyWeek- A PyGame developer contest	Programming Contest	Dr.B.Paramasivan	B.Shunmugapriya	-	-	-	400	11 th – 23 rd May 2020

Introduction to PyGame - Python Programming Tutorials	Hands on training	Ms.M.Carmel Sobia & B.Shunmugapriya	-	-	-	-	40	16.05.2020
Expectations from industry Through ISTE Student Chapter	Webinar	Ms.M.Carmel Sobia & B.Shunmugapriya	-	-	-	-	65	23.05.2020
PyWeek- A PyGame developer/ Web Developer contest	Programming Contest	Dr.V.Gomathi	B.Shunmugapriya	-	-	-	200	23 rd - 28 th August 2021
PyWeek- A PyGame developer/ Web Developer contest	Programming Contest	Dr.V.Gomathi	B.Shunmugapriya	-	-	-	110	11 rd - 18 th July 2022

Short term Courses / Seminars / Conference/ Workshops Attended:

S.No	Title	Period	venue
1.	Technical seminar on Network security research issues and challenges	17/05/2010 & 18/05/2010	Mepco Shlenk Engg College,
2.	NPTEL (IIT Madras)	13/03/2015	National Engineering College
3.	Intellectual Property Rights and Innovations	07/11/2015	National Engineering College
4.	Research Aspirants Meet	7/01/2016 & 08/01.2016	National Engineering College
5.	DBT sponsored workshop "Modern computing methodologies on Affective Brain computer Interface(ABCI)"	08/01/2016 & 09/01/2016	National Engineering College
6.	FDTP on data warehousing and data mining	25/05/2016-31/05/2016	Anna University Tirunelveli
7.	Pattern Recognition and Machine learning: Techniques and its Application	10/8/2016 & 11/08/2016	National Engineering College

8.	NPTEL-How the Brain creates Mind	Jul- Aug 2016 (10 Hour course)	National Engineering College
9.	ISTE sponsored Brain Computer Interface-Integrating EEG and Gaze”	28 /09/2016 & 29/09/2016	National Engineering College
10.	NITTTR-Training programme on Instructional Design and Delivery systems	22/05/2017 to 27/05/2017	National Engineering College
11.	NITTTR-Training programme on “Technology enabled Teaching Learning Process”	27/05/2017 to 29/05/2017	National Engineering College
12.	Anna University sponsored FDTP on CS6503 Theory of Computation	01/06/2017 to 08/06/2017	National Engineering College
13.	Anna University sponsored FDTP on “Cryptography and Network Security”	13/06/2017 to 17/06/2017	Mepco Shlenk Engg College, Sivakasi
14.	NPTEL-Cognition, Transformation and Lives	Jul-Aug 2017(4 week course)	National Engineering College
15.	National level workshop on stimulating research perspectives on Big data- NLWSRPBD’18	Feb 28,2018	Anna University Tirunelveli
16.	Coursera-Embedded Hardware and Operating Systems	Jan-Feb. 2018	National Engineering College
17.	Operating Systems	26th Jan to 29th Jan 2018	Besant Technologies, Chennai
18.	System Design Aspects in IoT	26/06/2018 to 02/07/2018	National Institute of Technology Warangal
19.	NPTEL – Programming in C++ Elite Certification	06/08/2018 to 07/10/2018(8	National Engineering College
20.	Machine learning, Deep learning and Computational intelligence for wireless communication, MDCWC 2020	16/09/2019 to 20/09/2019	NIT, Trichy
21.	Introduction to Python Programming	01/08/2019 to 03/08/2019	National Engineering College
22.	NPTEL- Internet of Things Elite + Silver Certification (75%)	July to December 2019(12-week Course)	Online course
23.	C and C++ Workshop (IIT Bombay conducted)	29 February 2020	National Engineering College
24.	GUVI- Game development using PYGAME	08.04.2020	Online course
25.	GUVI- Step into Robotic Process Automation	18/04/2020	Online Course

26.	AI Academy-Udemy-Learn Bio Inspired Optimization methods	18.05.2020	Online Course
27.	Coursera course _ Internet of things and Embedded Systems	21.05.2020	Online course
28.	2 days Online FDP Ethical Hacking and Cyber Security	01.06.2020 to 02.06.2020	Shadan Womens College of Engineering and Technology
29.	Coursera course –Cyber security and Internet of things	03.06.2020	Online course
30.	Coursera course- Creating your C++ Applications	06.06.2020	Online course
31.	VLAB FACULTY DEVELOPMENT PROGRAM	AUG 10th – AUG 14th, 2020	PALS and NIT, Karnataka (Suratkal)-
32.	Virtual FDP on Salesforce Developer	AUG 17 th – AUG 22 th , 2020	ICT Academy
33.	NPTEL - Introduction to Industry 4.0 and Industrial Internet of Things -Elite + Silver Certification (80%)	July - Dec 2020	Online course
34.	Online workshop on Universal Human Value on the theme “Inculcating Universal Human Values in Technical Education”	19-23 October, 2020	All India Council for Technical Education (AICTE)
35.	Online FDP on "Cyber-physical production Systems"	2020-9-21 to 2020-9-25	AICTE Training and Learning (ATAL) Academy National Institute of Technology Andhra
36.	ACM India Summer School 2021 on IoT and Embedded Systems	7 to 14 July 2021	Hosted by IIIT-Bangalore Sponsored by Micron Technology
37.	Embedded Systems - An Application Driven Approach	August 25 th - 27 th 2021.	All India Council for Technical Education (AICTE), ATAL Academy, STMicroelectronics and
38.	Introduction to Basic Game Development using Scratch	Dec 25, 2021	Coursera
39.	NPTEL – Computer Networks and Internet Protocol - Elite + Silver Certification	Jan – April 2022	Online course
40.	Designing and Modelling of IoT, AI & ML Systems	01 -05 August 2022	Organized by AICTE, STMicroelectronics Arm, Microsoft

Expert Lecture Delivered :

S.No	Title	venue	Date	Participants
1	Brain Computer Interface- Integrating EEG and Gaze”	National Engineering College	28/09/2016 & 29/09/2016	40
2	Wireless Body area networks- values and challenges using IOT	National Engineering College	28/12/2018 & 29/12/2018	45
3	System Aspects on Internet of Things	National Engineering College	21/07/2018	65
4	PyWeek- A PyGame developer contest	National Engineering College	11th – 23rd May 2020	400 +1 & +2 students
5	PyWeek- A PyGame developer contest	National Engineering College	23 rd - 28 th August 2021	200 +1 & +2 students
6	PyWeek- A PyGame developer contest	National Engineering College	15 th August 2021	40 +1 & +2 students

Research Achievements :**Patent Published: 2**

1. SMART WASTE COLLECTING BIN

Application Number: 202041007420 dated: 21/02/2020

2. Method of System of Data Transmission from sensor Network Nodes

Application Number: 201841019925 dated: 28/05/2018

Publications :**International Journal Publications:**

S.No	Title of the Paper	Authors	Name of the Journal	Vol.No & Page No.	Month & Year
1	Empirical evaluation of particle filtering and Non local mean method image reconstruction techniques	B.Shunmugapriya Dr.A.Surulandi	CiiT International Journals (BEST PAPERS through ICCCE'2012 held in M.G.R. University, Chennai)	Vol 4, No 13	2012
2	Smart Health Monitoring System Using IoT for Assisted Living of Senior and Challenged People	R.Nivetha, S.Preethi, P.Priyadharshini, B.Shunmugapriya, J.Naskath	International Journal of Scientific & Technology Research - Scopus Indexed	VOLUM E 9, ISSUE 02, ISSN 2277-8616	Feb, 2020
3	Protection	B.Shunmugapriya,	International	Vol. 9	February-2020

	against SQL injection attack in cloud computing	Dr.B.Paramasivan	Journal of Engineering Research & Technology (IJERT) - Scopus Indexed	Issue 02 ISSN: 2278-0181	
4	Emerging work on Smart Speaking System for Dumb People Using BCI	G.Aarthi, D.Ammu priya, R.Dhanalakshmi, A.R.Miradevi, B.Shunmugapriya	International Journal of Recent Technology and Engineering (IJRTE) - Scopus Indexed	Volume-8 Issue-6 ISSN: 2277-3878,	March 2020
5.	Real-time evaluation of heart beat rate for early detection of cardio vascular inflammation	A.Shenbagharaman, Dr.M.S.Gowtham ,M.Anandapriya, B.Shunmugapriya	"Test Engineering and Management" - Scopus Indexed	ISSN: 0193 - 4120 Page No. 25215 - 25219	March – April2020
6.	Secure Data Storage, Privacy Data Access And Computation In Cloud Computing	B. Shunmugapriya Dr.M.S.Gowtham Shenbagharaman, Dr.V.Sivakumar	Strad Research-WOS	VOLUM E 7, ISSUE 6,	JUNE – 2020.
7	Student Leave Management System Mobile Application Using Flutter Framework	M. Vaishnavi, S. Anupriya , B.Shunmugapriya , A.Shenbagharaman	Journal of Huazhong University of Science and Technology - Scopus Indexed	VOLUM E 50 ISSUE 06 - 2021	June 2021
8	Face Recognition Method For E-Attendance System	A. Shenbagharaman B. Shunmugapriya , K. Rajkumar , Priya. R, Pandiselvi. S	Annals of the Romanian Society for Cell Biology ISSN: 1583-6258	Vol.25, Issue 4	June 2021
9	Design and implementation of speculative adder for high speed VLSI architecture	Dr.M.S.Gowtham Shenbagharaman, B. Shunmugapriya	Design Engineering (Toronto) - Scopus Indexed	Vol 2021: Issue 06 1699-1705	2021
10	Mitigation Of	Ms.B.Shunmugapriya ,	Tierärztliche	Vol 41	2021

	Black Hole And Gray Hole Attack Using ABC Algorithm With Ann In WBAN	Dr.B.Paramasivan , Mr.A.Shenbagharaman	Praxis (SCI)	882-917	
11	Fuzzy Based Relay Node Selection for Achieving Efficient Energy and Reliability in Wireless Body Area Network	Ms.B.Shunmugapriya , Dr.B.Paramasivan	Wireless Personal Communications (Springer) (SCI)	Vol: 122, PP: 2723–2743	Sep 2021
12	Wireless Body Area Networks: Survey of Recent Research Trends on Energy Efficient Routing Protocols and Guidelines	Shunmugapriya, B., Paramasivan, B., Ananthakumaran.S Naskath.J	Wireless Personal Communications (Springer) (SCI)	Vol: 123, PP: 2473–2504	Nov 2021
13	Design of Three Tier Hybrid Architecture Combing TDMA-CDMA Techniques to Mitigate Interference in WBAN	Ms.B.Shunmugapriya , Dr.B.Paramasivan	Wireless Personal Communications (Springer) (SCI)	Vol: 125, PP: 1585–1614	Feb 2022
14	Identifying the Optimal Location to Set up an Emergency Room Using Machine Learning Algorithms	Dr.G.Sivakamasundari, Ms.B.Shunmugapriya, Mr.A.Shenbagharaman, Mr.K.Rajkumar	Periodico Di Mineralogia	Volume 91, No. 4, 2022	August 2022

International Conference Publications:

S.No	Name of the Faculty	Title of the Paper	Name of the Conference	Organizer	Month & Year
1	B.Shunmugapriya	Empirical evaluation of particle filtering and Non local	IEEE sponsored International Conference on Computing and control	Dr. M.G.R Educational and Research Institute,	12 th and 13 th April 2012

		mean method image reconstruction techniques	engineering (ICCCE-2012)	Chennai	
2	B.Shunmugapriya	Empirical evaluation of image reconstruction techniques	IEEE sponsored International Conference on Computing, Communication and Network technologies (ICCCNT-2012)	SNS College of Technology, (Autonomous) , Coimbatore	26 – 28 July 2012
3	B.Shunmugapriya S.Suganya G.Suriyadharshini	Emerging work on electronic speaking system for dumb people	IEEE sponsored International conference on Computing Technologies and Intelligent Data Engineering (ICCTIDE'16)	National Engineering College	07/01/2016 to 09/01/2016
4	R.Rajakumari B.Shunmugapriya S.Indumathy C.Umarani	An Adaptive System to Assist Physically Challenged from their Tilts	IEEE sponsored International conference on Computing Technologies and Intelligent Data Engineering (ICCTIDE'16)	National Engineering College	07/01/2016 to 09/01/2016
5	B.Shunmugapriya R.Rajakumari S.Indumathy C.Umarani	Empirical evaluation of particle filtering and markov random fields image reconstruction techniques	IEEE sponsored International conference on Computing Technologies and Intelligent Data Engineering (ICCTIDE'16)	National Engineering College	07/01/2016 to 09/01/2016
6	B.Shunmugapriya	EEG BASED EMOTION RECOGNITION USING VALANCE AROUSAL STIMULI,	IEEE International Conference on Advanced Computing and Communication Systems (ICACCS)	Coimbatore, INDIA	Jan. 06 – 07, 2017
7	B.Shunmugapriya	Securing Digital Image Using Cryptographic Key Generation Algorithm	INTERNATIONAL CONFERENCE ON APPLIED SOFT COMPUTING TECHNIQUES (ICASCT'18)	Kalasalingam University, Srivilliputhur	23 rd & 24 th March 2018
8	B.Shunmugapriya	Defending against SQL injection attack in cloud computing	INTERNATIONAL CONFERENCE ON APPLIED SOFT COMPUTING TECHNIQUES (ICASCT'18)	Kalasalingam University, Srivilliputhur	23 rd & 24 th March 2018
9	B.Shunmugapriya Siva Durga.K	Optimized Routing in	International Conference on	Kalasalingam University,	15 th & 16 th February

	Sowndharya.P Sudalai Vadivoo.P	Wireless Body Area Network using Genetic Algorithm	Innovations in Engineering, Science and Technology ICIEST-2019	Srivilliputhur	2019
10	Sridarraj Rahul Saravanakumar B.Shunmugapriya	Skin Cancer Detection using Artificial Neural Network	5 th International Conference on latest trends in Science, Engineering and Technology	Karpagam Institute of Technology	22 nd & 23 rd March 2019
11	J.Naskath B.Paramasivan B.Shunmugapriya Hamza Aldabbas	Dynamic Cluster based Connectivity approach for Vehicular Adhoc Networks	International Conference on Innovative Computing and Cutting-edge Technologies (ICICCT 2019) Published in Springer Book - Learning and Analytics in Intelligent Systems	Middle East Association of Computer Science and Engineering (MEACSE) Istanbul, Turkey	October 30- 31,2019
12	M.Arjmand Banu, G.N.Gladis Joy, R.kaushika Bharathi, B.Shunmuga Priya	DSR Protocol for Wireless Body Area Network	7 th International Conference on Latest Trends in Science, Engineering and Technology (ICLTSET'21)	Karpagam Institute of Technology, Coimbatore	March 26-27, 2021
13	M.Mathavan, S.Allan, B.Shunmugapriya	Log analyzer and monitoring	IEEE International Conference on Emerging Technologies and Applications for a Smart and Sustainable world, ICEmTASS'21	National Engineering College, Kovilpatti	December 16-18, 2021
14	A.Ajith Kumar, J.Abilash, B.Shunmugapriya	Mask detector	IEEE International Conference on Emerging Technologies and Applications for a Smart and Sustainable world, ICEmTASS'21	National Engineering College, Kovilpatti	December 16-18, 2021
15	MS Gowtham, A Shenbagharaman, B Shunmugapriya, Sateesh Nagavarapu, Antonyuk Olga	A Critical Review Analysis of the Opportunities and Potential of Implementing Cloud Computing System for Large Scale Ad Hoc Network	2022 2 nd International Conference on Advance Computing and Innovative Technologies in Engineering (ICACITE) Pages: 103-106 Publisher: IEEE	Galgotias College of Engineering & Technology, Gr eater Noida, India	July 2022

National Conference Publications:

S.No	Name of the Faculty	Title of the Paper	Name of the Conference	Organizer	Month & Year
1	B.Shunmugapriya	Empowering Indian Education for Global Expectations	17 th ISTE TN & P Section Annual Convention	ISTE TN & P & NEC	7/11/2014 and 8/11/2014
2	A.Mahalakshmi B.Shunmugapriya	Continuous Glucose Monitoring system	Seventh National Conference on Computer Science and Applications – NCCSA'19	MEPCO Schlenk Engineering College (Autonomous), Sivakasi	March 8 & 9, 2019.
3	M. Vaishnavi, S. Anupriya, B.Shunmugapriya	Student Leave Management System - Mobile Application	5th National Level IEEE Project Competition	GSSS Institute of Engineering and Technology for Women, Mysuru	26th June 2021

Reviewer:

1. International Journal of Electrical and Computer Engineering Systems
2. International Journal of Sensors, Wireless Communications and Control
3. Indonesian Journal of Electrical Engineering and Computer Science
4. International Conference on Electronics, Communications and Networks, Xiamen, China during November 4-7, 2022.

Additional Responsibilities held:

- Associate Warden – Ladies Hostel (2018-2022)
- Internal Complaint Committee Coordinator (Jan 2021 to Aug 2022)
- CSE Association Incharge (2020- Till date)
- ISTE Student Chapter Faculty advisor (2014-2021)
- Department library-Incharge (2019-2020)
- AICTE, Anna University Affiliations, UGC, Governing Council & NAAC- Department Coordinator (2014-2019)
- Faculty Target (2017-2019)
- Department meetings (2015-2018)
- NPTEL Student Coordinator (2016-2018)
- IEEE International conferences ICCTIDE'16 & ICEmTASS'21 Coordinator
- Department Placement Coordinator (2021- 2022)
- AICTE CII Survey- Incharge (2014-2019)
- NAAC Criteria-1 Coordinator
- NBA Criteria-9 Coordinator
- ISTE Staff Chapter Incharge (Sep 2022 – Till date)
- Class Incharge (2020- Till date)
- Anti-Ragging Committee Coordinator (2018-till date)
- Lab Incharge IBM & Common Computer Lab (2019-till date)
- Internship, Inplant training and industrial visit – student coordinator (2019-Till date)