FACULTY PROFILE

Name of the Faculty:	**Dr. Mani Deep Karumanchi**		
Designation:	**Professor**		
Department:	**CSE (AI & ML)**		
Date of Birth:	**09-08-1988**		
AICTE – ID:	**1-717028556**		
Education	• B.Tech in CSE from JNTUK in 2009 • M.Tech in CSE Specialization from ANU in 2011 • PhD in CSE specialization from Pondicherry University in 2023		
Experience	Teaching: 15 Years	Industry: 0 Years	**Total: 15 Years**
	Research: 8 Years along with Teaching	Others: 0 Years	
Research Specialization	**Blockchain, Cloud Computing, Cryptography, Supply Chain Management, Deep Learning, Computer Vision**		
Courses taught	**1. Cloud Programming (Windows Azure and AWS)** **2. Enterprise Programming (.NET Technologies)** **3. Object Oriented Programming (C# and Java)** **4. Computer Networks** **5. DevOps** **6. Full Stack Development** **7. Distributed Systems** **8. Operating Systems** **9. Discrete Mathematical Structures**		

Research contributions

International/national peer reviewed journals

S. No.	Title of Paper	Journal	Year	Volume	Pages	Indexing (SCI/WoS/ Scopus/Google Scholar)
1	Diffusion-Enhanced Brain Tumor Classification Using Fast-DDPM and EfficientNet-B0 on MRI: A Controlled Comparative Evaluation of Baseline and Denoising-Enhanced Accuracy	International Journal of Scientific Research in Engineering and Management (IJSREM)	2026	10(4)	1–7	UGC Care
2	Disease Prediction and Medicine	Musik In Bayern	2025	90(11)	468–476	ESCI

	Recommendation System					
3	Maize Leaf Disease Identification for Sustainable Crop Productivity	International Journal of Enhanced Research in Science, Technology & Engineering	2025	14(7)	—	UGC Care
4	Innovative Synergies: Examining Artificial Intelligence with Enhanced Smart Library Services on Boost User Engagement	Nanotechnology Perceptions	2024	20(S14)	2662–2678	Scopus
5	Improving Data Transfer Performance to Unlock Potential of Cloud Service Providers	Journal of Electrical Systems	2024	20(11s)	850–858	Scopus
6	Artificial Intelligence in Healthcare: Revolutionizing Early Detection of Intervention in Clinical Practice	Telematique	2024	23(1)	969–990	ESCI
7	An Improved Integrity-Based Hybrid Multi-User Data Access Control for Cloud Heterogeneous Supply Chain Databases	International Journal on Recent and Innovation Trends in Computing and Communication	2023	11(9s)	276–289	Scopus
8	An Efficient Integrity Based Multi-User Blockchain Framework for Heterogeneous Supply Chain Management Applications	International Journal of Computers and Applications	2023	45(4)	337–351	Scopus
9	Integrated Internet of Things with Cloud Developed for Data Integrity Problems on Supply Chain Management	Measurement: Sensors	2022	24	100445	Scopus
10	Blockchain Enabled Supply Chain using Machine Learning for Secure Cargo Tracking	International Journal of Intelligent Systems and Applications in Engineering	2022	10(4)	434–442	Scopus
11	Survey on Fake News Detection Using Machine	International Journal of	2021	—	—	Google Scholar

	Learning Algorithms	Engineering Research & Technology				
12	Client Authentication as a Service in Microsoft Azure	International Journal of Engineering and Advanced Technology (IJEAT)	2019	8	—	Scopus
13	Network as a Service Model in Cloud Authentication by HMAC Algorithm	International Journal of Advanced Networking and Applications	2018	9(6)	3623–3631	UGC Care
14	Quarantine Stabilizing Multi-Keyword Rated Discover with Unfamiliar ID Transfer over Encrypted Cloud Warning	International Journal of Engineering Research in Computer Science and Engineering (IJERCSE)	2015	2(2)	7–10	UGC Care
15	A Riskless Prudent Data Transfer in Clouds	International Journal on Recent and Innovation Trends in Computing and Communication	2014	2(9)	2780–2785	Google scholar
16	Benefits and Barriers of Adopting Cloud Computing	International Journal of Modern Sciences and Engineering Technology	2014	1(6)	117–123	Google Scholar

Books published

S. No.	Title of the book	Publisher	year
1	**Proceedings of International Conference on Advanced Computing Techniques**	**Bapatla Engineering College – Conference Proceedings**	**2021**

Book chapters / Conferences Published

S.No.	Title of the Chapter	Book Title / Conference	Publisher	Year
1	Quick Overview of Machine Learning Algorithms and Techniques for Fitting an Algorithm	Proceedings of the International Conference on Recent Advances in Science, Engineering and Technology (ICRCSET-2026)	Chalapathi Institute of Technology, Guntur, Andhra Pradesh, India	2026

2	The Software Failure Prediction Field's Performance of Machine Learning Classifiers Compared to Ensemble Classifiers	AIP Conference Proceedings, Vol. 3157, No. 1, Article 080019	AIP Publishing LLC	2025
3	Nonlinear Integrity Algorithm for Blockchain Based Supply Chain Databases	Pervasive Computing and Social Networking: Proceedings of ICPCSN 2022 (pp. 169–181)	Springer Nature Singapore	2022
4	Cloud Based Supply Chain Management System Using Blockchain	Proceedings of the 2019 4th International Conference on Electrical, Electronics, Communication, Computer Technologies and Optimization Techniques (ICEECCOT), pp. 390–395	IEEE	2019
5	Self-Assured Data Repossession for Disperse Interference Military Tolerant Networks	Proceedings of National Conference on Emerging Trends in Computer Science (NCETCS-2K15), pp. 271–275	Bapatla Engineering College (BEC Proceedings)	2015
6	Shared Admittance Regulation in Public Networks	Proceedings of National Conference on Emerging Trends in Computer Science (NCETCS-2K15), pp. 184–189	Bapatla Engineering College (BEC Proceedings)	2015

Details of Patents Published

S. No	Name of the Patent Published/Granted	Application No	Date of Patent Filing	Year of Publicatio
1	Smart AI-Based Traffic Violation Detection Using CCTV and Deep Learning Techniques	202641048917	17-04-2026	01-05-202
2	AI-Powered Hand Tracking System for Virtual Mouse and Keyboard Applicants	202641047792	15-04-2026	01-05-202
3	An AI-Driven Resume Screening Framework with Semantic Matching and Explainable Decision Support	202641047459	14-04-2026	24-04-202
4	Spatio-Temporal Anomaly Detection In	202641046958	13-04-2026	24-04-202

	Remote Sensing Imagery			
5	Smart Farmer-to-Market Advisory Platform	202641045291	09-04-2026	24-04-2026
6	Improving Brain Tumor MRI Classification Accuracy Through Fast-DDPM and EfficientNet-B0 Optimization	202641047685	14-04-2026	24-04-2026
7	A Hybrid Approach for Innovative Farming by Avoiding the crop threats	202441104707 A	30-12-2024	10-01-2025
8	EduAnimate Vision Pro – Smart Animated Learning Platform with Interactive Quizzes and Classroom Engagement for Effective Education.	202541041271A	29-04-2025	23-05-2025
9	An Intelligent Eco-Friendly Dishwasher with Real-Time Load Sensing and Automated Resource Management	202641004679 A	17-01-2026	30-01-2026
10	Women's Safety Enhancement through Smart Wearable Bracelet with Real-Time Location Tracking and Emergency Alert System	202641024906 A	03-03-2026	13-03-2026

Details of Projects Applied

- ✓ **Identifying and Enhancing Urban Subterranean Water Leak Monitoring** – *Applied to Prime Minister's Early Career Research Grant (ANRF/ECRG)* | Applied: **15-Nov-2024** | Duration: **36 Months** | Value: **₹21.15 Lakhs**.
  (IoT and wireless sensor-based solution for real-time underground water leak detection in urban areas.)
- ✓ **Counterfeit Medicine Prevention: Blockchain and IoT Framework** – *Applied to Indian Knowledge Systems (IKS) Division, MoE* | Applied: **27-Feb-2025** | Duration: **24 Months** | Value: **₹20 Lakhs**.
  (Blockchain and IoT framework for securing pharmaceutical supply chains and preventing counterfeit drugs.)
- ✓ **Q-VISTA: Quantum–Vision Integrated Surveillance Threat Analysis Platform** – *Applied to National Quantum Cell under National Quantum Mission (DST)* | Applied: **18-Aug-2025** | Duration: **6 Years** | Value: **₹2.28 Crores**.
  (Hybrid Quantum–AI platform for real-time anomaly detection in defence and border

surveillance systems.)

- ✓ **Quantum Communication Lab for Undergraduate Programs** – *Applied to National Quantum Cell under National Quantum Mission (DST)* | Applied: **22-Aug-2025** | Duration: **5 Years** | Value: **₹99,20,046**.

  (Proposal to establish a dedicated lab supporting undergraduate teaching and hands-on training in quantum technologies.)

- ✓ **Quantum-Hybrid Optimization Engine for Smart Urban Public Transport and Supply Chain Logistics in Telangana** – *Applied to National Quantum Cell under National Quantum Mission (DST)* | Applied: **14-Aug-2025** | Duration: **6 Years** | Value: **₹2.12 Crores**.

  (Associate PI: Proposal on quantum-hybrid optimization for improving efficiency in urban transport and logistics networks.)

Details of Conferences/FDPs/STTPs/webinars/Workshops Organized

S.No.	Name of the event	Role	Dates
1	International Conference on Advanced Computing Techniques	Convenor	May 20-21st, 2021

Details of Conferences/FDPs/STTPs/webinars/Workshops Participated

S.No.	Name of the event	Organized by	Dates
1	30 Hours International Faculty Development Program on Deep Learning for NLP and Computer Vision	CBIT, Hyderabad	10-07-2023 to 28-07-2023
2	5 DAY'S ONLINE NATIONAL LEVEL FACULTY DEVELOPMENT PROGRAM ON "INTELLECTUAL PROPERTY RIGHTS"	Dr. M.G.R. Educational and Research Institute, Chennai	22-05-2023 to 26-05-2023
2	5 Days FDP on Innovative Teaching Learning Practices for Preparation of NEP-2020	AJEENKYA DY Patil School of Engineering,	06-02-2023 to 10-02-2023
3	One Week Virtual Faculty Development Program "Emerging Research Trends in Computing Technologies"	Dr. M.G.R. Educational and Research Institute, Chennai	28-11-2022 TO 02-12-2022
4	A Three Day National level online workshop on "Outcome Based Education and Examination Reforms"	Bapatla Engineering College	03-08-2022 to 05-08-2022

5	30 Days Master Class on Advanced Python Programming	APSSDC	27-10-2022 to 27-11-2022
6	One Week FDP on "Data Engineering"	VNRVJIET, Hyderabad	16-08-2022 to 20-08-2022
7	Programming in Java	NPTEL	Jul-Oct 2022
8	Cyber Security, Cyber Crimes & Digital Forensics: Trends and Technologies	Puducherry Technological University	10-11-2021 to 16-11-2021 (6 Days)
9	online workshop on Universal Human Value on the theme "Inculcating Universal Human Values in Technical Education"	All India Council for Technical Education(AICTE)	28-07-2020 to 01-08-2020
10	Introduction to Python Programming	ICT Academy	24-05-2021 to 28-05-2021
11	AICTE Sponcered 6 Day Online STTP on "BLOCKCHAIN TECHNOLOGY & ITS APPLICATIONS"	East West Institute of Technology	12-10-2020 to 17-10-2020
12	five day online Faculty Development Program on "Cyber Security"	Bapatla Engineering College	02-06-2020 to 06-06-2020

Awards/recognitions/achievements

S.No.	Name of the Award	Awarding body/Society/Organization	Year
1	Department Best Teacher Award	Bapatla Engineering College	2020-21
2	College Best Teacher Award	Bapatla Engineering College	2020-21

Student Project/research guidance

S.No	Level	Total number
1	UG	Completed: 20 Ongoing: 2
2	PG	Completed: 7 Ongoing: 0
3	PhD	Completed: 0 Ongoing: 0

Administrative experience

S.No.	Role	Duration (From – to)
1	Head of the Department	Apr 2025 to till Date
1	Assistant Controller of Examinations Software Operations	Nov 2015 to Apr 2019
2	Website Coordinator	Mar 2013 to Apr 2017

3	**MIC Coordinator**	**Mar 2013 to July 2016**
4	**Mail Server Administrator**	**Mar 2013 to Till Date**
5	**Examination section software developer**	**Nov 2013 to Nov 2015**

Research credentials

Index/database	ID/Link
Google Scholar	**https://scholar.google.com/citations?user=tmQSVXYAAAAJ&hl=en**
SCOPUS	**57218452239**
Web of Science	**HMV-3856-2023**
Vidwan ID	**https://vidwan.inflibnet.ac.in/profile/170525**

Any other relevant information

1. Served as Resource Person for the ATAL FDP on "Innovating with Generative AI: Transforming Large Language Models for Real-World" organized by K. G. Reddy College of Engineering & Technology, Hyderabad from 9th - 14th December, 2024.
2. Acted as a Resource Person for the Workshop on "**Windows 8 App Development"** Conducted by Bapatla Engineering College, 19th - 20th March, 2015.
3. Acted as a Resource Person for the Two-day Faculty Development Program on **"Cloud Computing"** conducted by Bapatla Engineering College, 28th – 29th April, 2015.
4. Guided more than 200 students in developing **Windows Apps** (Windows 8, Windows 8 Phone and Azure)
5. Developed **3 windows Phone apps**, one **Windows Desktop app** and are available in store.
6. Received **Microsoft Azure Educator Grant Award** for teaching Microsoft Azure as part of the curriculum.
7. Developed **5 Windows Azure apps** and are available in store.
8. Served as Resource person for the 3-day workshop on "**Windows 8 App Development**" conducted by St. Mary's Womens Engineering College, Guntur, 17th -19th November, 2016.
9. Actively participated in designing syllabus for subjects like **Cloud Computing using Windows Azure**, **Blockchain Technologies, OOPS using C#**, **.NET Technologies, Windows Application Development, Full Stack Development, and DevOps**.
10. Worked in development, addition of components and web pages using PHP and MySQL Database for **www.eclinicmanagement.co.uk**.

11. Developed **Faculty Leave Management System, Student Information System, Student Registration System, Certificate Generation, Provisional Certificate generation, CMM and OD** using various technologies (**JSP, C#.NET, ASP.NET, MySQL, SQL Server, Jasper Reports.**) for Bapatla Engineering College.
12. Developed Cloud Resource Access applications using C#.NET and Java on Windows Azure Cloud platform.
13. All India 2nd Ranker in Ph.D. Entrance test conducted by Pondicherry University.
14. Among the top 1% in the NPTEL course Programming in Java (Jul-Oct 2022).
15. Among the top 5% in the NPTEL course Blockchain Architecture Design and Use Cases (Jul-Oct 2019).

(Mani Deep Karumanchi)
(06/11/2026)