

**R. Saranya**

Assistant Professor  
Department of Computer Science  
School of Mathematics and Computer Sciences  
Central University of Tamil Nadu  
Thiruvarur  
Tamil Nadu, India  
E-mail: [saranya@cutn.ac.in](mailto:saranya@cutn.ac.in)  
[saranya@acad.cutn.ac.in](mailto:saranya@acad.cutn.ac.in)



Vidwan Link: <https://cutn.irins.org/profile/59950>

Google Scholar link: [https://scholar.google.co.in/citations?user=\\_qaAzjIAAAAJ&hl=en](https://scholar.google.co.in/citations?user=_qaAzjIAAAAJ&hl=en)

**Educational Qualification**

Examination	Year	Marks / Grade	Division / Class	University / Institution
Ph.D. Computer Science	2015		Highly Commendable	Madurai Kamaraj University
M.E. Computer Science & Engineering	2011	8.69 CGPA	First Class with Distinction	Anna University, Chennai
B.E. Computer Science & Engineering	2008	75%	First Class with Distinction	Anna University, Chennai
+2 (Plus Two)	2004	80%	First Class	State Board of Examinations, Tamil Nadu
10 <sup>th</sup> Std	2002	83%	First Class	Board of Matriculation Examination, Tamil Nadu

**Professional Experience**

Position	Name of the Institution	Duration
Assistant Professor Computer Science (Senior Scale)	Central University of Tamil Nadu Thiruvarur	11.07. 2016 to till date
Assistant Professor Computer Science & Engineering	Pannai College of Engineering and Technology, Sivagangai	26.05.2014 to 19.05.2016
Assistant Professor Computer Science & Engineering	Sethu Institute of Technology , Madurai	15.06.2011 to 30.04.2014

**Top Publications****Refereed Journals**

- Divyasri. S.R , **R.Saranya** and P.Kathiravan.(2023). “*Enhancing Crime Prediction with Knora Dynamic Ensemble Selection and Cross-Validation* “, Eur. Chem. Bull. 2023, 12(Special Issue 5), pp.2698 – 2719, Publisher: Deuton-X Ltd.
- Kiran Kumar Kondru, **Saranya R.** (2023), “*Making raft consensus a little more fault tolerant*”, Eur. Chem. Bull. 2023, 12(Special Issue 5), pp.3763 – 3769, Publisher: Deuton-X Ltd.
- Kiran Kumar Kondru, **R Saranya (2019)**. “*Directed Acyclic Graph-based Distributed Ledgers – An Evolutionary Perspective*”. Int. Journal of Engineering and Advanced Technology (IJEAT),9(1), pp. 6096- 6103
- Ajins Joy and **R. Saranya.** (2019). "A Pilot Research on Android Based Voice Recognition Application." Int. Journal of Recent Technology and Engineering (IJRTE), 8(4), pp. 7272-7277
- Bhaskaruni.V.M. Sai Dileep , S.Bhuvaneshwari , **R.Saranya.**(2019). “A Comprehensive Study on Face Detection and Recognition Techniques”. American International Journal of Research in Science, Technology, Engineering & Mathematics. Special Issue, pp.57-63
- **Saranya, R.,** Kannan, S.S. & Sundaram, S.M. (2019). “*Integrated quantum flow and hidden Markov chain approach for resisting DDoS attack and C-Worm*”. Cluster Computing, 22 (Suppl 6), pp.14299–14310, Springer Nature.
- **Saranya, R.,** Senthamarai Kannan, S.(2016). “*An enhanced hidden markov dynamic bayesian model for resisting camouflaging worm attack study*”. Asian Journal of Information Technology, 15(18) pp.3616 - 3623
- **Saranya, R.,** Senthamarai Kannan, S.(2015). “*An efficient DDOS traffic flooding attack resistance model using quantum flow*”. Int. Journal of Applied Engineering Research ,10(23), pp.43484-43491
- **Saranya, R.** (2014). “*Fault Removal Effectiveness on Software Requirements Specification Using Non-Preemptive Relocation Technique*”. Int. Journal of Engineering and Computer Science,03(06), pp. 6729-6734
- **Saranya, R.** (2014). “*A Top-Down Approach to Overcome Risk on Larger Projects Based on Requirements Elicitation Target Planning*”. Int. Journal of Research in Information Technology,02(04), pp. 244- 261
- **Saranya, R.** (2014). “*Survey on security measures of software requirement engineering*”. Int. journal of computer applications, 90(17),pp.12-19
- **R.Saranya.** (2013). “*Security Measures in Requirement Development Using Defense in Depth*”. Int. Journal of Engineering Research & Technology ,02(08), pp. 2739-2750

Conference or Workshop Proceedings

- Kathiravan, P. Shanmugavadivu P. & **Saranya, R.** (2023). “*Mitigating Imbalanced Data in Online Social Networks using Stratified K-Means Sampling*” , 8<sup>th</sup> International Conference on Business and Industrial Research (ICBIR), Bangkok, Thailand, pp. 883-888 , IEEE, ISBN:979-8-3503-9964-6.
- Kathiravan Pannerselvam , **Saranya Rajiakodi** , Rahul Ponnusamy , Sajeetha Thavareesan.(2023), “*CSSCUTN@DravidianLangTech@RANLP 2023: Abusive comments Detection in Tamil and Telugu*” in 8<sup>th</sup> RANLP 2023 International Workshop, Bulgaria , Association for Computational Linguistics (ACL). – Accepted for presentation.
- Kathiravan, P, **Saranya, R.** (2023) , “*A Review on discovering the knowledge from the Social media discourse on domestic violence against women*”, organized by 8th National Conference on Innovative Computing Techniques (NCICT'23), ISBN: 978-93-95054-52-2.
- D.Kamelesun, **R.Saranya**, Kathiravan, P (2023). “*Predicting Covid-19 Outbreaks: Leveraging Machine Learning and Deep Learning models for Trend Analysis*”, International Conference on Data Science and Applications (ICDSA 2023), Malaviya National Institute of Technology.
- Kathiravam, P., **Saranya, R.** (2023). “*Enhancing Named Entity Recognition for Tamil text: Challenges and solutions*”. National Conference Emerging trends in Computer Science and Technology, ISBN No: 978-81-958687-6-6, pp.214- 218
- Kiran Kumar Kondru , **R.Saranya**.(2023). “*Making RAFT Consensus a little more Fault Tolerant*”. International Conference on Advanced Computing Technologies for Innovative Solutions organized by Gandhigram Rural Institute (ICACTiS 2023), ISBN : 978-93-92063-42-8,pp.199-206
- A. B. Evanjalin, **R. Saranya** and K. K. Kondru. (2021). “*Illustration of a Parallel and Discrete Event Simulator using Scala*,” 2021 First International Conference on Advances in Computing and Future Communication Technologies (ICACFCT), pp. 98-103..IEEE, ISBN:978-1-6654-2076-1.
- Kondru, Kiran Kumar and **R Saranya**. (2019).“*The Evolution of Blockchain – From Chain of Blocks to Direct Acyclic Graph*”. DST Sponsored National Conference on “Blockchain and Smart Contract Technologies”, NIT, Trichy. pp.18-24
- Bhuvanewari, S., & **Saranya, R.** (2020).”*Internet of vehicle based accident detection and management techniques by using vanet: An empirical study*”. In 2020 Fourth International Conference on Inventive Systems and Control (ICISC) pp. 237-244, IEEE,ISBN:978-1-7281-2813-9
- **Saranya, R.**, Kannan, S. S., & Prathap, N. (2015). “*A survey for restricting the DDOS traffic flooding and worm attacks in Internet*”. In 2015 International Conference on Applied and Theoretical Computing and Communication Technology (iCATccT) pp. 251-256,IEEE, ISBN:978-1-4673-9223-5

**Publications of book/book chapters**

- Kathiravan, P., **Saranya, R.**, & Shanmugavadivu P. (2023). “*The impact of COVID-19 on IT services in rural area*”. ICAS-2023 in Green Economics Institute Education, UK – Accepted for publication
- Kathiravan, P., **Saranya, R.**, & Shanmugavadivu P. (2023),” *Intelligent Named Entity-Based Cybercrime Recognition System for Social Media Network Platform*”, Cybersecurity for Decision Makers, CRC Press , Taylor & Francis Group , eBook ISBN – 9781003319887, pages 16.
- Kathiravan, P., **Saranya, R.**, & Sridurga S., (2023).” *Sentiment Analysis of COVID-19 tweets using TextBlob and Machine Learning classifiers - An evaluation to show how COVID -19 opinions is influencing psychological reactions of people’s behaviour in social media*”, Lecture Notes in Networks and Systems ,volume 551 ISBN 978-981-19-6634-7, pp.89-106, Springer Nature.
- Kalivaraprasanna Babu G, Thiyagarajan Paramasivan And **Saranya Rajiakodi**.(2023). “*Proactive Public Healthcare Solution Based On Blockchain For Covid-19*”, Studies in Autonomic, Data-Driven and Industrial Computing (SADIC) ,ISSN 2730-6445, pp. 125-134, Springer Nature.
- Kondru, Kiran Kumar, **R. Saranya**, and Annamma Chacko.(2020). "A Review of distributed supercomputing platforms using Blockchain.". Lecture Notes in Networks and Systems book series, volume 127) ISBN : 978-981-15-4218-3, pp.123-133, Springer Nature.
- **R.Saranya**.(2015). “*Security Mechanisms for Software Requirement Analysis*”. Lulu Book Publications, Hillsborough St,Raleigh, NC 27607, United States of America (USA), ISBN :978-1-329-60878-8.

**Publications Summary**

- SCI / SCIE / Scopus Index Journal Publications: 10
- National/International Conferences: 12 (Scopus indexed :06)
- Books/Book Chapters: 06 (Scopus Indexed: 04)

**Patent Filed:** Smart Jewel Display Box (Application Number: 392758-001) to Intellectual Property India - General of Patents, Designs and Trademarks, Design Office, Kolkata.

**Areas of Interest**

Text analytics and Distributed Systems

**Orientation /Refresher/FDP attended**

- Completed UGC-Sponsored Online Refresher Course in Computer Science & Applications from 22<sup>nd</sup> September to 05<sup>th</sup> October 2021.
- Completed Refresher Course from 13.02.2019 to 05.03.2019 (21 days) conducted by UGC – HRDC, Bharathiar University.

- One - Day Faculty Development Programme on 08.09.2018 in CUTN.

One - Day Workshop on National Digital Library of India & Launching of NDLI and Reader's Club on 15<sup>th</sup> Nov. 2018 in CUTN.

- Faculty Development Programme (FDP101x) on Foundation Program in ICT for Education , 14 days (Online and Offline) conducted by IIT Bombay, sponsored by AICTE from 03<sup>rd</sup> August to 07<sup>th</sup> September 2017.
- Faculty Development Programme (FDP201x) on Pedagogy for Online and Blended Teaching-Learning Process 14 days (Online and Offline) conducted by IIT Bombay, sponsored by AICTE 14<sup>th</sup> September to 12<sup>th</sup> October 2017
- Four days Faculty Development Programme on Problem Solving and Programming using Python, by PSNA College of Engineering & Technology on 27.06.2017 to 30.06.2017, sponsored by CSI Student Branch.
- Attended Orientation Programmed (28 days) from 20.04.2017 to 17.05.2017 conducted by UGC – HRDC of Madurai Kamaraj University, Madurai, Tamilnadu.
- Faculty Improvement Program on Paradigms in Recent Research Methodology held at SIT during 6<sup>th</sup> & 7<sup>th</sup> May 2013
- Faculty Development Training Programme on CS 6201 – Digital Principles and System Design Regional Centre at Madurai, Anna University during the period 11<sup>th</sup> to 17<sup>th</sup> December 2013.
- Faculty Development Programme on Research based simulation techniques in image processing and mobile Computing held at K.L.N. College of Information Technology, during 09<sup>th</sup> & 10<sup>th</sup> Feb.2012
- Staff Development Programme on Recent Advances in Mobile and Pervasive Computing held at SIT during 7<sup>th</sup> to 18<sup>th</sup> May 2012
- Faculty Development Programme on Artificial Intelligence Sponsored by Anna University, Chennai held at SIT, during 3<sup>rd</sup> to 9<sup>th</sup> December 2012
- Faculty Development Program on Faculty Induction Program held at SIT, during period 14<sup>th</sup> to 16<sup>th</sup> July, 2011
- Faculty Development Programme on Rational Application Developer held at K.L.N. College of Engineering, during 7<sup>th</sup> to 10<sup>th</sup> December 2011

**Workshops Seminar & Webinars attended**

- Five – Day National Webinar on Artificial Intelligence and its Multi-Disciplinary Stances (W- AIMS 2022) conducted by Gandhigram Rural Institute held on 05.09.2022 - 09.09.2022.
- Virtual International Workshop on Artificial Intelligence and its Multi-Disciplinary Stances (AIMS - 2022) conducted by Gandhigram Rural Institute held on 23.03.2022 - 25.03.2022.
- Two days TEQIP Sponsored IEEE Workshop on IoT using OpenCV Platform and Raspberry Pi by TCE, Madurai, Sponsored by TEQIP during 22.02.2017 to 23.02.2017
- One day International Workshop on Advanced Ethical Hacking(HACK-2017) - 13.08.2017 at IIT Madras Research Park, Chennai.
- Two-Day Workshop on Computational Intelligence for Big Data Analytics by TCE, Madurai, Sponsored by DST SERB during 17.11.2016 to 18.11.2016.
- One day Workshop on Research Methodology, by Anna University Chennai during 15.12.2014.
- Workshop on LaTeX conducted by Spoken Tutorial project, IIT Bombay, funded by National Mission an Education Through ICT, MHRD, Govt of India, 09.12.2013
- Workshop on Work-Life Balance of Today's Women by Women Empowerment Cell at SIT, 05.12.2013
- National Webinar on Research Methodologies & Property Rights by Dept. of ICE at SIT, 28.11.2013 to 29.11.2013
- Workshop on Image Processing Dept. of IT at SIT, 21.08.2013 to 22.08.2013.
- National Webinar on Intelligent Computing and Data Mining by Dept. of IT at SIT, during 21.12.2013 to 22.12.2013
- National Webinar on Security and Privacy in Cloud Computing by Dept. of CSE at KLN College of Information Technology, 10.08.2012 to 11.08.2012
- National Seminar on Security Issues in Mobile AD-HOC Networks by Dept. of CSE at SIT, 02.08.2012 to 03.08.2012
- National Workshop on Medical Image Processing Dept. of IT at SIT, September 16.09.2011.
- National Workshop on Data Mining Best Practice Dept. of IT at SIT, September 09.09.2011

**Workshops and Extension Activities Organized in CUTN**

- Organized A Five Day International Webinar On “Disruptive Technologies In Smart Computing For Today And Tomorrow” (DTS:T&T’2020) from 7<sup>th</sup> September 2020 to 11<sup>th</sup> September 2020.
- Coordinator and Organizer for Two – Day National Workshop on IoT using Raspberry Pi held on 5<sup>th</sup> and 6<sup>th</sup> of April 2018.
- Organizing secretary for One- Day National workshop Orientation to Research Fundamentals and Recent innovations in Computer Science dated 24.02.2018 funded by CUTN
- Organized A Five-Day National Workshop on Digitization of Resources using Open Source Software : DSpace, sponsored by CUTN and INFLIBNET held on 20<sup>th</sup> to 24<sup>th</sup> March, 2017
- Coordinator for “Zenith 2017” Immayathai Nokki” – Career Guidance Programme during 24<sup>th</sup> March, 2017
- Resource person - Career Guidance Programme for 10th and 12th students happened in Neelan matriculation school Needamangalam on 07.04.2017.

**Number of Invited Talks delivered: More than 35****New courses designed in CUTN**

- CDE01 - Basics of programming
- CSCEC16 - Ethical Hacking
- CSCEC18 - Internet of Things for Health Care
- CSCEC22 - Dockers and Kubernetes
- CSCEC23 - Computational Social Science

**Ph.D. Guidance in CUTN : 03 (Ongoing)****Research Domains**

- Mr.Kiran Kumar Kondru -Distributed Consensus Algorithms
- Mr.P.Kathiravan - Social Media Data Analytics
- Mr. G. Kalivaraprasanna Babu - Blockchain in Healthcare

**Teaching in CUTN**

- MSCT13 – Computer Organization
- MSCT22 – Networks & its Lab

- CSE01 - Basics of programming
- MSCE7 - Internet of Things (IoT)
- MSCT41 – Web services
- MSCT24 – Web Technology & its Lab
- MSCT25 - Theory of Computation
- MSCAEC1 - Cyber Security
- CSC1005 - Introduction to Programming using Python & its Lab
- CSC5005 - Data Warehousing and Data Mining

**Projects done by M.Sc. Students in CUTN under my Guidance**

- Real Time Face Recognition Attendance management system using Facenet Deep Convolutional network by Rahul Kumar during May 2018.
- Flower processing by Suvetha .J during May 2018.
- Rice grading system by Swarnalatha during May 2018.
- Annotate : An Android App by Ajins Joy during May 2019.
- SVM based signature analysis using MATLAB by Abishekavalli .G during May 2019
- Simulation of smart helmet with collision detection by S. Bhuvaneshwari during May 2019
- Comparison Analysis of FP growth and Apriori algorithm for market basket dataset by Pavalavathi during May 2019
- Object detection using Tensorflow with MS-COCO dataset by Sai Dileep Bashkarum V.M during May 2019
- Handwritten digit recognition using CNN by KADALI SAI KALYAN during May 2020
- An implementation of notarization in hyperledger fabric by Vignesh H.M during May 2020
- Implementation of improved logistic regression model for diabetes prediction using K-Means clustering by Annama Chacko during May 2020
- Simple trading network in blockchain by Urathi Hemanath Kumar during May 2020
- Stock market analysis and prediction by Bhupathi Dhananjay during May 2020
- Malware detection using Data mining Techniques by Beulah Evanjalini during May 2021
- Comparative Analysis of Classification Models for Diabetes Prediction using Machine Learning by B.Bharathi during May 2021



- Crime Detection and Prediction system using Machine Learning by Manda Amulya during May 2021
- Sentimental Analysis on Covid – 19 By Sridurga . S during May 2021
- Crime Data Analysis using ensemble classifiers and deep Learning algorithms by Divyasri . S during May 2022
- Fake news detection using various ensemble method in machine learning by Susminu S Kumar during May 2022
- Face mask detection using Deep Learning models in Real Time videos by Anshid K A during May 2022
- Predictive analysis of Covid-19 dataset using Machine Learning algorithms by Kamelesun.D during May 2022
- Dstraw – TWEET Scrapping Web Application using DJANGO by Kurias Jose during May 2023
- Krishi-Mitra An AI based Application for Improved Crop Management by Nilesh Kumar during May 2023
- Twitter Text based Emotion Classification by Shafas PV during May 2023
- Sentimental Analysis of Internet Memes by Velmala Manoj during May 2023

### **Major Administrative Responsibilities in CUTN**

- Warden, Old Girls Hostel (Kurinji Hostel) from January 2020 to 2022
- Member Anti Ragging Squad of CUTN from January 2020 to 2022
- Member – Ph.D. Admission Committee – Dept. of Computer Science from 2017 to till date
- Department Coordinator for NET coaching class from 2018 to 2022
- Department Timetable Coordinator from 2019 to 2022
- Department Admission Committee Member
- Department NAAC Coordinator
- Member in Convocation Committee (Reception)
- Member – Department PG admission committee from 2016 to till date
- Member -Finance Committee – Dept. of Computer Science from 2016 to 2021
- CUTN – Computer Science Department Exam Coordinator from 2017 to 2022
- Member - Sub-Committees (Perception) for NIRF – 2017
- Member – Automation of activities committee – Employee centric during Nov.2017
- Student Seminar coordinator during October 2017
- Member, Board of Studies, Department of Computer Science, Central University of

Tamil Nadu from 2016 to till date

**Membership in Academic Professional Body:**

- Member of Soft Computing Research Society, ID : 2022-03-16-2813,
- Life member (Member No. 11503352), Grade : Associate – Computer Society of India
- Life member No. 160949 – International Association of Engineers (IAENG)
- Member in IEEE, Member number: 94254189

**Other Relevant Information**

- Reviewer for Information Processing & Management Journal , Elsevier
- Reviewer for IEEE Internet of Things Journal, IEEE
- Program Committee Member in International conference on Speech & Language Technology for Low-resource Languages (SPELLL) – Tagged Conference from 2023
- Acted as Expert member in “Road traffic injury and Public health importance” at CUTN.
- Acted as Program Committee Member & Reviewer for 2022 IEEE World Conference on Applied Intelligence and Computing (AIC 2022) conducted by Rajkiya Engineering College, Banda.
- Acted as External Resource person for viva voce for practical examinations for MCA and BCA courses ( I and III year), IGNOU , Gulf Center for University Education , Kuwait during April 2022.
- Conducted Science Day celebration for students on 28th Jan.2019 in CUTN
- Acted as Question paper setter for Vignan University, Annamalai University , Mother Teresa Women's University , Bharathidasan University.
- Developed ICT based Open Education Resource (OER) for the course Networks for I year M.Sc (Computer Science) Students of CUTN and conducted flipped classroom and active learning strategies.
- Resource person for Vigilance Awareness Week (31.10.2016 to 05.11.2016) in CUTN
- Received Certificate of Excellence for Cent-percent (100 %) Result in the subject of Computer Programming, during the year 2013, at SIT, Virudhunagar
- Received Certificate of Excellence for 98.55% Result the subject of User Interface Design, during the year 2013, at SIT, Virudhunagar
- Won FIRST prize in AICTE Sponsored Technical Project Exhibition on Emerging Computer, Communication and Information Technologies held during Oct 7-11, 2013

- First Class with Distinction in BE-CSE at Anna University, Chennai
- First Class with Distinction in ME-CSE at Anna University, Chennai
- Got Placed in Hexaware Technologies as Software Engineer Trainee in the year 2008-09

**Personal Details**

- Father : Dr.M.Rajiakodi
- Mother : Mrs.P.Indurani
- DoB : 11.10.1986
- Husband : Dr.N.Prathap
- Children : 2 sons

\*\*\*\*\*