Dr. K. Shahu Chatrapati

Professor, Head of the Department

Life Member of CSI, ISTE

Computer Science & Engineering

Areas of Interest:
Machine Learning, Grid Computing, Ad-hoc & Wireless Sensor Networks, Data Warehousing & Mining, Big Data, Computer Networks, Software Engineering, Compilers, Theory of Automata, Distributed and Cloud Computing.

Name	**:**	Dr.K.Shahu Chatrapati
Designation	**:**	Professor
Qualification	**:**	Ph.D (CSE)
No. of Years of Experience	**:**	21yrs
Organization	**:**	JNTUH UCEJ / JNTUH Hyderabad,TS,INDIA.
Department	**:**	Computer Science and Engineering.

Educational & Professional

Academic Qualifications

- Ph.D in Computer Science and Engineering, Acharya Nagarjuna University (2005-2011)
- M.Tech. in Computer Science and Engineering, University College of Engineering, Andhra University with First class (2000-2002)
- B.Tech. in Computer Science Engineering, Acharya Nagarjuna University with First class (1995-1999)

Professional Experience

Teaching Experience
- Assistant Professor, Indur Institute of Engineering College (2003-01-03 - 2006-11-14)

At JNTUH
- Professor, JNTUH UCEH /JNTU ,HYDERABAD (2022 - Till Date)
- Professor, JNTUH UCEM /JNTU ,HYDERABAD (2019 - 2021)
- Associate Professor, JNTUH UCEM /JNTU ,HYDERABAD (2016 - 2019)
- Assistant Professor, JNTUH UCEM /JNTU ,HYDERABAD (2010 - 2016)
- Assistant Professor, JNTUH UCEJ /JNTU ,HYDERABAD (2009 - 2010)
- Assistant Professor, UCEK /JNTU ,KAKINADA (2006 - 2009)

Publications

- ‣ Dr. K. Shahu Chatrapati , Chiranjeevi Kunamalla, *Network Path Optimization Strategy using Collaborative Cache for Delay Tolerant Networks*, Journal of Scientific and Industrial Research (JSIR), ISBN No.0975-1084, Vol No.82, pp.210-218, February, 2023

- ‣ Dr. K. Shahu Chatrapati , Sagar Mekala, *A Hybrid Approach to Neighbour Discovery in Wireless Sensor Networks*, Intelligent Automation & Soft Computing, ISBN No.2326- 005X, Vol No.35, Issue No.1, pp.581-593, January, 2022

- ‣ Dr. K. Shahu Chatrapati , Sagar Mekala, *Continuous Neighbor Discovery with Efficient Asynchronous wake-up Schedules in Wireless Sensor Networks*, Journal of Theoretical and Applied Information Technology, ISBN No.1992-8645, Vol No.99, Issue No.16, pp.4081-4089, August, 2021

- ‣ Dr. K. Shahu Chatrapati , G. Raja Vikram, *An Energy Efficient Node Scheduling based Congestion Control Scheme for WSN Multicasting*, EAI Endorsed Transactions on Energy Web, ISBN No.2032-944X, Vol No.7, Issue No.30, pp.1-6, April, 2020

- ‣ Dr. K. Shahu Chatrapati , Sagar Mekala, *Energy adaptive block design based neighbor discovery for asynchronous wireless sensor networks*, Indian Journal of Science and Technology -Web of Science, ISBN No.0974- 6846, Vol No.13, Issue No.26, pp.2633-2643, July, 2020

- ‣ Dr. K. Shahu Chatrapati , Sagar Mekala, *Present State-of-the-Art of Continuous Neighbor Discovery in Asynchronous Wireless Sensor Networks*, EAI Endorsed Transactions on Energy Web, ISBN No.2032- 944X, Vol No.8, Issue No.33, pp.1-7, October, 2020

- ‣ Dr. K. Shahu Chatrapati , Chiranjeevi Kunamalla, *An Optimal Strategy for Cluster Hop Detection For Delay Tolerant Networks*, International Journal of Advanced Science and Technology, ISBN No.2005-4238, Vol No.29, Issue No.8, pp.6483-6499, September, 2020

- ‣ Dr. K. Shahu Chatrapati , Dr. J. Ujwala Rekha, *Competitive equilibrium based personal data market model*, Indian Journal of Science and Technology, ISBN No.0974-5645, Vol No.13, Issue No.13, pp.1450-1457, May, 2020

- ‣ Dr. K. Shahu Chatrapati , Dr. J. Ujwala Rekha, *Probabilistic Multiple Correlation based Term Weighting Scheme for Measuring Similarity of Unstructured Text Records*, Indian Journal of Science and Technology, ISBN No.0974-5645, Vol No.13, Issue No.11, pp.1276-1282, May, 2020

- ‣ Dr. K. Shahu Chatrapati , Sagar Mekala, *A Continuous Neighbour Discovery Protocol for Asymmetric Wireless Sensor Networks*, Journal of Advanced Research in Dynamical and Control Systems, ISBN No.1943-023X, Vol No.12, Issue No.07, pp.633-645, 2020

- ‣ Dr. K. Shahu Chatrapati , G. Raja Vikram, *A Secured and Scalable Battle-Field Surveillance using WSN Multicasting*, International Journal of Engineering and Advanced Technology , ISBN No.2249-8958, Vol No.9, Issue No.2, pp.2445-2449, December, 2019

- ‣ Dr. K. Shahu Chatrapati , Vijayakumar Polepally, *Dragonfly optimization and constraint measure-based load balancing in cloud computing*, Cluster Computing, ISBN No.1386-7857, Vol No.22, Issue No.1, pp.1099-1111, January, 2019

- ‣ Dr. K. Shahu Chatrapati , Vijayakumar Polepally, *DEGSA-VMM: Dragonfly-based exponential gravitational search algorithm to VMM strategy for load balancing in cloud computing*, The international journal of cybernetics, systems and management sciences(Kybernetes), ISBN No.0368-492X, Vol No.47, Issue No.6, pp.1138-1157, February, 2018

- ‣ Dr. K. Shahu Chatrapati , Kakelli Anil Kumar, *New secure routing protocol with elliptic curve cryptography for military heterogeneous wireless sensor networks*, Journal of Information and Optimization Sciences , ISBN No.2169-0103, Vol No.38, Issue No.2, pp.341-365, April, 2017

- ‣ Dr. K. Shahu Chatrapati , Vijayakumar Polepally, *Multiple Objectiveâ€"Based Modified Exponential Gravitational Search Algorithm to VMM Strategy for Load Balancing in Cloud*, International Journal of Intelligent Engineering and Systems , ISBN No.2185-3118, Vol No.10, Issue No.5, pp.67-76, October, 2017

- ‣ Dr. K. Shahu Chatrapati , Vijayakumar Polepally, *Exponential gravitational search algorithm-based VM migration strategy for load balancing in cloud computing*, International Journal of Modeling, Simulation, and Scientific Computing, ISBN No.1793- 9623, Vol No.9, Issue No.1, June, 2017

- ‣ Dr. K. Shahu Chatrapati , Kakelli Anil Kumar, *Energy Efficient Clustering Multipath Routing Protocol (EECMRP) with Strategic Route Discovery for Heterogeneous Wireless Sensor Network*, International Journal of Computer Science and Information Security, ISBN No.1947-5500 , Vol No.14, Issue No.07, pp.397-402, July, 2016

- ‣ Dr. K. Shahu Chatrapati , Kakelli Anil Kumar, *A Node Deployment Mechanism for Energy- Efficient Routing in Heterogeneous Wireless Sensor Network*, Journal of Theoretical and Applied Information Technology, ISBN No.1992-8645 , Vol No.93, Issue No.1, pp.17-23, November, 2016

- ‣ Dr. K. Shahu Chatrapati , Kakelli Anil Kumar, *Interference Minimization Protocol in Heterogeneous Wireless Sensor Network for High Quality Data Transmission*, International Journal of Engineering Research and Applications, ISBN No.2248-9622, Vol No.5, Issue No.12, pp.34-38, December, 2015

- ‣ Dr. K. Shahu Chatrapati , Dr. J. Ujwala Rekha, *Competitive Equilibrium Approach for Load Balancing a Data Grid*, International Journal of Computer Science Issues, ISBN No.1694-0814, Vol No.8, Issue No.2-427, 437, March, 2011

- ‣ Dr. K. Shahu Chatrapati , Dr. J. Ujwala Rekha, *Competitive equilibrium approach for load balancing a computational grid with communication delays*, Journal of Theoretical and Applied Information Technology, Vol No.19, Issue No.2, pp.126-133, 2010

-

International Conference

- ▸ Dr. K. Shahu Chatrapati , Chiranjeevi Kunamalla, *A Conclusive Comparative Analysis on Congestion Control in DTN Routing Protocols*, Computer Integrated Manufacturing Systems, ISBN No.1006-5911, Vol No.28, Issue No.12, pp.894-921, December, 2022

- ▸ Dr. K. Shahu Chatrapati , Sagar Mekala, *Energy Efficient Neighbor discovery using bacterial foraging optimization algorithm for directional WSNs*, Machine Learning, Deep Learning and Computational Intelligence for Wireless Communication, ISBN No.LNEE, 978-981-16-0289-4_7, Vol No.749, pp.93-107, February, 2021

- ▸ Dr. K. Shahu Chatrapati , Chiranjeevi Kunamalla, *Probabilistic Optimal Path Routing Strategy for Delay Tolerant Networks*, Design Engineering, ISBN No.0011-9342, Issue No.7, pp.16165-16184, July, 2021

- ▸ Dr. K. Shahu Chatrapati , G. Raja Vikram, *ECC-Based Secure Group Communication in Energy-Efficient Unequal Clustered WSN (EEUC-ECC)*, Third International Conference on Computational Intelligence and Informatics, ISBN No.978-981-15-1480-7, Vol No.1090, pp.673-682, March, 2020

- ▸ Dr. K. Shahu Chatrapati , Sagar Mekala, *Neighbor Nodes discovery schemes in a Wireless Sensor Network: A Comparative Performance Study*, Taylor and Francis Group, RACEE-2016, ISBN No.978-135-1136822, Vol No.1, Issue No.1, pp.1-12, 2019

- ▸ Dr. K. Shahu Chatrapati , Vijayakumar Polepally, *Energy Aware GSA-Based Load Balancing Method in Cloud Computing Environment*, Advances in Machine Learning and Data Science, ISBN No.978-981-10-8568-0, Vol No.705, pp.283-292, May, 2018

- ▸ Dr. K. Shahu Chatrapati , G. Raja Vikram, *Variable initial energy and unequal clustering (VEUC) based multicasting in WSN*, International Conference on Wireless Communications, Signal Processing and Networking (WiSPNET), ISBN No.978-1-5090-4443-6, February, 2018

- ▸ Dr. K. Shahu Chatrapati , Kakelli Anil Kumar, *Interference Minimization Protocol in Heterogeneous Wireless Sensor Networks for Military Applications*, Proceedings of First International Conference on Information and Communication Technology for Intelligent Systems, ISBN No.978-93-86138-76-7, Vol No.2, pp.479-487, January, 2016

- ▸ Dr. K. Shahu Chatrapati , Kakelli Anil Kumar, *Congestion Control in Heterogeneous Wireless Sensor Networks for High-Quality Data Transmission*, Proceedings of the International Congress on Information and Communication Technology , ISBN No. Advances in Intelligent Systems and Computing, Vol No.439, pp.429-437, June, 2016

- ▸ Dr. K. Shahu Chatrapati , Dr. J. Ujwala Rekha, *A Study on Speech Processing*, International Conference on Information Systems Design and Intelligent Applications, ISBN No.978-81-322-2757-1, pp.209-226, February, 2016

- ▸ Dr. K. Shahu Chatrapati , Dr. J. Ujwala Rekha, *Game Theory and Its Applications in Machine Learning*, Information Systems Design and Intelligent Applications, ISBN No.978-81-322-2757-1, pp.195-207, January, 2016

- ▸ Dr. K. Shahu Chatrapati , Dr. J. Ujwala Rekha, *Feature selection using game theory for phoneme based speech recognition*, 2014 International Conference on Contemporary Computing and Informatics, ISBN No.978-1-4799-6629-5, pp.962-966, January, 2015

- ▸ Dr. K. Shahu Chatrapati , Dr. J. Ujwala Rekha, *Feature selection for phoneme recognition using a cooperative game theory based framework*, International Conference on Multimedia, Communication and Computing Application (MCCA 2014), ISBN No.978-1-138-02775-6, pp.191-195, May, 2015

- ▸ Dr. K. Shahu Chatrapati , Dr. J. Ujwala Rekha, *Game theoretic approach for automatic speech segmentation and recognition*, 2014 IEEE 28th Convention of Electrical & Electronics Engineers in Israel (IEEEI), ISBN No.978-1-4799-5988-4, pp.1-5, IEEE, December, 2014

- ▸ Dr. K. Shahu Chatrapati , Dr. J. Ujwala Rekha, *Recursive Competitive Equilibrium Approach for Dynamic Load Balancing a Distributed System*, Distributed Computing and Internet Technology, ISBN No.978-3-642-19056-8_11, Vol No.LNCS 6536, pp.162-174, Springer-Verlag Berlin Heidelberg, 2011

- ▸ Dr. K. Shahu Chatrapati , Dr. J. Ujwala Rekha, *A Study on Load Balancing in Grid Networks*, Joint International Conference on Swarm, Evolutionary & Memetic Computing (SEMCCO) and Fuzzy & Neural Computing Conference (FANCCO), pp.78-81, December, 2011

- ▸ Dr. K. Shahu Chatrapati , Dr. J. Ujwala Rekha, *Competitive Equilibrium Theory and Its Applications in Computer Science*, International Conference on High Performance Architecture and Grid Computing, ISBN No.978-3-642-22577-2_7, Vol No.CCIS 169, pp.539-547, 2011

- ▸ Dr. K. Shahu Chatrapati , Dr. J. Ujwala Rekha, *Competitive Equilibrium Approach for Load Balancing in Computational Grids*, International Conference on Advances and Emerging Trends in Computing Technologies, pp.63-68, June, 2010

- ▸ **Events Participated/Organized**

- **Organized**
- ◦ Organized a Conference on A National Level Conference on â€œAdvances in Computing and Networkingâ€•, Department of Computer Science and Engineering, JNTUH University College of Engineering Manthani, Telangana, 06-12-2013 to 07-12-2013
- **Co-ordinated**
- ◦ Coordinated for a Refresher Course on *UGC sponsored Two-Week Online Refresher Course on â€œArtificial Intelligenceâ€•*, At UGC-Human Resource Development Centre, JNTUH, Kukatpally, Hyderabad, 09-11-2020 to 23-11-2020
- ◦ Coordinated for a Refresher Course on *UGC sponsored One-Week Online Short Time Course on â€œDeep Learningâ€•*, At UGC-Human Resource Development Centre, JNTUH, Kukatpally, Hyderabad, 14-09-2020 to 19-09-2020
- ◦ Coordinated for a Workshop on *TEQIP-3 Sponsored 2-Day Workshop on â€œOutcome Based Education and Research Methods for Engineering Facultyâ€•*, JNTUH University College of Engineering Manthani, Telangana, 28-02-2020 to 29-02-2020
- ◦ Coordinated for a Workshop on *2-Day State Level Student Hackathon â€œHack-Eliteâ€• on â€œAI for Sustainabilityâ€•*, JNTUH University College of Engineering Manthani, on behalf of J-Hub, JNTU Hyderabad, 24-01-2020 to 25-01-2020
- ◦ Coordinated for a Workshop on *a 2-Day National Level Technical Workshop on â€œInternet of Thingsâ€•*, Department of Computer Science and Engineering, JNTUH University College of Engineering Manthani, Telangana, 22-01-2020 to 23-01-2020
- ◦ Coordinated for a Workshop on *1-Day State Level Boot Camp on â€œArtificial Intelligence for better Future on IBM Watsonâ€•*, JNTUH University College of Engineering Manthani, on behalf of J-Hub, JNTU Hyderabad, 21-01-2020 to
- ◦ Coordinated for a Workshop on *a 3-Day National Level Technical Workshop on â€œMachine Learningâ€•*, Department of Computer Science and Engineering, JNTUH University College of Engineering Manthani, Telangana, 16-12-2019 to 18-12-2019
- ◦ Coordinated for a Refresher Course on *UGC sponsored Two-Week Refresher Course on â€œArtificial Intelligence and Machine Learningâ€•*, At UGC-Human Resource Development Centre, JNTUH, Kukatpally, Hyderabad, 14-10-2019 to 26-10-2019
- ◦ Coordinated for a Workshop on *a 2-Day National Level Technical Workshop on â€œEthical Hackingâ€•*, Department of Computer Science and Engineering, JNTUH University College of Engineering Manthani, Telangana, 01-04-2019 to 02-04-2019
- ◦ Coordinated for a Workshop on *2-Day State Level Student Hackathon â€œHack-Eliteâ€• on â€œAgri-Tech and Water Conservationâ€•*, JNTUH University College of Engineering Manthani, on behalf of J-Hub, JNTU Hyderabad, 09-01-2019 to 10-01-2019
- ◦ Coordinated for a Workshop on *2-Day State Level Boot Camp on â€œArtificial Intelligenceâ€•*, JNTUH University College of Engineering Manthani, on behalf of J-Hub, JNTU Hyderabad, 07-01-2019 to 08-01-2019
- ◦ Coordinated for a Workshop on *a 3-Day National Level Technical Workshop on â€œIOT & Big Dataâ€•*, Department of Computer Science and Engineering, JNTUH University College of Engineering Manthani, Telangana, 21-03-2018 to 23-03-2018
- ◦ Coordinated for a Refresher Course on *UGC sponsored Three-Week Refresher Course on â€œInternet of Thingsâ€•*, At UGC-Human Resource Development Centre, JNTUH, Kukatpally, Hyderabad, 09-10-2017 to 30-10-2017
- ◦ Coordinated for a Workshop on *a 3-Day National Level Technical Workshop on â€œBig Data Analyticsâ€•*, Department of Computer Science and Engineering, JNTUH University College of Engineering Manthani, Telangana, 23-09-2016 to 25-09-2016
- ◦ Coordinated for a Workshop on *a 3-Day National Level Technical Workshop on â€œBig Data Analyticsâ€•*, Department of Computer Science and Engineering, JNTUH College of Engineering Manthani, Telangana, 23-01-2016 to 25-01-2016
- ◦ Coordinated for a Workshop on *a 3-Day National Level Technical Workshop on â€œAndroid Application Developmentâ€•*, Department of Computer Science and Engineering, JNTUH College of Engineering Manthani, Telangana, 07-10-2015 to 09-10-2015
- ◦ Coordinated for a Workshop on *2-Day National Level Technical Workshop on â€œCyber Security and Malware Analysisâ€•*, Department of Computer Science and Engineering, JNTUH College of Engineering Manthani, Telangana, 14-03-2014 to 15-03-2014

- ▸ **Honors & Professional Activities**

- ▸ **Professional Activities**
- ▸
1. **Life Member**, Computer Society of India.
2. **Life Member**, Indian Society for Technical Education.

- ‣**Teaching**
- ‣ Soft Computing in B.TECH(CSE) I Semester (2022-2023)
- ‣ Software Quality Engineeing in MCA I Semester (2023-2024)
- ‣ PROGRAMMING FOR PROBLEM SOLVING in B.TECH(CSE) II Semester (2022-2023)
- ‣ SECURITY IN 5G TECNNOLOGY in M.Tech (CSE) I Semester (2022-2023)
- ‣ COMPILER DESIGN in B.TECH(CSE) II Semester (2022-2023)
- ‣ CLOUD APPLICATIONS in MCA I Semester (2022-2023)
- ‣ MACHINE LEARNING in MCA II Semester (2021-2022)

- ‣ **Adminstrative Positions Held**
- ‣ Additional Controller of Examinations, JNTUH HYDERABAD, 17 Mar 2022 - Present
- ‣ HEAD, Department of CSE, JNTUH UCEM /JNTUH ,HYDERABAD, 06 Aug 2012 - 16 Mar 2022
- ‣ NSS Program Officer, JNTUH UCEM /JNTUH ,HYDERABAD, 20 Jan 2012 - 14 Mar 2020
- ‣ Deputy Warden for Boys Hostel, JNTUH UCEM /JNTUH ,HYDERABAD, 26 Aug 2011 - 05 Apr 2017
- ‣ Transport In-charge of the College, JNTUH UCEM /JNTUH ,HYDERABAD, 03 Jan 2013 - 05 Aug 2015
- ‣ NSS Program Officer, JNTUH UCEJ /JNTUH ,HYDERABAD, 05 Aug 2010 - 29 Dec 2010
- ‣ Deputy Warden for Boys Hostel, JNTUH UCEJ /JNTUH ,HYDERABAD, 09 Mar 2009 - 04 Aug 2010

- ‣ **Project/Research Guidance**

- **Students**

Student Name	Title	Year	Download
K. CHIRANJEEVI	Congestion Control in Social Based Delay Tolerant Networks Using Cost Optimisation and Collaborative Cache Routing Mechanism	2023	
A. MAHENDER	Management of Cloud Based Resources on Virtual Machines and Networks for Application and Data	2023	
SAGAR MEKALA	Energy Efficient Neighbour Node Detection Algorithms for Wireless Sensor Networks	2022	
G. RAJAVIKRAM	DESIGN AND IMPLEMENTATION OF SECURED KEY DISTRIBUTION AND CONGESTION FREE PROTOCOL FOR MULTICAST COMMUNICATION	2021	
VIJAYAKUMAR POLEPALLY	NATURE INSPIRED META-HEURISTIC BASED IMPROVED LOAD BALANCING TECHNIQUES FOR CLOUD	2020	
KAKELLI ANIL KUMAR	IMCC SECURITY MECHANISM IN HETEROGENEOUS WIRELESS SENSOR NETWORKS FOR HIGH QUALITY DATA TRANSMISSION	2017	

- ‣ **Countries/Foreign Universities**

- ‣ IEEE 28th Convention of Electrical and Electronics Engineers in Israel, Israel.
- ‣ The Kulliyyah of Engineering, IIUM, Kuala Lumpur, Malaysia.

Contact :

Dr. K. Shahu Chatrapati
Computer Science & Engineering

Official Email: shahujntu@jntuh.ac.in
Alternate Email: shahujntu@gmail.com
Phone: 9866301501