Faculty Profile

Basic Information:



NAME	**Dr. C. MADANA KUMAR REDDY**
DESIGNATION	**Associate Professor & HOD**
DEPARTMENT	**MCA**
DATE OF BIRTH	**18-08-1975**
DATE OF JOINING	**27-08-2001**
EMAIL ID	**cmkr@aitsrajampet.ac.in** **cmkrcmkr@gmail.com**
EMPLOYEE ID	**36**

Academic Profile:

Qualification	Name of the Board/University	Year
Ph.D	Dravidian University, Kuppam	2016
M.Phil	Madurai Kamaraj University, Madurai	2005
MCA	Sri Krishnadevaraya University, Anantapur	1998
B.Sc.	Sri Krishnadevaraya University, Anantapur	1995

Research Details:

1. Areas of Specialization		Software Engineering, Artificial Intelligence, Machine Learning, Computer Networks
2. No. of Publications		21
3. Awards Received		Excellence in Service
4. Research Guidance		
	No. of PhD Guiding:	6
	No. of MCA. Guided:	130
	No. of B.Tech. Guided:	Nil
5. Details of Professional Membership:		ISTE Life Membership (Number LM-136551)

6. Subjects Taught	1. Software Engineering 2. Computer Organization 3. Big Data Analytics 4. Software Testing Methodologies 5. Operating Systems 6. Computer Networks 7. Artificial Intelligence 8. Information Security 9. Data Ware Housing and Data Mining 10. Data Base Management Systems 11. Management Information Systems 12. Java Progamming 13. C Programming 14. Business Data Processing using COBOL 15. System Software 16. Operations Research 17. Office Automation 18. Fundamentals of Computers

Experience: 28 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 of Engineering, Gadwal, Mahaboob Nagar (Dt) (06-09-2000 to 26-08-2001)
- Worked as a Lecturer in B.C.A., at Osmania College, Kumool. (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.

SWAYAM NPTEL Achievements:

- Top performing mentor appreciation for the course "Introduction to Internet of Things" July-December 2024 (12 Weeks Course).
- Secured Elite+ Gold award in NPTEL-AICTE FDP Programme on "Programming injava" 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 19-0ct-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.

Publication Details:

Books

Title	Publisher	Published Year
Programming in AJAX for Complete Beginners	NTL Publications	2023
A Programmer Guide to Pro ADO.NET for Beginners	NTL Publications	2023
Operating Systems Made Easy	Laxmi publications	2009

Book Chapters

Title	Publisher	Published Year
Enhancing Sustainability and Efficiency through Automation and Wireless Sensor Network-Controlled Irrigation System	Taylor & Francis	2024
Google Appstore Data Classification Using ML Based Nai:ve's Bayes Algorithm: A Review	Springer	2024
Knowledge-Based Decision Support System for Analyzing the Relevancies of Various Attributes Based on Their Characteristics	IGI Global	2017
Reliability and Scalability of Service Oriented Architecture in Web Services: Signature Verification	IGI Global	2016

Papers Published

Title	Publisher	Published Year
A Smart Manufacturing System in the Industrial Sectors to Enhance Productivity and Growth through Artificial Intelligence	SSRN	2024
Smart Contracts and Anomaly Detection in SDN environment using Cloud-Edge Integration Model	IEEE	2024
A Study on Predicting Skilled Employees Using Machine Learning Techniques	Springer	2024

Design and implementation of a wireless communication-based sprinkler irrigation system with seed sowing functionality	SN Applied Sciences	2023
Enhanced Crash Testing with Sensor-embedded Bumpers: Towards More Reliable Simulation Models	European Chemical Bulletin	2023
Health Monitoring Systems by using IOT Devices in the Real time Environment	Journal of Engineering Research	2019
Service Oriented Architecture using ISO RM-ODP with respect to Computational Viewpoint	International Journal of Innovative Research in Science, Engineering and Technolog:y	2014
Service Oriented Architecture using ISO RM-ODP with respect to Engineering and Technology Viewpoints	International Journal of Technology and Engineering System	2012
A Survey on Reliability and Scalability of Service Oriented Architecture using web services in business organizations	International journal of Computer Applications in Engineering Technology and Sciences	2011

Papers Presented in Conferences

Title of the Paper	Conference Details	Organized By	Date
CAPRI-DP: A Differentially Private Extension to Context-Aware Multi-Agent Privacy Frameworks	5th International Conference on Communication, Computing and Electronics Systems (ICCCES-2026),	PPG Institute of Technology, Coimbatore, Tamil Nadu, India,	21–23 January 2026
Trust-Aware Quantum-Inspired Multi-Objective Reinforcement Learning (TA-QMORL) for Resilient Routing in MANETs	3rd International Conference on Engineering Research in Computational Science, IEEE.,	Karpagam Academy of Higher Education, Coimbatore, Tamil Nadu, India	11–13 December 2025.
Unresolved Challenges and Future Directions in AI-Based Skin Cancer Detection: A Review of Data Diversity, Model Interoperability, and Clinical Integration.	9th International Conference on Electronics, Communication and Aerospace Technology (ICECA 2025)	RVS Technical Campus, Coimbatore, India,	5–7 Novembe r 2025
Intelligent Shopping Carts: IoT Innovation for Supermarkets.	2nd International Conference on Recent Trends in Electrical, Electronics and Computing Technologies (ICRTEECT 2025)	Vaagdevi Engineering College, Warangal, Telangana, India	30–31 October 2025.

Big Data Analytics in Industrial IoT Environments	International Conference on Contemporary Challenges on Intelligence Computation of Materials Science and Energy Engineering (ICMSEE'25)	Debre Tabor University, Ethiopia	9 & 10 May 2025
Real-Time Embedded System Optimization Using Edge Computing and Lightweight Deep Learning Architectures for Data Efficiency	International Conference on Research and Development in Information, Communication and Computing Technologies (ICRDICCT'25)	E.G.S. Pillay Engineering College, Nagapattinam, Tamil Nadu, India	Ap1il 4 & 5, 2025
A Smart Manufacturing System in the Industrial Sectors to Enhance Productivity and Growth through Artificial Intelligence	3rd International Conference on Optimization Techniques in the Field of Engineering (ICOFE-2024)	KSR College of Engineering, Narnakk:al, Tamil Nadu, India and Debre Tabor University, Ethiopia	22nd & 23rd October 2024
Enhancing Sustainability and Efficiency through Automation and Wireless Sensor Network-Controlled Inigation System	2nd International Conference on Communication and Computing Technology (ICCICCT-2024)	KSR College of Engineering, Tiruchengode, Namakkal, Tamil Nadu, India	26th -27th April 2024
Smart contracts and Anomaly Detection in SDN Environment using Cloud-Edge Integration Model	International Conference on Emerging research in Computational Science (ICERCS)-2023	Karpagam Academy of Higher Education, Coimbatore, Tamil Nadu, India	07th -09th December 2023

A study on predicting skilled employees using machine learning techniques	International Conference on Computational Intelligence in Machine Learning (ICCIML)	Geethanjali College of Engineering & Technology, Hyderabad, India	18th -19th November 2022
Cyber Physical Security Systems basic possible breaches and counter measures for safeguarding the systems data	International Conference on Smart Computing and Control of Systems (ICSCCS)	Sree Vidyanikethan Engineering College, Tirupati, Andhra Pradesh, India	17th-19th October, 2019
Service Oriented Architecture Using ISO Reference Model for Open Distributed Processing with respect to Information Viewpoint	3rd International Conference on Science, Engineering and Technology (SET)	VIT University, Vellore, Tamil Nadu, India	17^{th}-18^{th} November, 2011
Data Mining: An Analysis of Attribute Relevance with its Characterization and Comparison	2009 IEEE International Advance Computing Conference (IACC09)	Thapar University, Patiala, Punjab	6th_ 7th March, 2009
Information Security in Computer Networks	International Conference on Advanced Computing & Communication Technologies for High performance Applications	Federal Institute of Science and Technology, Angamaly, Cochin, Kerala	24^{th} -26^{th} September, 2008

Patent Details:

Title of Patent	Submitted/Published/Awarded
Integrated IOT Solutions for Enhanced Communication in Electrical and Electronic Systems	Published
Machine learning-based closed-loop mixture of concrete equipment and the method	Published

Academic and Administrative Roles:

1. Heading the Department of Computer Applications since 2016
2. Chaimnan of Board of Studies of Computer Applications from 2017 to till date
3. Member Board of Studies of Computer Applications from 2011 to 2013
4. Timetable In-charge in the Department of Computer Applications From 2001to till date

Participation in FDPs/STTPs/STC:

- Participated in one-week Faculty Development program on "Blockchain & Web3" from 10th March to 17th March 2025 Organized by the Department of CSE & CSE (Data Science), Sri Siddhartha Institute of Technology, SSAHE, Kamataka.
- Participated in one-week Faculty Development program on "Cyber Security" from 14/02/2025 to 20/02/2025 Organized by Department of MBA & Research Centre, Sapthagiri NPS University, Bangalore.
- Participated in one-week Faculty Development program on "Gen AI & Chat GPT Applications in the Industry" from 27/01/2025 to 31/01/2025 Organized by Department of MBA & Research Centre, SJC Institute of Technology, Chikkaballapur.
- Partjcjgated io ope-week facn)ty peyeJppmegt prpgram PD"Bwec0iogJoo0xatjppsaod Cballeoges io Mpdeco pata Analytics Applications" from 20/01/2025 to 25/01/2025 Organized by Department of Information Technology,Mahatma Gandhi Institute of Technology, Hyderabad, Telangana.
- Participated in one-week Faculty Development program on "Emerging Wireless Technologies for 6G" from 06/01/2025 to 10/01/2025 Organized by Department of Electronics and Coll1ll1unication Engineering, CVR College of Engineering, Ibrahirnpatnam, R.R Dist, Telangana.
- 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 MEAS!Institute oflnfo1mation 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 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 Januuy 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 Annamachary Institute of Technology and Sciences (Autonomous), Rajampet, Andhra Pradesh. ((Ce11ificate No: ICT-2086/22).
- Participated in AICTE recognized Short Tenn 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 Annamachary Institute of Technology and Sciences (Autonomous), Rajampet, Andh:ra Pradesh. (Certificate No:ICT/64/21-22).
- 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 Annamachary 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 inAICTE Sponsored one-week National Level AICTE Training and Leaming (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 - ITT 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 Smart bridge 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, KSRM 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 ITT 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 ITT, 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, S1i 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 bharat" conducted by Y.S.R. Engineering College of Yogi Vemana Univeristy, Proddatur, Y.S.R (Dt) from Novermber 20th, 2017 to December 2nd 2017.
- Participated in National workshop "Popularisation ofRemote 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 ITT 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 Sci }Tidyan-ikerbao Eogioeeriog Colleges lio1pati, oo 13th August 2916**

- Participated in one day NPTEL (National Programme on Technology Enhanced Learning) workshop, Organized by ITT Madras at ITT 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!STE workshop on "Database Management Systems", Organized by ITT 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 KL 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 ofETL", Organized by the Department of Computer Applliactions, Sree 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 Sree Vidyanikethan Engineering College, Tirupathi, During 27th to 28th March,2010
- Participated inAICTE Sponsored two-day National level workshop on "Foundations of Middle Ware Technologies", Organized by Sree Vidyanikethan Engineering College, Tirupathi, During 6th to 7th March 2010
- Paper entitled "Inage processing: Image compression" in National Workshop on intelligent data Analytics and Image processing, Organized by Bannari Amman Institute of Technology, Sathyamangalam, Tamilanadu, During 26th to 27th October 2007.