

Name of Faculty: Dr. Prem Kumar Chithaluru

Designation: Associate Professor

Nature of Job/Appointment: Contract

Date of Joining: 31-11-2022

E-mail: premkumarc\_cse@cbit.ac.in



**Education Qualifications:**

PDF

Ph. D

PG

UG

**Name of the Degree**

Post Doc Fellow (Department of Project Management, Universidad Internacional Iberoamericana, Campeche, C.P. 24560, Mexico)

Doctor of Philosophy (CSE, Wireless Sensor Networks)

M. Tech. (CSE)

B. E. (CSE)

**Class**

Pursuing (1-Year project). August 2022 – July 2023.

Awarded

First with Distinction

First with Distinction

**Work Experience:**

Teaching 14 Years

Research 9 years

Industry --

Others --

Area of Specialization: Computer Science, Computer organization, DLD, Microprocessors & controllers, WSN, IoT, Cloud computing, and Big data.

Professional Memberships: 1. Member, IEEE [96893689]  
2. Member, IAENG [144260]  
3. Member, ACM [0303514]

Responsibilities held at Institution Level: -

Responsibilities held at Department Level: -

Research Guidance: NA

Awards Received: NA

Courses Handled at Under Graduate / Post Graduate Level: Computer organization, DLD, Microprocessors & controllers, WSN, IoT, Cloud computing, and Bigdata.

No. of Papers Published International & National Journals – 25 (15 SCI, 10 SCOPUS)

International & National Conference –11

Projects Carried out NA

Patents NA

Technology Transfer NIL

Invited Speaker NA

No. of Books/Chapter Published with details

1. **Chithaluru, Premkumar**, "A Method for Automatic Accurate Image Registration and translation", and bearing ISBN 978-3-659-44321-3 in LAP (Lambert Academic Publications), Germany. **(SCOPUS)**
2. **Chithaluru, Premkumar**, Ravi Prakash, and Subodh Srivastava. "WSN Structure Based on SDN." In Innovations in Software-Defined Networking and Network Functions Virtualization, pp. 240-253. IGI Global, 2018. **(SCOPUS)**
3. **Chithaluru, Premkumar**, and Ravi Prakash. "Simulation on SDN and NFV models through mininet." In Innovations in Software-Defined Networking and Network Functions Virtualization, pp. 149-174. IGI Global, 2018. **(SCOPUS)**
4. **Chithaluru, Premkumar**, and Ravi Prakash. "Organization Security Policies and Their After Effects." In Information Security and Optimization, pp. 43-60. Chapman and Hall/CRC, 2020. **(SCOPUS)**
5. **Chithaluru, Premkumar**, Rohit Tanwar, and Sunil Kumar. "Cyber-Attacks and Their Impact on Real Life: What Are Real-Life

Cyber-Attacks, How Do They Affect Real Life and What Should We Do About Them?" In Information Security and Optimization, pp. 61-77. Chapman and Hall/CRC, 2020. **(SCOPUS)**

6. **Chithaluru, Premkumar**, Kulvinder Singh and Manish Kumar Sharma. Cryptocurrency and Blockchain." In Information Security and Optimization, pp. 143-158. Chapman and Hall/CRC, 2020. **(SCOPUS)**

Rohit Tanwar, S. Balamurugan, R. K. Saini, Vishal Bharti, and **Premkumar Chithaluru**. "Advanced Healthcare Systems: Empowering Physicians with IoT-Enabled Technologies (Artificial Intelligence and Soft Computing for Industrial Transformation)" In Scrivener Publishing-Wiley", ISBN: 9781119768869, 2021. **(SCOPUS)**

7. Jena, L., Ammoon, L., **Chithaluru, P.** (2022). Supervised Intelligent Clinical Approach for Breast Cancer Tumor Categorization. In: Mishra, S., Tripathy, H.K., Mallick, P., Shaalan, K. (eds) Augmented Intelligence in Healthcare: A Pragmatic and Integrated Analysis. Studies in Computational Intelligence, vol 1024. Springer, Singapore. [https://doi.org/10.1007/978-981-19-1076-0\\_2](https://doi.org/10.1007/978-981-19-1076-0_2). **(SCOPUS)**

Details of NA  
STTPs/FDPs/Seminars/Work  
shops. Other Trainings  
Details of Journal Publications/ Conferences (National and International)

#### International/National Journals:

1. **Ch. Premkumar**, S. M. Afroj, 2012. A Method for Automatic accurate Image Registration Through Histogram-Based Image Segmentation and Translation (delineation). IJCST Vol. 3, Issue 3, July – Sept. **(SCOPUS, Q3)**
2. P Srikanth, **Ch. Prem Kumar**, Shivam Rawat, 2014. Super Virtualization Structural Model for Centralized and Distributed Server Management. IJCST Vol. 5, Issue 4, Spl-1 Oct-Dec. **(SCOPUS, Q3)**
3. Satyam Pandey, Umesh Singh Tomar, **Prem Kumar Ch**, 2014. Security Issues in SCADA Functionality over Physical & Logical Framework. IJCST Vol. 5, Issue 4, Spl-1 Oct-Dec. **(SCOPUS, Q3)**
4. **Ch. Prem Kumar**, P Srikanth, M Vijaya Kamal, 2015. Raid-5 Strategy in Virtual Hybrid Cloud (R5 VHC). International Research Journal of Management Sociology & Humanities (IRJMSH), Vol. 6 Issue- 6. **(SCOPUS, Q3)**
5. Ravinder Kumar, **Prem Kumar Ch**, 2016. Universal Language Translator Using Raspberry Pi. International Journal of Engineering Research in Computer Science and Engineering (IJERCSE) Vol 3, Issue 1, January. **(SCOPUS, Q3)**
6. **Ch. Prem Kumar**, Amit Verma, Ravi Prakash, 2016. Secure Reach Routing Algorithm Using Keyless Encryption. I J C T A, 9(11) 2016, pp. 5369-5376. **(SCOPUS, Q3)**
7. **Premkumar Ch**, Rohit Joshi, Preeti Pathak & Naveen Garg, 2017. Temperature and Power Efficient Scheduling for Cloud Data Centers: Green Approach. Communication and Computing Systems – Prasad et al. (Eds). Taylor & Francis Group. **(SCOPUS, Q3)**
8. **Premkumar Ch**, Ravi Prakash, Anuj Awasthi & Sagar Uppal, 2017. Booster's implementation over SCADA architecture. Communication and Computing Systems – Prasad et al. (Eds). Taylor & Francis Group. **(SCOPUS, Q3)**
9. **Prem Kumar Ch.**, Utkarsh Yadav, Saumya Srivastava, 2018. Big data – Social Data Analysis-Improvisation of social data analysis to boost E-Commerce. IJASCSE Vol. 6 issue 9. **(SCOPUS, Q3)**
10. Ravi Prakash, **Premkumar Chithaluru**, Deepak Sharma and P. Srikanth, 2019. Implementation of Trapdoor Functionality to Two-Layer Encryption and Decryption by Using RSA-AES Cryptography Algorithms. Nanoelectronics, Circuits and Communication, Springer Nature Singapore Pte Ltd. Doi: 10.1007/978-981-13-0776-8\_8. **(SCOPUS, Q3)**
11. **Chithaluru, Premkumar**, Rajeev Tiwari, and Kamal Kumar. "AREOR–Adaptive ranking-based energy-efficient opportunistic routing scheme in Wireless Sensor Network." Computer Networks 162 (2019): 106863. **(SCI, Q1, IF: 5.493)**
12. **Premkumar Chithaluru**, Rajeev Tiwari, and Kamal Kumar, "Performance Analysis of Energy Efficient Opportunistic Routing Protocols in Wireless Sensor Network" International Journal of Sensors, Wireless Communications, and Control, 1-18 (18), 2020. **(SCOPUS, Q3)**
13. **Chithaluru, Premkumar**, Fadi Al-Turjman, Manoj Kumar, and Thompson Stephan. "I-AREOR: An Energy-balanced Clustering Protocol for implementing Green IoT in smart cities." Sustainable Cities and Society (2020): 102254. **(SCI, Q1, IF: 10.696)**
14. **Chithaluru, Premkumar**, Rajeev Tiwari, and Kamal Kumar. "ARIOR: Adaptive Ranking Based Improved Opportunistic Routing in Wireless Sensor Networks." Wireless Personal Communications (2020): 1-24. **(SCI, Q1, IF: 2.017)**
15. Ramakuri, Sravanth K., **Premkumar Chithaluru**, and Sunil Kumar. "Eyeblick Robot Control Using Brain-

- Computer Interface for Healthcare Applications" International Journal of Mobile Devices, Wearable Technology, and Flexible Electronics (IJMDWTFE) 10, no. 2 (2021): 38-50. **(SCOPUS, Q3)**
16. **Chithaluru, Prem Kumar**, Mohammad S. Khan, Manoj Kumar, and Thompson Stephan. "ETH-LEACH: An energy enhanced threshold routing protocol for WSNs." International Journal of Communication Systems: e4881, 2021. **(SCI, Q1, IF: 1.882)**
  17. **Chithaluru, P.**, Al-Turjman, F., Stephan, T., Kumar, M. and Mostarda, L., 2021. Energy-efficient blockchain implementation for Cognitive Wireless Communication Networks (CWCNs). Energy Reports, 7, pp.8277-8286. **(SCI, Q1, IF: 4.937)**
  18. **P. Chithaluru**, F. Al-Turjman, M. Kumar and T. Stephan, "MTCEE-LLN: Multilayer Threshold Cluster-Based Energy-Efficient Low-Power and Lossy Networks for Industrial Internet of Things," in IEEE Internet of Things Journal, vol. 9, no. 7, pp. 4940-4948, April 1, 2022, DOI: 10.1109/JIOT.2021.3107538. **(SCI, Q1, IF: 10.236)**
  19. **P. Chithaluru**, S. Kumar, A. Singh, A. Benslimane and S. K. Jangir, "An Energy-Efficient Routing Scheduling Based on Fuzzy Ranking Scheme for Internet of Things," in IEEE Internet of Things Journal, vol. 9, no. 10, pp. 7251-7260, 15 May 15, 2022, DOI: 10.1109/JIOT.2021.3098430. **(SCI, Q1, IF: 10.236)**
  20. **Chithaluru, P.**, Stephan, T., Kumar, M. and Nayyar, A., 2022. An enhanced energy-efficient fuzzy-based cognitive radio scheme for IoT. Neural Computing and Applications, 34(21), pp.19193-19215. **(SCI, Q1, IF: 5.102)**
  21. Joshi, D., **Chithaluru, P.**, Singh, A., Yadav, A., Elkamchouchi, D.H., Pérez-Oleaga, C.M. and Anand, D., 2022. A Novel Large-Scale Stochastic Pushback Design Merged with a Minimum Cut Algorithm for Open Pit Mine Production Scheduling. Systems, 10(5), p.159. **(SCI, Q2, IF: 2.895)**
  22. Jain, A., Singh, J., Kumar, S., Florin-Emilian, T., Traian Candin, M. and **Chithaluru, P.**, 2022. Improved Recurrent Neural Network Schema for Validating Digital Signatures in VANET. Mathematics, 10(20), p.3895. **(SCI, Q1, IF: 2.592)**
  23. Joshi, D., **Chithaluru, P.**, Singh, A., Yadav, A., Elkamchouchi, D.H., Breñosa, J. and Anand, D., 2022. An Optimized Open Pit Mine Application for Limestone Quarry Production Scheduling to Maximize Net Present Value. Mathematics, 10(21), p.4140. **(SCI, Q1, IF: 2.592)**
  24. Yadav, A., **Chithaluru, P.**, Singh, A., Joshi, D., Elkamchouchi, D.H., Pérez-Oleaga, C.M. and Anand, D., 2022. An Enhanced Feed-Forward Back Propagation Levenberg–Marquardt Algorithm for Suspended Sediment Yield Modeling. Water, 14(22), p.3714. **(SCI, Q2, IF: 3.530)**
  25. Yadav, A., **Chithaluru, P.**, Singh, A., Albahar, M.A., Jurcut, A., Álvarez, R.M., Mojada, R.K. and Joshi, D., 2022. Suspended Sediment Yield Forecasting with Single and Multi-Objective Optimization Using Hybrid Artificial Intelligence Models. Mathematics, 10(22), p.4263. **(SCI, Q1, IF: 2.592)**

#### International /National Conferences:

1. My Research paper entitled "Super Virtualization Structural Model for Centralized and Distributed Server Management" submitted to the International Conference on Interdisciplinary Research and Technological Developments (IRTD 2014). **(SCOPUS)**
2. My Research paper entitled "Security Issues in SCADA Functionality over Physical & Logical Framework" was submitted to The International Conference on Interdisciplinary Research and Technological Developments (IRTD - 2014). **(SCOPUS)**
3. My Research paper entitled "Universal Language Translator Using Raspberry Pi" was submitted to the "International Conference on Emerging Trends in Engineering and Technology-2016". **(SCOPUS)**
4. My Research paper entitled "Temperature and Power Efficient Scheduling for Cloud Data Centers: Green Approach (Paper ID- 94)" was submitted to ICCCS-16.
5. My Research paper entitled "Boosters Implementation over SCADA Architecture" (Paper ID- 129)" submitted to ICCCS-16. **(SCOPUS)**
6. My Research paper entitled "UART based Visible Light Communication over Power Line Communication" was submitted to the 10th IEEE Advanced Networks and Telecommunications Systems (ANTS) J. N. Tata Auditorium, IISc Bangalore, India November 6-9, 2016. **(SCOPUS)**
7. My Research paper entitled "Big data – Social Data Analysis Improvisation of social data analysis to boost E-Commerce" was submitted to the 3rd International Conference on Cyber Security (ICCS - 2017), 12-13 Aug 2017. **(SCOPUS)**
8. My Research paper entitled "Implementation of Trapdoor Functionality to Two-Layer Encryption & Decryption by using RSA-AES Cryptography Algorithms" was submitted to the 3rd International Conference on Nanoelectronics, Circuits & Communication Systems (NCCS-2017), 11-12th Nov-2017. **(SCOPUS)**
9. My Research paper entitled, "Performance analysis of jitter and packet loss ratio for routing protocols in wireless sensor networks", in Proceedings of IEEE International Conference on Advances in Computing, Communication & Automation, Bareilly, 2019. **(SCOPUS)**
10. My Research paper is entitled, "Active Security by Implementing Intrusion Detection and Facial Recognition." In: Nath V., Mandal J. (eds) Nano-electronics, Circuits, and Communication Systems. Lecture Notes in Electrical Engineering, vol 692, 2021 Springer, Singapore. **(SCOPUS)**
11. My Research paper is entitled "An Adaptive Fuzzy-Based Clustering Model for Healthcare Wireless Sensor Networks." In Ambient Intelligence in Health Care, pp. 1-10. Springer, Singapore, 2023. **(SCOPUS)**