

Head of Department

Dr. C. Madana Kumar Reddy
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Educational Qualifications:

- Ph.D., in Computer Science from Dravidian University , Kuppam (2016)
- M.Phil., in Computer Science from Madurai Kamaraj University, Madurai (2005)
- M.C.A., from Sri Krishnadevaraya University, Anantapur (1998)
- B.Sc., in Computer Science from Sri Krishnadevaraya University, Anantapur (1995)

Experience : 25+ Years

- Working as an HOD in Department of Computer Applications, Annamacharya University (Formerly Annamacharya Institute of Technology and Sciences, Rajampet, Annamayya(Dt). (01-11-2016 and Continuing)
- Worked as an Associate Professor in Department of Computer Applications, Annamacharya Institute of Technology and Sciences, Rajampet, Kadapa(Dt). (01-10- 2007 to 31-10-2016)
- Worked as an Assistant Professor in Department of Computer Applications, Annamacharya Institute of Technology and Sciences, Rajampet, Kadapa(Dt). (27-08- 2001 to 30-09-2007)
- Worked as an Assistant Professor in C.S.E. Department, Kottam Thulasireddy Memorial College Engineering, Gadwal, Mahaboob Nagar(Dt) (06-09-2000 to 26-08-2001)
- Worked as a Lecturer in B.C.A., at Osmania College, Kurnool. (29-12-1998 to 05-09- 2000)

Ratifications:

- Ratified as Associate Professor in MCA Department by JNTUA with effect from 06-05-2023.
- Ratified as Assistant Professor in MCA Department by JNTUA with effect from 04-09-2010.

Books Published:

- The book titled with “Programming in AJAX for Complete Beginners” by NTL Publications, Tamil Nadu, India. First Edition, 12th July 2023, Pages- 194, Price- 500/-, ISBN No. 978-81-964712-4-8
- The book titled with “A Programmer Guide to Pro ADO.NET for Beginners” by NTL Publications, Tamil Nadu, India. First Edition, 12th July 2023, Pages- 179, Price- 480/-, ISBN No. 978-81-

964712-2-4

- The book titled with “Operating Systems Made Easy” by University Science Press (an imprint of Laxmi publications), New Delhi. First Edition, January 2009, Pages- 103, ISBN No. 978-81-318-0743-9
- The book (SWAYAM NPTEL Course) titled with “Introduction to Programming in C” offered by IIT Kanpur, English content translated to Telugu language.

Chapters Published:

- Published a chapter entitled “Google Appstore Data Classification Using ML Based Naïve’s Bayes Algorithm: A Review” in the book “Modern Approaches in Machine Learning and Cognitive Science: A Walkthrough, Volume 1117. Springer, Cham, 14th January 2024, PP.147-158, DOI: https://doi.org/10.1007/978-3-031-43009-1_14. ch014, Print ISBN978-3-031-43008-4, Online ISBN- 978-3-031-43009-1. ISSN 1860-9503.
- Published a chapter entitled “Knowledge-Based Decision Support System for Analyzing the Relevancies of Various Attributes Based on Their Characteristics” in the book “Web Data Mining and the Development of Knowledge-Based Decision Support Systems” Information Science Reference (An imprint of IGI Global), January 2017, PP.184-193, DOI: 10.4018/978-1-5225-1877-8.ch011, ISBN-978-1-5225-1877-8.
- Published a chapter entitled “Reliability and Scalability of Service Oriented Architecture in Web Services: Signature Verification” in the book “Design Solutions for improving Website Quality and Effectiveness”, Information Science Reference (An imprint of IGI Global), January 2016, PP. 342-356, DOI: 10.4018/978-1-4666-9764-5.ch015, ISBN- 978-1-4666-9764-5.

Paper Publications:

- Published a paper entitled “Smart Contracts and Anomaly Detection in SDN environment using Cloud-Edge Integration Model” in IEEE, pp 1-6, Published: 21 February 2024, Print on Demand(PoD) ISBN:979-8-3503-5977-0, Electronic ISBN:979-8-3503-5976-3, DOI: <https://doi.org/10.1109/ICERCS57948.2023.10434076>.
- Published a paper entitled “A Study on Predicting Skilled Employees Using Machine Learning Techniques” in Computational Intelligence in Machine Learning, Volume 1106, PP 247–258, Published: 21 February 2024, Print ISBN 978-981-99-7953-0, Online ISBN 978-981-99-7954-7, Springer, Singapore, DOI: https://doi.org/10.1007/978-981-99-7954-7_23.
- Published a paper entitled “Design and implementation of a wireless communication-based sprinkler irrigation system with seed sowing functionality” in Journal of SN Applied Sciences, Volume 5, Article number: 379 (2023) Open access, Published: 02 December 2023, ISSN: 2523-3971 (Online) DOI: <https://doi.org/10.1007/s42452-023-05556-9>. Indexed in Web of Science’s Emerging Sources Citation Index (ESCI), SCOPUS, Ei Compendex, DOAJ and others.
- Published a paper entitled “Enhanced Crash Testing with Sensor-embedded Bumpers: Towards

More Reliable Simulation Models” in Journal of European Chemical Bulletin, Volume 12, Issue 3, 2023, PP. 5234–5250, ISSN: 2063-5346 DOI: 10.31838/ecb/2023.12.s3.583.

- Published a paper entitled “IOT Based Smart Blood Bank Services for Healthcare Applications” in Journal of Education and Society, Volume 46, Issue 03, No. 27, April-June 2023, PP. 80-89, ISSN: 2278-6864.
- Published a paper entitled “Ingrained Dark-Vision Structure for Identifying Objects and People” in Journal of Fundamental & Comparative Research, Volume 9, Issue 1, No. 7, January – June 2023, PP. 114-119, ISSN: 2277-7067.
- Published a paper entitled “Humidity as well as Temperature Tracking related Internet of Things with Arduino UNO” in International Journal of humanities, Law and Social Sciences, Volume 9, Issue 1, No. 8, 2022, PP. 152-158, ISSN: 2348-8301.
- Published a paper entitled “Health Monitoring Systems by using IOT Devices in the Real time Environment” in International Journal of Engineering Research, Volume 8, Issue 4, October 2019, PP. 87-90, ISSN: 2319-6890.
- Published a paper entitled “Service Oriented Architecture using ISO RM-ODP with respect to Computational Viewpoint” in International Journal of Innovative Research in Science, Engineering and Technology, Volume 3, Issue 8, August 2014, PP. 15472- 15480, ISSN: 2319-8753.
- Published a paper entitled “Service Oriented Architecture using ISO RM-ODP with respect to Engineering and Technology Viewpoints” in International Journal of Technology and Engineering System (IJTES), Volume 3 Issue 1 January- March 2012, PP. 7-11, ISSN: 0976-1345.
- Published a paper entitled “A Survey on Reliability and Scalability of Service Oriented Architecture using web services in business organizations” in International journal of Computer Applications in Engineering Technology and Sciences, Volume 3 Issue 1 October, 2010-March, 2011, PP. 36-41, ISSN: 0974-3596.

International Conferences:

- Presented a paper entitled “Enhancing Sustainability and Efficiency through Automation and Wireless Sensor Network-Controlled Irrigation System” in International Conference on 2nd International Conference on Communication and Computing Technology (ICCICT-2024), held during 26th -27th April, 2024, Organized by KSR College of Engineering, Tiruchengode, Namakkal, Tamil Nadu, India.
- Presented a paper entitled “Smart contracts and Anomaly Detection in SDN Environment using Cloud-Edge Integration Model” in International Conference on Emerging research in Computational Science (ICERCS)-2023, held during 07th -09th December, 2023, Organized by Karpagam Academy of Higher Education, Coimbatore, Tamil Nadu, India.

- Presented a paper entitled “A study on predicting skilled employees using machine learning techniques” in International Conference on Computational Intelligence in Machine Learning (ICCIML), held during 18th -19th November, 2022, Organized by Geethanjali College of Engineering & Technology, Hyderabad, India.
- Presented a paper entitled “Cyber Physical Security Systems basic possible breaches and counter measures for safe guarding the systems data” in International Conference on Smart Computing and Control of Systems(ICSCCS), held during 17th -19th October, 2019, Organized by Sree Vidyanikethan Engineering College (Autonomous), Tirupati, Andhra Pradesh, India. ISBN Number - 978-93-5391-897-2 (Issue Date 19-11-2019).
- Presented a paper entitled “Service Oriented Architecture Using ISO Reference Model for Open Distributed Processing with respect to Information Viewpoint“ in 3rd International Conference on Science, Engineering and Technology (SET) November 17-18, 2011 Organized by School of Mechanical and Building Sciences (SMBS), VIT University, Vellore-632 014, Tamil Nadu, India. Pp. 790-798. Volume.5.
- Presented a paper entitled “Data Mining: An Analysis of Attribute Relevance with its Characterization and Comparison” in 2009 IEEE International Advance Computing Conference(IACC09), March 6-7, 2009, Organized by IEEE Delhi section at Thapar University, Patiala, Punjab. PP.2834 to 2838.
- Presented a paper entitled “Information Security in Computer Networks “ in International Conference on Advanced Computing & Communication Technologies for High performance Applications, September 24-26, 2008, Organized by Federal Institute of Science and Technology, Angamaly, Cochin, Kerala.

Patents:

- Patent published on 01-03-2024 (filed on 06-02-2024) with the Title of the Invention as “Integrated IOT Solutions for Enhanced Communication in Electrical and Electronic Systems” (Application Number: 202421007999)
- Patent published on 06-10-2023 (filed on 03-07-2023) with the Title of the Invention as “Machine learning-based closed-loop mixture of concrete equipment and the method” (Application Number: 202341044495)

Board of Studies:

- Chairman of MCA Board of Studies, Annamacharya University, Rajampet since 01-08-2024.
- Chairman of MCA Board of Studies, Annamacharya Institute of Technology and Sciences, Rajampet since 01-11-2016 to 31-07-2024.
- Member of MCA Board of Studies, Annamacharya Institute of Technology and Sciences, Rajampet from 01-08-2011 to 01-08-2013.

SWAYAM NPTEL Achievements:

- Secured Elite + Gold award in AICTE NPTEL FDP Programme on “Programming in java” conducted by IIT Kharagpur from January to April, 2019 (12 weeks course).
- Stand as Topper (in top 5%) in NPTEL–AICTE Faculty Development Programme on “Software Engineering” conducted by IIT, Kharagpur, from 30-Jul-2018 to 19-Oct-2018 (12 week course).
- Completed “Computer networks and Internet Protocol” course conducted by IIT Kharagpur with Score 94% from January to April, 2020 (12 weeks course).

SWAYAM NPTEL E-Content Translations:

- SWAYAM NPTEL Course “Software Project Management (106105218)” offered by IIT Kharagpur, Files of English content translated to Telugu language.
- SWAYAM NPTEL Course “Introduction to Industry 4.0 and Industrial Internet of Things (106105195)” offered by IIT Kharagpur, Files of English content translated to Telugu language.
- SWAYAM NPTEL Course “Introduction to Programming in C” offered by IIT Kanpur, Files of English content translated to Telugu language.
- SWAYAM NPTEL Course “Programming in Java” offered by IIT Kharagpur, Files of English content translated to Telugu language.

Memberships:

- Member in AP ICET-2021 admissions committee .
- Indian Society for Technical Education (ISTE), Membership number is LM–136551.
- International Association of Engineers (IAENG), Membership number is 179210.
- International Economics Development Research Center (IEDRC), Membership number is 90080835.
- Association for Computing Machinery (ACM), Membership number is : 2425914

Reviewer:

- Reviewer for IJECRT (International Journal of Engineering Computational Research and Technology)
- Reviewer for the book the book Design Solutions for improving Website Quality and Effectiveness, Information Science Reference (An imprint of IGI Global), January 2016, ISBN-978-1-4666-9764-5.

Researcher IDs:

- ORC ID - 0000-0001-6297-4810
- WOS ID- ABD-8609-2021
- Vidwan ID – 239357
- Scopus ID - 58739863700
- Google scholar ID - 8myQgJoAAAAJ

National Conferences:

- Presented a paper entitled “Proposed Service Oriented Architecture using ISO Reference model for Open Distributed Processing” in National Conference on Information Technology and its Applications (NITA-2K11), 25-27 November, 2011, organized by Department of Computer Science, Sri Venkateswara University, Tirupati, Andhra Pradesh.
- Presented a paper entitled “Image processing:Image Compression” in National Conference on Speech, Image & video Processing, January 10-11, 2008, Organized by Shri sant Gajanan Maharaj College of Engineering, Shegaon, Maharashtra
- Presented a Paper entitled “Information Security in Computer Networks “ in National Conference on Information Security, November 17-18 , 2007, Organized by Velagapude Ramakrishna Siddhartha Engineering College, Vijayawada, Andhra Pradesh.

Workshops (FDPs):

- Participated in One week Faculty Development program on "Exploring New Frontiers in Teaching Tools, AI and Data analytics" from 29/07/2024 to 02/08/2024 Organized by MEASI Institute of Information Technology, Peter’s Road, Royapettah, Chennai.
- Participated in One Day National Level Faculty Development program on "Research Funding Opportunities" on 14/02/2024 Organized by ACE Engineering College, Hyderabad.
- Participated in One week Faculty Development program on "Blockchain Technology" from 08/01/2024 to 12/01/2024 Organized by Ramrao Adik Institute of Technology - D. Y Patil Deemed to be University, Bishop Heber College and SR University in Collaboration with ExcelR Edtech Pvt. Ltd.
- Participated in One week National Level Faculty Development program on "Cloud Infrastructure (AWS)" from 21/08/2023 to 25/08/2023 Organized by Annamacharya Institute of Technology and Sciences (Autonomous) Rajampet, Andhra Pradesh in collaboration with Brainovision Solutions India Pvt. Ltd. and AICTE (Certificate ID- B23AFDP2672).
- Participated in webinar on "Research funding and Technical writing" on 11-07-2023 at Vardhaman College of Engineering, Hyderabad, Telangana.
- Participated in One week Faculty Development program on "Artificial Intelligence and Data Analytics for Engineering Applications" from 12/06/2023 to 16/06/2023 jointly organized by Aditya College of Engineering, Madanapalle and JNTUA in association with ISTE.
- Participated in One week online Faculty Development program on "Data Science and Chat GPT" from 15/05/2023 to 19/05/2023 Organized by KL Deemed to be University in collaboration with ExcelR.
- Participated in One week online Faculty Development program on "AWS (Amazon Web Services)" from 27/02/2023 to 03/03/2023 Organized by AVS Engineering College in collaboration with ExcelR, Salem,

Tamilnadu.

- **Participated and successfully completed 5-day online Faculty Development program on the theme "Inculcating Universal Human Values in Technical Education" organized by All India Council for Technical Education (AICTE) from 16th January to 20th January 2023 (F.No AICTE/FDP-SI/OnlineWorkshop/201/169651).**
- Participated in One week online Faculty Development program on "Emerging Trends in Machine Learning and Deep Learning Techniques" from 02/01/2023 to 06/01/2023 at Madanapalle Institute of Technology and Science, Madanapalle, Andhra Pradesh.
- Participated in One week online Faculty Development program on "NEP 2020 Implementation in Higher Education Institutes" from 09/05/2022 to 13/05/2022 at Annamacharya Institute of Technology and Sciences (Autonomous), Rajampet, Andhra Pradesh. ((Certificate No:ICT-2086/22).
- Participated in AICTE recognized Short Term Course on "Artificial Intelligence and Big Data Analysis for Electrical Engineering (in collaboration with MathWorks) through ICT" from 07/03/2022 to 11/03/2022 at Annamacharya Institute of Technology and Sciences (Autonomous), Rajampet, Andhra Pradesh. (Certificate No:ICT/64/21-22).
- Participated in One day online webinar program on "Cloud Technologies In The Real World" on 14-08-2021 at Annamacharya Institute of Technology and Sciences (Autonomous), Rajampet, Andhra Pradesh.
- Participated in AICTE Sponsored One week online webinar series-21 program on "Recent Advancements of Soft Computing Techniques in Applied Electronics" from 15-06-2021 to 19-06-2021 at Annamacharya Institute of Technology and Sciences (Autonomous), Rajampet, Andhra Pradesh.
- Participated in AICTE Sponsored One week National Level on "Explainable Artificial Intelligence and Machine Learning for Solving Learning Problems using Python and Tensorflow" from 08-02-2021 to 13-02-2021 at Srenivasa Institute of Technology and Management Studies (Autonomous), Chittoor, Andhra Pradesh.
- Participated in AICTE Sponsored One week National Level AICTE Training And Learning (ATAL) Academy Online FDP on "Internet of Things (IoT)" from 21-9-2020 to 25-9-2020 at ANNA UNIVERSITY. (No:ATAL/2020/1600325795).
- Participated in AICTE Sponsored One week National Level AICTE Training And Learning (ATAL) Academy Online FDP on "Cyber Security" from 24-8-2020 to 28-8- 2020 at St. Joseph's College of Engineering. (No:ATAL/2020/1597304522).
- Participated in Three Day Faculty Development Programme on "Excerpts of Research Methodology and Processes", organized by Tirumala Engineering College, Narasaraopet, Guntur (Dt.) during 20th – 22nd July 2020.
- Participated in IIT Bombay Sponsored One week Faculty Development Programme on "Advances in Python, Python for Data Science,and Cyber Security", organized by Chadalawada Ramanamma Engineering College, Tirupati during 21st – 27th May 2020.
- Participated in STP – IIT Bombay sponsored one week National Level FDP on "ICT Tools", Organized by the department of Information Technology, Sri Vidyanikethan Engineering College, Tirupati during 11th – 16th May 2020.
- Participated in AICTE Sponsored Two week National Level FDP on "Big Daa Analytics for Cyber Physical Systems:Research Challenges and Opportunities", Organized by the department of Computer Science and Engineering, Sri Venkateswara College of Engineering, Tirupathi during 09th – 22nd December 2019.
- Participated in IBM Smartbridge Sponsored One week National Level FDP on "Artificial Intelligence with IBM Watson", Organized by Annamacharya Institute of Technology and Sciences, Rajampet, during 2nd – 7th December 2019.
- Participated in AICTE Sponsored Two week National Level FDP on "Cyber Security", Organized by the

department of Computer Science and Engineering, KSRRM College of Engineering, Kadapa during 11th – 23rd November 2019.

- Participated in two day DST-ICPS Sponsored National level Workshop on “Multi Agent System and its Application in Cyber Physical Micro – Grid” organized by Annamacharya Institute of Technology and Sciences, Rajampet on 3rd and 4th August, 2019.
- Participated in DST Sponsored Two week Faculty Development Programme on "Emerging Trends and Research Challenges in Cyber Security, Cryptanalysis and Cyber Physical System", organized by Chadalawada Ramanamma Engineering College, Tirupati during 10th – 22nd June 2019.
- Participated in AICTE NPTEL FDP Programme on “Programming in java” conducted by IIT Kharagpur from January to April, 2019 (Elite + Gold).
- Participated in three day workshop on Cyber Security – Hands on Practice workshop organized by Annamacharya Institute of Technology and Sciences, Rajampet during 14- 16 March, 2019.
- Participated in one week AICTE Short Term Course on Artificial Intelligence and optimization through ICT, organized by Annamacharya Institute of Technology and Sciences, Rajampet From 21-01-2019 to 25-01-2019.
- Participated in three day workshop on Entrepreneurship Awareness Camp (EAC) organized by Annamacharya Institute of Technology and Sciences, Rajampet during 13- 15 December, 2018.
- Participated in NPTEL–AICTE Faculty Development Programme on “Software Engineering” conducted by IIT, Kharagpur, from 30-Jul-2018 to 19-Oct-2018(12 week course (Topper (in top 5%))).
- Participated in AICTE Sponsored Two week National Level FDP on "Challenges and Current Solutions of Cyber Physical Systems”, conducted by the department of Information Technology, Sri Vidyanikethan Engineering College, Tirupati from December 11th, 2017 to December 23rd 2017.
- Participated in AICTE approved Two-week FDP on “The impact of injecting moral values into the society to build a more strong bharaat” conducted by Y.S.R. Engineering College of Yogi Vemana Univeristy, Proddatur, Y.S.R (Dt) from November 20th, 2017 to December 2nd 2017.
- Participated in National workshop “Popularisation of Remote Sensing Based Maps & Geospatial Information” Jointly organized by ISRS & ISRO on August 11th 2017.
- **Participated in AICTE approved Four-week FDP on “Use of ICT in Education for online and Blended Learning” conducted by IIT Bombay from May 2nd, 2016 to July 10th 2016.**
- Participated in one day Research Oriented Workshop on “New Innovations in Cloud Computing for Big Data Applications” under Technical Education Quality Improvement Programme (TEQIP), Organized by the Department of IT at Sri Vidyanikethan Engineering College, Tirupati, on 13th August, 2016.
- Participated in one day NPTEL(National Programme on Technology Enhanced Learning) workshop, Organized by IIT Madras at IIT Tirupati, on 30th June, 2016.
- Participated in one day National level IBM Seminar sponsored by Dept. of Science & Technology, Govt. of India on “Cloud Computing in Mainframes”, Organized by TIFAC- CORE at VIT University, Vellore on 20th July, 2013.
- Participated in two-week ISTE workshop on “Database Management Systems”, Organized by IIT Bombay held under MHRD at Sri venkateswara College of Engineering, Sri Venkateswara university, Tirupati, During 21st to 31st May, 2013.
- Participated in Four day AICTE Sponsored National level workshop on “Research methodology to Enhance the Research Skills”, Organized by the Department of CSE at K L University, Vaddeswaram, Guntur Dt., During 15th to 18th May, 2013.
- Participated in two day Faculty Development Programme on “Wireless Sensor Networks– Applications and Challenges” under TEQIP, Organized by the Department of IT at Sri Vidyanikethan Engineering

College, Tirupati, during 20th to 21st April, 2013.

- Participated in three day Faculty Development Programme on “Recent Trends and Research Perspective in Data Warehousing and Data Mining” under TEQIP, Organized by the Department of CSE at Sri Vidyanikethan Engineering College, Tirupati, during 30th March to 1st April, 2013.
- Participated in two day Faculty Development Programme on “Wireless Networks and Simulation Through NS-2” under TEQIP, Organized by the Department of CSE at Sri Vidyanikethan Engineering College, Tirupati, during 8th to 9th March, 2013.
- Participated in three day training in IBM SEED Program on “Rational Software Architect”, Organized by Annamacharya Institute of Technology and Sciences, During 1st to 3rd February, 2013.
- Participated in one day National level workshop on “Design and Architecture of ETL”, Organized by the Department of Computer Applications, Sri Vidyanikethan Engineering College, Tirupati, on 17th November, 2012.
- Participated in two day National level workshop for faculty on “Research methodologies”, Organized by the Department of CSE at Sri Venkateswara College of Engineering, Sri Venkateswara university, Tirupati, During 29-30th September, 2012.
- Participated in One day National level workshop for faculty on “Recent Trends in Software Testing”, Organized by the Department of MCA at Madanapalle Institute of Technology and Sciences, Madanapalle on 28th October, 2011.
- Participated in AICTE Sponsored two day National level workshop on “Advance J2EE Technologies”, Organized by Sri Vidyanikethan Engineering College, Tirupati, During 27th to 28th March, 2010
- Participated in AICTE Sponsored two day National level workshop on “Foundations of Middle Ware Technologies”, Organized by Sri Vidyanikethan Engineering College, Tirupati, During 6th to 7th March, 2010
- Participated in one day workshop on “Systems Integration: The Microsoft way”, Organized by Microsoft & IEG/JKC through MANA TV on 20th February, 2009.
- Paper entitled “Image processing: Image compression” in National Workshop on intelligent data Analytics and Image processing, Organized by Bannari Amman Institute of Technology, Sathyamangalam, Tamilnadu, During 26th to 27th October, 2007.

Departmental Activities:

- Heading the Department of Computer Applications,
- Casting the class time tables as well as individual time tables for the Computer Applications Department.

Other Activities:

- Many speeches related to computers field and other educational areas are broadcasted through All India Radio.
- Reviewer for various international publishers