Prof. Tarachand Amgoth
Associate Professor
Computer Science & Engineering
Indian Institute of Technology, Dhanbad

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Current Position

2021 - Cont. **Associate Professor**, Department of Computer Science & Engineering, Indian Institute of Technology, Dhanbad.

Education

2011 - 2014 **Ph.D**, Computer Science & Engineering, Indian Institute of Technology, Dhanbad.

2004 - 2006 **M.Tech**, Computer Science & Engineering, National Institute of Technology, Rourkela.

1998 - 2002 **B.Tech**, Computer Science & Engineering, JNTU, Hyderabad.

Professional Experience

2010 - 2020 **Assistant Professor**, Department of Computer Science & Engineering, Indian Institute of Technology, Dhanbad.

2006 - 2010 **Research Fellow**, School of Computer & Information Sciences, University of Hyderabad.

Projects

2021 - 2022 **TexMin, Technology Innovation Hub, IIT, Dhanbad, Sponsored by DST, under NM-ICPS**: Design of Predictive Maintenance System for Mobile Assets in Underground Metal Mines: Seed Grant received **Rs. 9,50,000, Role: PI**.

2021 - 2022 **TexMin, Technology Innovation Hub, IIT, Dhanbad, Sponsored by DST, Govt. of India under NM-ICPS**: Smart Wearable devices for Safety of Working personnel in Underground Mines: Seed Grant received **Rs. 7,00,000, Role: Co-PI**.

2021 - 2022 **MSME, Govt. of India**: AI-enabled Solar-based Smart Street Lightning System: Grant received **Rs. 20,00,000, Role: PI**. Date of Sanction: 15.01.2021

2021 - 2022 **MSME, Govt. of India**: Solar-based autonomous drones for agriculture and Industrial Applications: Grant received **Rs. 19,40,000, Role: PI** and instrumental in receiving grant of amount **Rs. 1,00,00,000** to the institute for infrastructure development. **If any institute get minimum two ideas approved by MSME then the institute will get additional grant of Rs. 1,00,00,000 and the institute will be declared as a host institute**. Date of Sanction: 15.01.2021

2019 - 2022 **DST (SERB), Govt. of India**: Interoperability Issues in Fog-Cloud Infrastructure for IoT Applications: Grant received **Rs. 20,82,000, Role: PI**. Date of Sanction: 21.02.2019

2019 - 2020 **DST (ICPS Division), Govt. of India**: A Two-Week FDP on Sensor Networks and IoT: Grant received **Rs. 9,00,000, Role: PI**. Date of Sanction: 30.03.2019

2016 - 2017 **TEQIP-II, Govt. of India**: Mobility-based Algorithms for Wireless Sensor Networks: Grant received **Rs. 2,00,000, Role: PI**.

Awards and Achievements

2022 **Declared as World's top 2 % scientists**: Stanford University, Elsevier database

2021 **Declared as World's top 2 % scientists**: Stanford University, Elsevier database

2020 **Shastri Mobility Programme Award 2020** awarded by the Shastri Indo-Canadian Institute, Funded by Ministry of Education (MoE), Government of India

2013 **Best Second Paper Award** at International conference ICECCS 2013

2007 **Topper** in all India entrance test for PhD admission, conducted by University of Hyderabad

2006 **Selected as a Software Engineer for Sasken Technologies, Bangalore** in campus placement at NIT Rourkela.

PhD Supervision

Completed **Dr. Mainak Adhikari**, Thesis title: Design of Scheduling and Load balancing Algorithms for Cloud Computing Environment, 2020.

Current position: Assistant Professor, IIIT Lucknow

Completed **Dr. Madnesh K. Gupta**, Thesis title: Design of Algorithms for Efficient Management of Virtual Machines in Cloud Computing Environment, 2020.

Completed **Dr. Praveen Kumar D.**, Thesis title: Machine Learning-based Algorithms for Wireless Sensor Networks, 2021.

Current position: Postdoc Fellow, TU Wien, Austria

Completed **Dr. Ramesh Kumar**, Thesis title: Algorithms for Connectivity Restoration in Wireless Sensor Networks, 2022

Completed **Dr. Dinesh K. Sah**, Thesis title: Algorithms for Cross Layer Design in Wireless Sensor Networks, 2022

Completed **Dr. Abhishek Hazra**, Thesis title: Design of Algorithms for IoT Applications in Fog-Cloud Infrastructure, 2022

Current position: Research Fellow, NUS, Singapore

Completed **Mr. Dipak K. Sah**, Thesis title: Algorithms for Energy Harvesting Wireless Sensor Networks, 2023

Publications

Journals:

[1] Abhishek Hazra and Tarachand Amgoth, *Cost-efficient Computation Offloading of Green Industrial Fog Networks Using Graph Q-Learning*, **IEEE Transaction on Industrial Informatics: Accepted**, 2022. **IF: 12.6 (Q1)**.

[2] Abishek Hazra, Praveen Kumar D., Tarachand Amgoth, and Schahram Dustdar *Cooperative Transmission Scheduling and Computation Offloading with Collaboration of Fog and Cloud for Industrial IoT Applications*, **IEEE IoT Journal: Accepted**, 2022. **IF: 10.6 (Q1)**.

[3] Abishek Hazra, Tarachand Amgoth, Mainak Adhikari, and Satish Srirama Narayana *A Comprehensive Survey on Interoperability for Industrial IoT: Taxonomy, Standards and Future Directions*, **ACM Computing Surveys**, 2021. **IF: 16.6 (Q1)**.

[4] Abishek and Tarachand Amgoth, Mainak Adhikari, Satish Srirama Narayana *Collaborative AI-enabled Intelligent Partial Service Provisioning in Green Industrial Fog Networks*, **IEEE IoT Journal: Accepted**, 2021. **IF: 10.6 (Q1)**.

[5] Abishek and Tarachand Amgoth, Mainak Adhikari, Satish Srirama Narayana *Fog Computing for Next-Generation Internet of Things: Architecture, Challenges and Future Trends*, **Computer Science Review: Accepted**, 2021. **IF: 12.9 (Q1)**.

[6] Abhishek Hazra, Mainak Adhikari, and Tarachand Amgoth, *DRL-enabled Mobile Edge Computing for Service Deployment in Next-Generation Industrial Networks*, **IEEE Transaction on Network Science and Engineering**, 2021. **IF: 6.6 (Q1)**.

[7] Abhishek Hazra, Tarachand Amgoth, Mainak Adhikari, and Satish Narayana Srirama, *Stackelberg Game for Service Deployment in 6G-aware Fog Networks*, **IEEE Internet of Things Journal: Accepted**, 2020. **IF: 10.6 (Q1)**.

[8] Abhishek Hazra, Tarachand Amgoth, Mainak Adhikari, and Satish Narayana Srirama, *Joint Computation Offloading and Scheduling Optimization in IoT-Assisted Fog Networks*, **IEEE Transactions on Network Science and Engineering: Accepted**, 2020. **IF: 6.6 (Q1)**.

[9] Praveen and Tarachand Amgoth, *A Survey on Recent Advances in IoT Application Layer Protocols and Scope of Machine Learning for Research Directions*, **Digital Communication and Networks: Accepted**, 2021. **IF: 7.9 (Q1)**.

[10] Biswa Mohan Sahoo, Hari Mohan Pandey, and Tarachand Amgoth, *A Genetic Algorithm Inspired Optimized Cluster Head Selection Method in Wireless Sensor Network*, **Swarm and Evolutionary Computation (Elsevier): Accepted**, 2022. **IF: 10.00 (Q1)**.

[11] Dinesh Kumar Sah and Tarachand Amgoth, *Energy Efficient Medium Access Control Protocol for Data Collection in Wireless Sensor Network: A Q-learning approach*, **Sustainable Energy Technologies and Assessments (Elsevier): Accepted**, 2022. **IF: 8.00 (Q1)**.

[12] Dinesh K Sah, Tarachand Amgoth, K Cengiz, Yasser Alshehri, and Noha Alnazzawi *TDMA policy to optimize resource utilization in Wireless Sensor Networks using reinforcement learning for ambient environment*, **Computer Communications: Accepted**, 2022. **IF: 6.00 (Q1)**.

[13] Ramesh Kumar and Tarachand Amgoth, *Reinforcement learning based connectivity restoration in wireless sensor networks*, **Applied Intelligence: Accepted**, 2021. **IF: 5.3 (Q1)**.

[14] Praveen Kumar D., Tarachand Amgoth, and A.C.S. Rao *Delay-aware Data Fusion in Duty-Cycled Wireless Sensor Networks: A Q-learning Approach*, **Sustainable computing: Accepted**, 2021. **IF: 4.5 (Q1)**.

[15] Mainak Adhikari, Tarachand Amgoth, and Satish Narayana Srirama, *Application Offloading Strategy for Hierarchical Fog Environment through Swarm Optimization*, **IEEE Internet of Things Journal**, vol.7, pp.4317-4328, 2020. **IF: 10.6 (Q1)**.

[16] Dipak Kumar Sah and Tarachand Amgoth, *Renewable Energy Harvesting Schemes in Wireless Sensor Networks: A Survey*, **Information Fusion (Elsevier): Accepted**, 2020. **IF: 18.6 (Q1)**.

[17] Biswa Mohan Sahoo, Hari Mohan Pandey, and Tarachand Amgoth, *GAPSO-H: A Hybrid Approach Towards Optimizing the Cluster Based Routing in Wireless Sensor Network*, **Swarm and Evolutionary Computation (Elsevier): Accepted**, 2020. **IF: 10.00 (Q1)**.

[18] Sanjai Prasada Rao Banoth, Praveen Kumar D., and Tarachand Amgoth*Dynamic mobile charger scheduling with partial charging strategy for WSNs using deep-Q-networks*, **Neural Computing and Applications: Accepted**, 2021. **IF: 6.0 (Q1)**.

[19] Biswa Mohan Sahoo, Tarachand Amgoth, and Hari Mohan Pandey, *Particle Swarm Optimization Based Energy Efficient Clustering and Sink Mobility in Heterogeneous Wireless Sensor Network*, **Ad Hoc Networks (Elsevier): Accepted**, 2020. **IF: 4.8 (Q1)**.

[20] Mainak Adhikari, Tarachand Amgoth, and Satish Narayana Srirama, *Multi-Objective Scheduling Strategy for Scientific Workflows in Cloud Environment: A Firefly-based Approach*, **Applied Soft Computing (Elsevier): Accepted**, 2020. **IF: 8.7 (Q1)**.

[21] Praveen Kumar D., Tarachand Amgoth, and Chandra Sekhar Annavarapu, *Machine learning algorithms for wireless sensor networks: A survey*, **Information Fusion (Elsevier)**, vol.49, pp.1-25, 2019. **IF: 18.6 (Q1)**.

[22] Mainak Adhikari, Tarachand Amgoth, and Satish Narayana Srirama, *A Survey on Scheduling Strategies for Workflows in Cloud Environment and Emerging Trends*, **ACM Computing Survey**, vol.52, 2019. **IF: 16.6 (Q1)**.

[23] Mainak Adhikari and Sudharsan Nandy, and Tarachand Amgoth, *Meta heuristic-based task deployment mechanism for load balancing in IaaS cloud*, **Journal of Network and Computer Applications (Elsevier)**, vol.128, pp.64-77, 2018. **IF: 8.7 (Q1)**.

[24] Mainak Adhikari and Tarachand Amgoth, *An intelligent water drops-based workflow scheduling for IaaS cloud*, **Applied Soft Computing (Elsevier)**, vol.77, pp.547-566, 2019. **IF: 8.7 (Q1)**.

[25] Mainak Adhikari and Tarachand Amgoth, *Heuristic-based load balancing algorithm for IaaS cloudHeuristic-based load balancing algorithm for IaaS cloud*, **Future Generation Computing Systems (Elsevier)**, vol. 81, pp. 156-165, 2018. **IF: 7.6 (Q1)**.

[26] Praveen Kumar D., Tarachand Amgoth, Chandra Sekhar Annavarapu, *ACO-based mobile sink path determination for wireless sensor networks under non-uniform data constraints*, **Applied Soft Computing (Elsevier)**, vol.68, pp.528-540, 2018. **IF: 8.7 (Q1)**.

[27] Dinesh Kumar Sah and Tarachand Amgoth, *Parametric survey on cross-layer designs for wireless sensor networks*, **Computer Science Review (Elsevier)**, vol.27, pp.112-134, 2018. **IF: 12.9 (Q1)**.

[28] Madnesh K. Gupta and Tarachand Amgoth, *Power and resource-aware virtual machine placement for IaaS cloud*, **Sustainable Computing (Elsevier)**, vol.19, pp.50-62, 2018. **IF: 4.5 (Q1)**.

[29] Sunil Kumar, Dheeraj Kumar, Praveen Kumar Donta and Tarachand Amgoth*Land Subsidence Monitoring and Prediction using Modified PSInSAR and Recurrent Neural Networks*, **Stochastic Environmental Research and Risk Assessment: Accepted**, 2021. **IF: 4.2 (Q1)**.

[30] Dinesh K Sah, K Cengiz, PK Donta, VN Inukollu, Tarachand Amgoth *EDGF: Empirical dataset generation framework for wireless sensor networks*, **Computer Communications: Accepted**, 2021. **IF: 6.0 (Q1)**.

[31] Dipak Kumar Sah and Tarachand Amgoth, *Harvested Energy Prediction Technique for Solar-Powered Wireless Sensor Networks*, **IEEE Sensors Journal: Accepted**, 2022. **IF: 4.3 (Q1)**.

[32] Abhishek Hazra, Tarachand Amgoth, Mainak Adhikari, and Satish Narayana Srirama, *Fog Computing for Energy-efficient Data Offloading of IoT Applications in Industrial Sensor Networks*, **IEEE Sensors Journal: Accepted**, 2022. **IF: 4.3 (Q1)**.

[33] Ramesh Kumar, Debjit Das, and Tarachand Amgoth, *Obstacle-aware connectivity establishment in wireless sensor networks*, **IEEE Sensors Journal**, 2020. **IF: 4.3 (Q1)**.

[34] Praveen Kumar D. B. Sanjai Prasada Rao, Tarachand Amgoth, A.C.S. Rao, and Silpamayee, *Data collection and path determination strategies for mobile sink in 3D WSNs*, **IEEE Sensors Journal** , vol.20, pp. 2224-2233, 2020. **IF: 4.3(Q1)**.

[35] Prasannababu and Tarachand Amgoth, *Adaptive SSO Based Node Selection For Partial Charging In Wireless Sensor Network*, **Peer-to-Peer Networks and Applications (SpringerNature)**, vol.10, pp.66-78, 2021. **IF: 4.2 (Q2)**.

[36] Praveen Kumar D., Tarachand Amgoth, Chandra Sekhar Annavarapu, *An Extended ACO-based Mobile Sink Path Determination in Wireless Sensor Networks*, **Journal of Ambient Intelligence & Humanized Computing (Springer): Accepted**, 2020. **IF: 1.7 (Q2)**.

[37] Praveen Kumar D., Tarachand Amgoth, and Satish Narayana Srirama, *Intelligent Congestion Control Algorithm for CoAP using Deep Reinforcement Learning*, **Journal of Ambient Intelligence & Humanized Computing (Springer): Accepted**, 2020. **IF: 1.7 (Q2)**.

[38] Madana Srinivas and Tarachand Amgoth, *Delay Tolerant Charging Scheduling By Multiple Mobile Chargers In Wireless Sensor Network Using Hybrid GSFO*, **Journal of Ambient Intelligence & Humanized Computing: Accepted**, 2021. **IF: 1.7 (Q2)**.

[39] Dinesh Kumar Sah, Korhan Cengiz, and Tarachand Amgoth, *3D Localization and Error Minimization in Underwater Sensor Networks*, **ACM Transactions on Sensor Networks (Accepted)**, 2021. **IF: 4.1 (Q2)**.

[40] Dipak Kumar Sah and Tarachand Amgoth, *An Energy Efficient Coverage Aware Algorithm in Energy Harvesting Wireless Sensor Networks*, **Wireless Networks (SpringerNature): Accepted**, 2022. **IF: 3.0 (Q2)**.

[41] Madana Srinivas and Tarachand Amgoth, *Data Acquisition in large-scale Wireless Sensor Networks using Multiple Mobile Sinks: A Hierarchical Clustering Approach*, **Wireless Networks: Accepted**, 2021. **IF: 3.0 (Q2)**.

[42] Sanjai Prasada Rao, Praveen Kumar D. and Tarachand Amgoth, *Target-aware distributed coverage and connectivity algorithm for wireless sensor networks*, **Wireless Networks: Accepted**, 2021. **IF: 3.0 (Q2)**.

[43] Korra Cheena and Tarachand Amgoth, *Deep Q-probabilistic algorithm based rock hyraxes swarm optimization for channel allocation in CRSN smart grids*, **Wireless Networks: Accepted**, 2021. **IF: 3.0 (Q2)**.

[44] Prasannababu and Tarachand Amgoth, *Joint Mobile Wireless Energy Transmitter and Data Collector for Rechargeable Wireless Sensor Networks*, **Wireless Networks: Accepted**, 2021. **IF: 3.0 (Q2)**.

[45] Praveen Kumar D. B. Sanjai Prasada Rao, Tarachand Amgoth, A.C.S. Rao, and Silpamayee, *Data collection and path determination strategies for mobile sink in 3D WSNs*, **IEEE Sensors Journal** , vol.20, pp. 2224-2233, 2020. **IF: 4.3 (Q1)**.

[46] Dipak Kumar Sah and Tarachand Amgoth, *A Novel Efficient Clustering Protocol for Energy Harvesting in Wireless Sensor Networks*, **Wireless Networks (SpringerNature): Accepted**, 2020. **IF: 3.0 (Q2)**.

[47] Ramesh Kumar and Tarachand Amgoth, *Adaptive cluster-based relay node placement for disjoint wireless sensor networks*, **Wireless Networks (SpringerNature)**, vol.26, pp.651-666, 2020. **IF: 3.0 (Q2)**.

[48] Madnesh K. Gupta and Tarachand Amgoth, *Resource-aware virtual machine placement algorithm for IaaS cloud*, **The Journal of Supercomputing (SpringerNature)**, vol.74, pp.122-140, 2018. **IF: 3.3 (Q2)**.

[49] Tarachand Amgoth and Prasanta K. Jana, *Coverage-hole detection and restoration algorithm for wireless sensor networks*, **Peer-to-Peer Networks and Applications (SpringerNature)**, vol.10, pp.66-78, 2017. **IF: 4.3 (Q2)**.

[50] Tarachand Amgoth and Prasanta K. Jana, *Energy-aware routing algorithm for wireless sensor networks*, **Computers & Electrical Engineering (Elsevier)**, vol.41, pp.357-367, 2015. **IF: 4.3 (Q1)**.

[51] Mainak Adhikari, Tarachand Amgoth, and Satish Narayana Srirama, *A Comprehensive Survey on Nature-Inspired Algorithms and Their Applications in Edge Computing: Challenges and Future Directions*, **Software: Practice and Experience**, 2021. IF: 3.5 (Q1)

Conference:

[1] Ramesh Kumar and Tarachand Amgoth, *Delaunay tetrahedron based connectivity approach for 3D wireless sensor networks*, **MISP2022**, 2022.

[2] Dipak K. Sah and Tarachand Amgoth, *Target coverage area in energy harvesting wireless sensor networks*, **ICPCCT 2022**, 2022.

[3] Ramesh Kumar and Tarachand Amgoth, *Deployment of sensor nodes for connectivity restoration and coverage maximization in WSNs*, **WiSPNET2021**, 2021.

[4] Madana Srinivas, Praveen Kumar Donta and Tarachand Amgoth, *Efficient Algorithms for Point and Area Sweep–Coverage in Wireless Sensor Networks*, **WiSPNET2021**, 2021.

[5] Madana Srinivas, Praveen Kumar Donta and Tarachand Amgoth, *Finding the Minimum Number of Mobile Sinks for Data Collection in Wireless Sensor Networks*, **COMNETSAT**, 2020.

[6] Biswa Mohan Sahoo, Tarachand Amgoth, and Hari Mohan Pandey, *A Modified Whale Optimization Based Energy Improvement Clustering for Wireless Sensor Networks*, **Confluence**, 2021.

[7] Praveen Kumar D., Tarachand Amgoth, Chandra Sekhar Annavarapu, *Scheduled Virtual Machine Placement in IaaS Cloud: A MPSO Approach*, **IEMTRONICS**, 2020, **Vancouver, Canada**.

[8] Biswa Mohan Sahoo, Tarachand Amgoth, and Hari Mohan Pandey, *Enhancing the network performance of wireless sensor networks on meta-heuristic approach: Grey Wolf Optimization*, **ICAAAIML**, 2020.

[9] Madnesh K. Gupta, Ankit Jain, and Tarachand Amgoth, *Congestion-aware Data Acquisition with Q-learning for Wireless Sensor Networks*, **ICIIP**, 2019.

[10] Divya Singh and Tarachand Amgoth, *Joint Wireless Charging and Data Collection using Mobile Element for Rechargeable WSNs*, **GUCON**, 2019.

[11] Shubham Vaishnav and Tarachand Amgoth, *Mobile Charger Scheduling using Partial Charging Strategy for Rechargeable WSNs*, **GUCON**, 2019.

[12] Mainak Adhikari and Tarachand Amgoth, *Multi-Objective Accelerated Particle Swarm Optimization Technique for Scientific workflows in IaaS cloud*, **ISII**, 2018.

[13] Madnesh K. Gupta and Tarachand Amgoth, *On-demand Virtual Machine Placement in Infrastructure Cloud*, **ICACCI**, 2018.

[14] Madnesh K. Gupta and Tarachand Amgoth, *QoS-aware Virtual Machine Placement for Infrastructure Cloud*, **GUCON**, 2018.

[15] Mainak Adhikari and Tarachand Amgoth, *An Enhanced Dynamic Load Balancing mechanism for task deployment in IaaS cloud*, **GUCON**, 2018.

[16] Mainak Adhikari and Tarachand Amgoth, *Deadline-aware scheduling for scientific workflows in IaaS cloud*, **ICSICCS**, 2018.

[17] Madnesh K. Gupta and Tarachand Amgoth, *Resource-aware algorithm for virtual machine placement in cloud environment*, **IC3**, 2016.

[18] Mainak Adhikari and Tarachand Amgoth, *Efficient algorithm for workflow scheduling in cloud computing environment*, **IC3**, 2016.

[19] Tarachand Amgoth and Prasanta K. Jana, *Energy-Aware Multi-level Routing Algorithm for Two-Tier Wireless Sensor Networks*, **ICDCIT**, 2014.

[20] Tarachand Amgoth and Prasanta K. Jana, *EDCP: Efficient distributed clustering protocol for large-scale wireless sensor networks*, **ICECCS**, 2013. **(Second Best paper Award)**

[21] Tarachand Amgoth and Prasanta K. Jana, *BDCP: A backoff-based distributed clustering protocol for wireless sensor networks*, **ICACCI**, 2013.

[22] Tarachand Amgoth, V Kumar, A Raj, A Kumar, and Prasanta K. Jana, *An energy efficient load balancing algorithm for cluster-based wireless sensor networks*, **INDICON**, 2012.

Teaching

2022-2023 CSO303: Artificial Intelligence, CSC207 Computer Architecture, CSD513: Internet of Things, CSC205: Computer Organization Lab

2021-2022 CSC503: Artificial Intelligence, CSC504: Machine Learning, CSC205: Computer Organization Lab

2020-2021 CSC17102: Parallel & Distributed Computing, CSC16101: Artificial Intelligence

2019-2020 CSC17102: Parallel & Distributed Computing, CSC16101: Artificial Intelligence, CSC16106: Compiler Design

2018-2019 CSC15107: Computer Architecture, CSC11101: Computer Programming, CSC16101: Artificial Intelligence, CSC52107: High Performance Computer Architecture

2017-2018	CSC15107:Computer Architecture, CSM15101: Algorithm Design & Analysis, CSC91101: Computer Programming, CSE18106: Distributed Operating Systems, CSC52107: CSC52107: High Performance Computer Architecture
2016-2017	CSC15107:Computer Architecture, CSM15101: Algorithm Design & Analysis, CSE18106: Distributed Operating Systems, CSC18122: Advanced Computer Architecture, CSC11301: Computer Programming
2015-2016	CSC15107:Computer Architecture, CSM15101: Algorithm Design & Analysis, CSE18106: Distributed Operating Systems, CSM16101: Computer Organization,
2014-2015	CSC15107:Computer Architecture, CS14102: Algorithm Design & Analysis, CSE18106: Distributed Operating Systems, CSC52107: High Performance Computer Architecture
2013-2014	CSC15107:Computer Architecture, CS14102: Algorithm Design & Analysis, CSE18106: Distributed Operating Systems, CSC52107: High Performance Computer Architecture
2012-2013	CSC15107:Computer Architecture, CS14102: Algorithm Design & Analysis, CSE18106: Distributed Operating Systems, CSC52107: High Performance Computer Architecture
2011-2012	CSC15107:Computer Architecture, CS14102: Algorithm Design & Analysis, CSE18106: Distributed Operating Systems, CSC52107: High Performance Computer Architecture
2010-2011	CSE18106: Distributed Operating Systems, Data Structure & Algorithms
Lab Courses:	Computer Programming Lab, Algorithm Design & Analysis Lab, Parallel & Distributed Computing Lab, Compiler Design Lab

Roles and Responsibilities

Institute Level:

1. Member, Executive Committee of TexMin Hub, Technology Innovation Hub (TIH), IIT, Dhanbad, Sponsored by DST, Govt. of India under NM-ICPS, 2023 - 2026
2. Member, Executive Committee of TexMin Hub, Technology Innovation Hub (TIH), IIT, Dhanbad, Sponsored by DST, Govt. of India under NM-ICPS, 2021 - 2023
3. Internship Coordinator, Institute Innovation Council 3.0 committee for the year 2020-21, IIT Dhanbad
4. Domain-Specific Coordinator, AI & Data Analytics, Technology Innovation Hub (TIH), IIT, Dhanbad, Sponsored by DST, Govt. of India under NM-ICPS, 2020 - continuing
5. Member, Naresh Vashisth Centre for Tinkering & Innovation, IIT Dhanbad, 2020 - continuing
6. Committee Member, Developing a multi-institutional, one-year blended Post-Graduate Diploma program for developing leaders for the Energy Resources industry, 2020 - continuing
7. Faculty Coordinator for Grand Challenge 2020, Sponsored by CIIE, IIT Dhanbad
8. SPOC for Smart Indian Hackathon (SIH), 2020
9. Faculty Coordinator for HackFest 2023, HackFest 2020, HackFest 2019
10. Faculty Coordinator for Organizing Samsung Innovation Award 2020 at IIT Dhanbad
11. Member Organizing Committee, IIT ISM Foundation Day, 2015 and 2017
12. Hostel Warden, Sapphire Hostel : 2013 and 2014

Department Level:

1. Convener, Departmental Undergraduate Courses, 2022-Continuing

2 Departmental IT Coordinator, 2020

3 Faculty In charge, Training & Placement 2020 - Continuing

4 Faculty In charge, Computer Science & Engineering Society (CSES): 2011 to 2020

5 Faculty In charge, Innovation & Entrepreneurship, Department of Computer Science & Engineering.

6 Faculty In charge, Artificial Intelligence & Cyber Physical Systems Lab, Hardware Lab.

7 Member, Departmental Faculty Selection Committee, 2019 - 2021

8 Member, Departmental Undergraduate Courses, 2019- 2021

9 Member, Departmental NBA work, 2014-2016

10 Organizing Committee, International Conference RAIT 2012, 2014, 2016 and 2018

11 Faculty Coordinator, Udbhav (Annual Day): 2019, 2018, 2017, 2016, 2014, 2013, Confluence (Alumni Meet): 2017, 2016, 2014,

12 Faculty Advisor: Pre-final year DD (CSE). 2013-2019

Short-Term Courses/FDPs organized

2019 Tarachand Amgoth, Course Coordinator (Co-CI), *A Two-Week FDP on Sensor Networks and Internet of Things*

2018 Tarachand Amgoth, Course Co-Coordinator (Co-CI), *One Week National Training Programme on Wireless Sensor Networks*

2017 Tarachand Amgoth, Course Co-Coordinator (Co-CI), *A Short Term Course on Wireless Sensor Networks and Internet of Things*

2016 Tarachand Amgoth, Course Coordinator (Co-CI), *A Short Term Course on Wireless Sensor Networks with Recent Trends*

2015 Tarachand Amgoth, Course Coordinator (CI), *A Short Term Course on Wireless Network Protocols & Algorithms*

2012 Tarachand Amgoth, Course Co-Coordinator (Co-CI), *A Short Term Course on Advanced Algorithms & their Applications*

Personnel Details

POB	Kothagudem, Telangana, India
DOB	07.11.1980
Languages	Lambada (Fluent), English (Fluent), Hindi (Fluent), Telugu (Intermediate)
Hometown	H.NO.5-3-31, Cooli Line (Street), Kothagudem, Bhadradri Kothagudem, T.S-507101
Office	Room 302, Dept.of CSE, IIT Dhanbad, Jharkhand - 826004
Present	Flat No: A104, Tower A, IIT ISM Campus, Dhanbad-826004