

Name of Faculty Dr. V. Padmavathi
 Designation Associate Professor
 Nature of Job/Appointment Regular
 Date of Joining 30-06-2022
 E-mail padmavathiv_cse@cbit.ac.in



Education Qualifications

Ph. D
 PG
 UG

Name of the Degree

Ph.D. (CSE)
 M. Tech. (CSE)
 B.E. (CSE)

Class

Awarded
 First Class with
 Distinction
 First Class

Work Experience

Teaching 21 Years
 Research 13 Years
 Industry -
 Others -

Area of Specialization

Classical and Quantum Cryptography, Algorithms, Software Engineering, Machine Learning

Professional Memberships

IEEE, CRSI, CSI, IAENG, Internet Society

Responsibilities held at Institution Level

Co-Convener for Sudhee and Shruthi -25- Publicity Committee, Member of Feedback committee, Member of Mentoring Committee

Responsibilities held at Department Level

PAQIC Coordinator, UG NBA Co-coordinator, Member of BoS, PG NBA Criterion-2 Incharge

Courses Handled at Under Graduate / Post Graduate Level.

Cryptography and Information Security, Compiler Design, Operating Systems, Software Engineering, C, Data Structures Using C, Computer Networks, OOAD, Parallel and Distributed Systems, Real Time Systems, Distributed Systems

Patents

1-Grant
 5-Published

Technology Transfer

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Invited Speaker

1. Delivered expert talk on "Quantum Key Distribution" on 20th Aug, 2025 AICTE-VAANI sponsored Workshop at Siddhartha Institute of Technology & Sciences.
2. Invited for Guest Talk on "Quantum Computing and its Applications" by Sreedevi Women's College, Ganidpet, Hyderabad on 6th May, 2005
3. Invited as Guest Lecturer by VBIT, Hyderabad on 25th January 2024 to deliver a lecture on "Certifying Security for E-Commerce Applications".
4. Invited for Guest Talk on "Ensuring Secure Transactions over Web" by SNIST, Hyderabad on 27th January, 2023.
5. Invited as Guest speaker to deliver a talk on "Quantum Key Distribution", by Christ University, Bengaluru on 29th Jan, 2022.
6. Invited to deliver the Keynote speech at FSDM online Conference held during October 26th-29th, 2021, South Korea.
7. Speaker for the Five Day FDP on "Quantum Algorithms" organized by Anurag University, Hyderabad from 27th-30th September & 1st October, 2021.
8. Invited as a resource person for A Five Day STTP on "Recent Trends and Challenges in CSE" organized by Tirumala Engineering College, Narsaraopet, A.P. during 05th-07th July, 2021.
9. One of the speakers for AICTE sponsored Two-week FDP on "Quantum Computing", from 08th-20th Mar, 2021 at ACE

College of Engineering, Hyderabad.

10. Speaker for the FDP on "Trends and Advances in Cryptography" organized by SNIST, Hyderabad from 24th-28th Aug, 2020.

Reviewer and Program committee member

1. Program committee member for 11th International Conference on Data Mining and Database (DMDDB 2024) January 20 ~ 21, 2024, Zurich, Switzerland.
2. Reviewer and Program committee member for 3rd International Conference on Cloud, Big Data and IoT (CBloT 2022), July 23 - 24, 2022, Toronto, Canada.
3. Reviewer and Program committee member for International Conference on Artificial Intelligence Advances (AIAD 2022), August 27 - 28, 2022, Virtual Conference.
4. Program committee member for 3rd International Conference on Machine Learning Techniques and Data Science (MLDS 2022), November 26 ~ 27, 2022, London, United Kingdom.
5. Program committee member for 7th International Conference on Artificial Intelligence, Soft Computing And Applications (AISCA 2023), January 02 - 03, 2023, Zurich, Switzerland.
6. Program committee member for 12th International Conference on Cloud Computing: Services and Architecture (CLOUD 2023), March 18 - 19, 2023, Vienna, Austria.

No. of Books/Chapter Published with details

1. "Encryption and Decryption Algorithms in Private AI", Sustainable Development Using Private AI: Security Models and Applications, Taylor & Francis.
2. "Serverless Computing: A security viewpoint", Serverless Computing Concepts, Technology and Architecture, IGI Global, April 2024.
3. "Introduction to Quantum Computing", Evolution and Applications of Quantum Computing, Scrivener publishing, Wiley Library, May 29, 2023.
4. "Machine Learning Application for Detecting Leaf Diseases with Image Processing Schemes", in Machine Learning Methods for Signal, Image and Speech Processing, River Publications, 2021.
1. Conducted expert Talk on 25-10-2025, "Responsible and Trustworthy AI for Financial Services: Privacy, Explainability and Governance".
2. Cyber Security-Ransomware Attacks and Defense" Organized on 17-05-2025.
3. "Unlocking Performance: A Journey into Parallel Computing" on 14th December, 2023.
4. "Coding Theory in Reliable and Secure Communication", 2nd December, 2022.
5. "Cyber Security", 20th-22nd October, 2021.
6. "Quantum Algorithms", 27th-30th Sep & 1st Oct, 2021.
7. "Foundations on Machine Learning", 14th-18th Dec, 2020.
8. "Trends and Advances in Cryptography", 24th- 28th, August, 2020.

Details of Short-Term Training Programs/Faculty Development Programs/Seminars/Workshops/Other Trainings **(Organized)**.

Details of Short-Term Training Programs/Faculty Development Programs/Seminars/Workshops/Other Trainings **(Attended)**.

1. "QT-03& QT-04 Basic Quantum Programming and Technologies Lab" conducted by Meity and MNIT Jaipur, Oct 27- Nov 28. 2025.
2. A Two-Week online Summer School on "Generative AI and Large Language Models" organized by the Department of Computer Science and Engineering in Association with IEEE Hyderabad Section Computer Society Chapter at CBIT, Hyderabad held from 19th May, 2025 to 30th May, 2025.
3. "Basics of Quantum Computing" , conducted by Meity and MNIT Jaipur, May 16- June 07, 2025.
4. "Quantum Technologies & Applications", Feb 28 - Mar 22, 2025 conducted by Meity and MNIT Jaipur.
5. "National Education Policy 2020 - Challenges in

implementation in Higher Education” organized by Chaitanya Bharathi Institute of Technology, Hyderabad, Telangana in association with IEEE Education Society Student Branch Chapter CBIT and IEEE Young Professionals from 18th March 2024 to 23rd March 2024.

6. “Research Advancements in Natural Language Processing” Organized by the Department of Artificial Intelligence and Machine Learning, Chaitanya Bharathi Institute of Technology (Autonomous), Hyderabad.
7. One week online FDP on “Quality Education through OBE” organized by Chaitanya Bharathi Institute of Technology(Autonomous), Hyderabad in association with IEEE Education Society Student Branch Chapter CBIT during 22nd - 27th January 2024.
8. Participated in the Hackathon on “Quantum Computing Using QSim” held in July 2023 organised by Centre For Development of Advanced Computing (C-DAC Hyderabad) in collaboration with IIT Roorkee with the support of Ministry of Electronics and Information Technology (MeitY), Government of India.
9. Participated in National Level One Week Faculty Development Programme on “Recent Trends in Data Science for Engineering” organized by Department of Information Technology, Chaitanya Bharathi Institute of Technology, Hyderabad, Telangana in association with CBIT IEEE-RAS student branch chapter from 26th June 2023 to 30th June 2023.
10. Successfully completed a one month course on “Quantum Computing using Indigenous Quantum Simulator QSim” jointly organized by IIT Roorkee and C-DAC Hyderabad with the support of the Ministry of Electronics and Information Technology, Government of India, May 2023.
11. “Machine Learning & IoT applications” conducted by CSE Dept., OU, Hyderabad in association with CCE, NIT Warangal from 31st March to 4th April, 2023.
12. “Network Security Analysis using Wireshark, Snort and SO”, 5th – 9th, December, 2023, SNIST, Hyderabad.
13. “Blockchain Technology and Advanced Cloud Developer Essentials”, 25th – 29th, July 2022, Reva University.
14. “Advanced Security Techniques for Next Generation Computing, 16th-21st, November, 2021, CMR Institute of Technology.
15. “Intelligent Systems for Sustainable Development”, 8th -12th June, 2021, St. Peter’s Engineering College.
16. “Quantum Computing”, 5th- 9th Oct, 2020, C-DAC, Mohali.
17. “Cyber Security”, AICTE Training And Learning (ATAL) Academy, 21-25, Sep, 2020, Dr. Harisingh Gour University.
18. “Quantum Computing”, 24-29 Aug 2020, MNIT Jaipur.
19. “Cyber Security”, 28th September - 4th October, 2020, SNIST.
20. “IPR and Innovation”, 2nd July, 2020, DON Bosco Institute of Technology, Mumbai.
21. “Effective Technical Report Writing Using LaTeX”, 8th - 9th June, 2020, MGIT, Hyderabad.
22. “PHP & MySQL”, 18th - 23rd May, 2020, JNTUH College of Engineering, Jagtial.
23. “IPR Awareness and Patent Prosecution”, 6th - 10th May, 2020, CMR Engineering College, Hyderabad.
24. “Quantum Computing”, Feb 13th-14th, 2020, Society for Electronic Transaction and Security (SETS), Chennai.
25. “Internet of Things - Architecture Applications and Research Challenges”, 18th - 23rd November, 2019, SNIST.

26. "Data Science using R Programming", 22nd - 27th July, 2019, SNIST.

International Journals / Conferences

1. Swin-Decision Transformer: A Transformer-Based Hybrid Protocol for Adaptive Clustering and Energy-Efficient Routing in Large-Scale WSNs" Wiley, 2025.
2. "Enhancing Physical Layer Protection for 6G Wireless Communication Systems through Reconfigurable Intelligent Surfaces", July 2025.
3. Temporal Model for Classic Piano Music using GRU-Based Recurrent Neural Networks", IEEE ICSSAS, 2025.
4. Hybrid CNN-Graph Attention Networks for Diabetic Retinopathy Grading: A Multimodal Feature Fusion Approach", IEEE ICICI 2025.
5. "Integrating Vision Transformers and Predictive analysis for Speech Emotion Recognition in Psychiatric Care", IEEE ICSSAS, 2025.
6. "Pixel Value Ordering Based Prediction for High-Fidelity Images", IEEE International conference on "Cognitive, Green and Ubiquitous Computing", 2024 (IC-CGU).
7. "Attaining Reliability over Web using Quantum Key Distribution", EAI PerSoM 2023 - EAI 2nd International Conference on Pervasive Knowledge and Collective Intelligence on Web and Social Media, 2023.
8. Comparison of Channel Equalization Schemes for MIMO-OFDM", 2nd International conference on Data Science and Artificial Intelligence (ICDSAI), 24th -2 th April, 2023, Springer.
9. "Enhanced Beamforming Techniques in Intelligent Antenna Systems", International Journal of Intelligent Systems and Applications in Engineering, Elsevier, March 2024.
10. "Underground Water Level Prediction in Remote Sensing Images using Improved Hydro Index Value with Ensemble Classifier", MDPI, Artificial Intelligence and Machine Learning for multi-source Remote Sensing, April 2023.
11. "Prediction of Stock Market Using Trading Bot", International Journal for Innovative Engineering and Management Research, Elsevier-SSRN, 2023.
12. A Novel Approach for Gas Leakage Detection using GPS", Thirteenth International conference on Advances in computer Engineering (ACE - 2023), 26th – 27th May, 2023.
13. "Gas Leakage Detection using IoT and Cloud Technology: A Review", 5th International Conference on Design and Manufacturing Aspects for Sustainable Energy (ICMED2023), 19th – 20th May, 2023.
14. IoT based Gas leakage detection using GPS", 5th International Conference on Design and Manufacturing Aspects for Sustainable Energy (ICMED2023), 19th – 20th May, 2023.
15. Securing Files Using Hybrid Cryptography", Turkish Online Journal of Qualitative Inquiry, December, 2021.
16. Secure Data Transfer using Cardan Grille Cipher", Design Engineering, November, 2021.
17. Quantum Devices and attacks on Quantum Systems", Science, Technology and Development, August, 2020.
18. Traffic Sign Recognition Using Convolution Neural Networks", International Journal of Advanced Science and Technology, June, 2020.
19. "Provably Secure Quantum Key Distribution By Applying Quantum Gate ", International Journal of Network Security (IJNS), January, 2018.
20. "Significance of Key Distribution using Quantum Cryptography", International Journal of Innovative Computing Information and Control (IJICIC), February, 2018.
21. "Introducing Quantum Cryptography Based Secured Encryption and Decryption Algorithms", international Journal of Security and Its Applications, August, 2017.
22. "Quantum Cryptography and Quantum Key Distribution Protocols: A Survey", 2016 IEEE 6th International Conference on Advanced Computing.