




# TAGORE ENGINEERING COLLEGE

(A Member of Tagore Group of Institutions Chennai)

Approved by AICTE, New Delhi | Affiliated to Anna University, Chennai

ACCREDITED BY IQAC-NAAC WITH 'A' GRADE

## FACULTYPROFILE

PERSONALDETAILS							
Name &Qualification	Dr.R.BEULAHJAYAKUMARI, M.E., Ph.D.,						
Designation	PROFESSOR						
Department	Information Technology						
Total Teaching Experience	16Years						
Total Research Experience	10Years						
Total Industry Experience	-						
Area of Specialization	Wireless Sensor Network,Data Science						
AICTE Faculty ID	1-7383331771						
Email ID	hod.it@tagore-engg.ac.in						
							
				EDUCATIONALDETAILS			
				Degree	Branch/Specialization	University	Year
				UG	B.E-Electrical and Electronics Engineering	Madras University Chennai	1999
PG	M.E-Computer Science and Engineering	Anna University Chennai	2008				
Ph.D	I&C	Anna University Chennai	2016				
RESEARCH/PUBLICATIONDETAILS							
Publicationsin Journal							
1. <b>Beulah Jayakumari R</b> , have published a paper title “An overview of current developments and methods for identifying diabetic foot ulcers: A Survey” on WIREs Data Mining and Knowledge Discovery September 2024							
2. <b>Beulah Jayakumari R</b> , have published a paper title “COVID-19 Mental Health Impact Analysis using Ensemble-based Classifier” on The Open Public Health Journal, DOI: 10.2174/0118749445312597240726054050, e18749445312597 2024, Vol. 17							
3. <b>Beulah Jayakumari R</b> , have published a paper title ‘E-voting System using Cloud-based Hybrid Blockchain Technology’ on Journal of Safety Science and Resilience, Elsevier on February 19, 2024							
4. <b>Beulah Jayakumari R</b> , MayaEapen, Vanitha R , Bhuvaneshwari G, Murugesan S and Merlin Vensiya V have published a paper title “Dengue Prone area Prediction System using Machine learning” Journal of Data Acquisition and Processing ISSN: 1004-9037 Vol. 38 (1) 2023.							

5. Bhuvaneshwari G, Bhalaji N, **Beulah Jayakumari R**, Murugesan S, Suganya A and Subashini Khave published a paper title “Highly secure authentication and key agreement protocol for blockchain assimilated 5g communication networks” Journal of Data Acquisition and Processing ISSN: 1004-9037 Vol. 38 (1) 2023.
6. Dr. B.Jaishanthi , Dr. B.Swaminathan , S.S.Bhaviya , Dr.J.Premalatha, **Dr.Beulah Jayakumari** have published a paper title “Prediction of climate change and temperature detection using deep learning” Journal of Data Acquisition and Processing ISSN: 1004-9037 Vol. 38 (2) 2023.
7. B. Murugeswari ,R.Vanitha , MayaEapen , Divya D and **Beulah Jayakumari R** have published a paper title “Employment Recommendation system for disabled people” Journal of Data Acquisition and Processing ISSN: 1004-9037 Vol. 38 (1) 2023
8. Abisha A , Dr.R.Beulah Jayakumari and D Doreen Hephzibah Miriam have published a paper title “Drought Prediction using Geo-Spatial Big Data” International Journal of Recent Technology and Engineering (IJRTE),ISSN:2277–3878,Volume-8, Issue-2S5,July2019.
9. Beulah Jayakumari. R, S.Vaishnavi, J.Sasirekha, R.Sowmiya rajalakshmi,, K.Saranya , 2018 , “A Survey on Congestion Control in Wireless Sensor Network Using Multiples Sink” Compliance Engineering Journal, ISSN NO: 0898-3577, Volume 10, Issue 3, 2019, Pages: 40-46
10. Dr.Beulah JayakumariR ,Gopalakrishnan P,Nithyanandham N,P2017,,“Farming Assistance Mobile Application” International Journal of Multee Disciplinary Research, vol.2017,ISSUE 2, march-April.
11. Jemimah C., Lilly Sheeba S., Beulah Jayakumari R and Vijayakumar A Classification on Survival Rate of Ebola Patients using Bigdata Australian Journal of Basic and applied Sciences,10(2)Special 2016, Pages: 67-74.
12. Beulah Jayakumari.R,Dr.Jawahar Senthilkumar V,P2015, “Priority Based Congestion Control Dynamic Clustering Protocol in Mobile Wireless Sensor Networks, The Scientific World Journal, vol. 2015, ArticleID 596138, pp.1-10.
13. Beulah Jayakumari. R, Dr. Jawahar Senthilkumar V, P 2015, „An Energy Efficient Routing Protocol in Wireless Sensor Network using Optimized Local Connectivity Approach“, International Journal of Applied Engineering Research, vol. 10,no.5, pp. 3900-3905.

14. Beulah Jayakumari.R ,Dr.Jawahar Senthilkumar V,P2014, "Optimized Priority Assignment Scheme For Congested Wireless Sensor Networks, Journal of Theoretical and Applied Information Technology, vol.65, no. 3, pp. 1817-3195.
15. **Beulah Jayakumari. R**, Dr. Jawahar Senthilkumar V, P 2013, " Priority Based Congestion Detection and Avoidance in Wireless Sensor Networks ,Journal of computer science,vol.9,no.3, pp.350-357.
16. Meera. S, **Beulah Jayakumari. R**, Dr. Jawahar Senthilkumar V, P 2012, "Congestion control in Wireless Sensor Networks using Prioritized Interface Queue", International Journal of Computer Application, pp. 32-37.
17. **Beulah Jayakumari.R**, Vinoth Lakshmi S 2015, "Routing Imperative Data Packets in Wireless Sensor Networks using Congestion Free Path "Indian Journal of Science and Technology, Vol8(32), November2015.

#### Conference Proceedings

1. **Dr. R. Beulah Jayakumari**, LathifunisaTausifa A , Surya S J, Vignesh A , 'A novel Emotion Prediction usingBlue Eye Technology' proceedings of 7 th International Conference on recent Advances in Science, Engineering and Management (ICRASEM-2022) on January 25th 2023.
2. **Dr. R. Beulah Jayakumari** , Merlin Vensiya V , Durgadevi E , Vaishnavi M R 'Early Detection of Dengue Diagnosis using Machine Learning' proceedings of 7 th International Conference on recent Advances in Science, Engineering and Management (ICRASEM-2022) on January 25th 2023
3. **Dr. R. Beulah Jayakumari** , HinaFathima K , Hema Lakshmi , Vignesh S 'Smart Bathrooms for Physically Challenged using Internet of Things' proceedings of 7 th International Conference on recent Advances in Science, Engineering and Management (ICRASEM-2022) on January 25th 2023
4. **Dr. R. Beulah Jayakumari** , Mathimithra K V , Jaiththira R , Charumathi B 'Applications based on Fingerprintanalysis using Machine Learning' proceedings of 7 th International Conference on recent Advances in Science, Engineering and Management (ICRASEM-2022) on January 25th 2023
5. **Dr. R. Beulah Jayakumari** , K Swetha , G. Saranya ,G.Lavanya ,G.Nandhini 'AI-Powered Nitrition Analyzer for Fitness Enthusiast' proceedings of 7 th International Conference on

recent Advances in Science, Engineering and Management (ICRASEM-2022) on January 25th 2023

6. **Dr. R. Beulah Jayakumari** , Hemapriya C , Jennifer J , SugheerthiMeena S K , Sandhya ‘IoT based Child Safety Monitoring and Notification system proceedings of 7 th International Conference on recent Advances in Science, Engineering and Management (ICRASEM-2022) on January 25th 2023
7. **Dr. R. Beulah Jayakumari** , K. Rahu Raman ‘Vaccination Camp Location Suggester’ proceedings of AICTE Sponsored Fourth International conference on emerging trends in Science, Engineering and Technology (ICETSET 2022) on July 7th & 8th July 2022.
8. **Dr. R. Beulah Jayakumari** , R. Nivedha, V. Hindu Priya ‘Substantiate Medical Documents Releasing With Privacy And Security’ proceedings of AICTE Sponsored Fourth International conference on emerging trends in Science, Engineering and Technology (ICETSET 2022) on July 7th & 8th July 2022.
9. Ramya R, Lilly Sheeba S, Christalin Nelson S , **Beulah Jayakumari R**, “ P 2022, ‘Counting the Presence of the People in a Real Time Contained Area Using Convolutional Neural Network” Proceedings of the International virtual Conference on Machine Learning Applications in Applied Sciences and Mathematics(IVCMASM 2022) , March 2022
10. SugheerthiMeena SK, Vijayalakshmi V, **Dr. Beulah Jayakumari R**, “Survey On Real TimeBigDataAnalytics- ApplicationsAndChallenges”proceedingsofAICTESponsoredInternational e-conference on Electrical, Communication and Computing(ICECC2020) onAugust 20&21 2020.
11. Ashwini, Saradha, **Dr. R. Beulah Jayakumari**, “An Overview Of Expert System In Artificial Intelligence” proceedings of AICTE Sponsored International e- conferenceon Electrical, Communication and Computing (ICECC2020)on August 20&212020.
12. Shakthisree B, **Dr. R. Beulah Jayakumari**,Capsule Networks (CapsNet)” proceedings ofAICTE Sponsored International e-conference on Electrical, Communication and Computing(ICECC2020)on August20&21 2020
13. A Abisha ,**Dr.R.Beulah Jayakumari**, Dr.D.Doreen Hepzibah Miriam, P 2019, “Drought Prediction Using Geo-Spatial Big Data” Proceedings of the International Conference on Emerging Trends in Science and Engineering, march 2019
14. M.Shanjana Mahalakshmi, **Dr.R.BeulahJayakumari**, P2019, “Conversion Of Hand- Gestures To Text And Speech Using internet Of Things” Proceedings of the

- International Conference on Emerging Trends in Science and Engineering, march2019.
6. Nithya M, Priyadharsini E K, Sneha B, **Dr.R.Beulah Jayakumari**, P 2019, “Diagnosis of Blood Borne Diseases” Proceedings of the International Conference on Emerging Trends in Science and Engineering, march 2019
  7. C.Dinesh Kumar, P.Gayathri, J.Gopalakrishnan , R.Gopika, **Dr. R. Beulah Jayakumari**, P2019, „Smart and Secure Insurance Claim Application Using Mobile APP“ Proceedings of the International Conference on Emerging Trends in Science and Engineering, march 2019
  8. B.Sundar, A.Suriya, S.Deepak Kumar, J.Rahul, **Dr.R.Beulah Jayakumari**, P2019, “OUTLINE OF BLOCKCHAIN TECHNOLOGY” Proceedings of the International Conference on Emerging Trends in Science and Engineering, march2019
  9. **Beulah Jayakumari. R**, P 2016, „Car Pooling for Passengers in Real Time City Taxis based on Dynamic Ride Sharing“ Proceedings of the international conference on Emerging Engineering Trends and Science, march 2016.
  10. **Beulah Jayakumari. R**, P 2014, „Congestion Aware Routing in Wireless Sensor Networks“ Proceedings of the International conference on Advanced Computing, Control Systems, Machines and Embedded Technology“ (ICACT2014)on 7 &8March 2014.
  11. **Beulah Jayakumari. R**, P 2013, „Priority based Message Scheduling with Neighborhood buffer check based Message Drop in Delay Tolerant Networks“ Proceedings of the International conference on Recent Advancements in Engineering & Technology, April2013.
  12. Meera. S, **Beulah Jayakumari. R**, Dr. Jawahar Senthilkumar V, P 2012, „Congestion control in Wireless Sensor Networks using Prioritized Interface Queue, Proceedings of the international conference on recent trends in computational methods, communication and controls,pp. 32-37.
  13. **Beulah Jayakumari.R**, S.Vaishnavi , J.Sasirekha, R.Sowmiyarajalakshmi ,K.Saranya, 2018 ,”A Survey on Congestion Control in Wireless Sensor Network Using Multiples Sink“ proceedings of National Conference on Emerging Trends in Science Engineering Technology. PP.196– 202.
  14. **Beulah Jayakumari. R**, Anand B, Bharath V , Sushmitha L K 2015, „ Enhanced Heuristic function based Energy Aware Routing Protocol in Wireless Sensor Networks“ proceedings of National Conference on Recent Trends in Information Technology, march2015.
  15. **BeulahJayakumari.R**, Meera.S, Dr.Jawahar SenthilkumarV, P2012, “Congestion control In Wireless Sensor Networks using Cross Layer Approach” proceedings of National

<p>Conference on computer and communication technology, march 2012.</p> <p>16. <b>Beulah Jayakumari. R</b>, Revathi K, 2011,“Resource and Traffic based Congestion Control inWSN”proceedings of National Conference on Researches in Computer Application &amp; Information Technology, feb 2011.</p> <p>17. <b>Beulah Jayakumari. R</b>, Hannah Rose Esther T 2010,“ Intelligent and Effective Prediction of various Diseases using Naïve Bayes Classifier in Data Mining” proceedings of National Conference on Issues and Trends in Advanced Computing, march 2010.</p> <p>18. <b>Beulah Jayakumari. R</b> 2008,“ Face Detection in a Complex Background” proceedings of National Conference on Recent Innovation in Computing Technology ( NCRICT‘08) march 2008</p>		
<b>Books/Chapters Published</b>		
-		
<b>Fund Received</b>		
<p>1. Grant Rs.30,000 from CFD, Anna University for six day online FDTP titled cloud computingbetween 18.07.2022to 23.07.2022.</p> <p>2. GrantRs.7500 Received from TNSCST –Student Project Scheme Titled 'Drought Prediction Using Geospatial big data' on 18.02.2019</p>		
<b>Patent Applied/Published/Granted</b>		
<p>1. Innovative Indian Patent, IPR India, filed a patent “Smart Precision Seeder For Agriculture Application” Design Accepted and Published, Journal No is 17/2024 and Journal Date is 26/04/2024. Application Number 403064-001</p> <p>2. Innovative Indian Patent, IPR India, filed a patent “Integrated AI Pest Control and Monitoring Agriculture Machine” and Examination Report has been Generated ,Case is Waiting for Examination Report Reply (FER generated on 01/03/2024) Application Number 405997-001</p> <p>3. Innovative Indian Patent, IPR India, filed a patent “AI powered nutrition analyzer for fitness enthusiast” and published on 09.12.2022</p> <p>4. Innovative Indian Patent, IPR India, filed a patent “IOT Based Safety Gadget for Child Safety Monitoring and Notification” and published on 09.12.2022</p>		
CITATIONS	<b>22</b>	
H-INDEX	<b>2</b>	
<b>RESEARCH GUIDANCE DETAILS</b>		
<b>Sl.No</b>	<b>University</b>	<b>Supervisor ID /Reference</b>

1	Anna University, Chennai	-
2	Number of UG Scholars Guided	<b>50</b>
3	Number of PG Scholars Guided	<b>8</b>
4	Number of Ph.D. Scholars Guided	-

5	Number of Ph.D. Scholars Pursuing	-
<b>PROFESSIONALSOCIETYMEMBERSHIPDETAILS</b>		
<b>Sl.No</b>	<b>ProfessionalSocietyName</b>	<b>MemberID</b>
1	Indian Society for Technical Education(ISTE)	LM77468
2	The International Association of Engineers(IAENG)	