Name of Faculty	Dr. Venkata Sushma Chinta
Designation	Assistant Professor
Nature of Job/Appointment	Regular
Date of Joining	20–01–2014
E-mail	venkatasushmachinta_mech@cbit.ac.in

Education Qualifications

	Name of the Degree	Class
Ph. D	Doctor of Philosophy (Mechanical) JNTU, Hyderabad.	Awarded
PG	M.E. (CAD/CAM)	First with Distinction
UG	B. Tech. (Mechanical)	First with Distinction

Work Experience

Teaching	16 Years
Research	--
Industry	--
Others	--

Area of Specialization	CAD/CAM, Composites, Fracture Mechanics, FEA, Machine Learning, Data Science, Deep Learning, Robotics.
Professional Memberships	ISTE LM134039
Responsibilities held at Institution Level	1. Mechanical Engineering department ARIIA coordinator 2. Co-Coordinator for "Home Coming 2017", CBIT ALUMNI MEET from Mechanical Department on 25th December 2017.
Responsibilities held at Department Level	1. Robotics and Drones lab In charge 2. PAQIC member
Research Guidance	-
Awards Received	1. Received best paper award for the paper titled "Investigation of Mechanical properties of bidirectional carbon / glass reinforced Epoxy hybrid composites, TJPRC Pvt Ltd., International journal of Mechanical and production Engineering Research and Development. 2. Silver Medal for the best academic performance during the year 2010-11 from CBIT, Hyderabad. 3. Silver Medal for the best academic performance during the year 2011-12 from CBIT, Hyderabad. 4. Received 1st prize in talent search conducted by MEDHA SOFTWARE SYSTEM INC. on 22 May 2001.
Courses Handled at Under Graduate / Post Graduate Level.	UG Level: Mechanics of Materials, CAD/CAM, CAD and FEM, Programming and program solving using C, object-oriented programming language using C++, Engineering Graphics and Design, Problem solving and programming using python, Robotics and Drones lab, Digital fabrication lab, CAD&D. PG level: Product design and process planning, CAE lab

No. of Papers Published	National Journals – nil International Journals – 22 National Conference – 01 International Conference – 8
Projects Carried out	1. Virtual Tryon: Image Analysis and Website development 2. Lamination of Areca nut composite balustrades
Patents	1. Intelligent Securities management system with trade order processing and qualification parameters (Appl No: 202341089159 A, Filing Dt: 12.01.2024) 2. Method and system for detection of delamination in a layered structure (Appl No: 202241067170A Filing Dt: 22-11-2022, PUBLICATION Dt: 23-12-2022). 3. Robotic manipulator for pick and place applications (Appl No: 202241067534A, Filing Dt: 24-11-2022, PUBLICATION Dt: 02-12-2022). 4. Development of auto pilot delivery drone an unmanned aerial vehicle(Appl No: 202241023144, Filing Dt: 20.04.2022)
Technology Transfer	ExcelR Robotics
Invited Speaker	1. Delivered Guest lecture on Robotics and Drones for VIT Bhopal University. 2. Delivered Guest lecture on ATAL FDP 'IoT and sensor design for Industry 5.O' 3. Delivered Guest lecture in 'GrassRoots Innovation Program (GRIP) a dedicated 4 month initiative focused on building and nurturing innovation and entrepreneurship amongst rural youth' 4. Delivered Guest lecture on Arduino programming at VVIT, Guntur 5. Resource person for the "Finite Element Applications in Mechanical and Civil Engineering (FEAMCE-2017)" under TEQIP-II during 23rd- 28th January, 2017 at CBIT.
1. No. of Books/Chapter Published with details	1. "Emerging Trends in Composite Materials and Industrial Applications", Vrinda Publishing House, ISBN 978-93- 85518-09-6.
Details of Short-Term Training Programs/Faculty Development Programs/Seminars/Workshops. Other Training (**Attended and/or Organized**).	1. Coordinator of one day Drones workshop on 15-02-2024 2. Coordinator of one - day training program on "HARDWARE INTEGRATION USING MATLAB AND SIMULINK" on 13-10-2023. 3. Coordinator of webinar on Low cost Automation on 04-07-2023 4. Co- Coordinator for the One-week ATAL FDP on ' IoT and Sensor design for Industry 5.0' 5. Coordinator for One-month summer internship on 'Python, Opencv and innovative projects' 6. Coordinator for one-month winter internship on 'Innovative projects using Python'

Details of Journal Publications/ Conferences **(National and International)**

International Journals:

1. Venkata Sushma Chinta, Sowmya Kethi Reddi , Nagini Yarramsetty , Optimal feature selection on Serial Cascaded deep learning for predictive maintenance system in automotive industry with fused optimization algorithm, Advanced engineering Informatics, 57, August 2023, 102105.

2. Venkata Sushma Chinta, Kiran Kumar Amireddy, Ravinder Reddy Pinninti and Koorapati Eshwar Prasad, "Fracture Parameters of Woven Jute Fibre Reinforced Axial Flow Fan Blade Material: An Experimental Investigation and FEA Analysis", Engineering Research Express, 6(1), (2023).

3. Nigamananda., J, Reddy, K. P., Chinta, V. S., "Pioneering factors driving divergence tyre technology from conventional tyres to non-pneumatic tyres", International Journal of Mechanical and Production Engineering Research and Development, Volume- 11, No. 6, pp. 747–755, 2022.

4. Raj, S. S., Chinta, V. S., Afridi, Z., “Bend twist coupling effect on the Performance of the Wing of an Unmanned Aerial Vehicle”, International Research Journal of Engineering and Technology, Volume- 9, No. 6, pp. 3140–3147, 2022.
5. Raj, S. S., Chinta, V. S., Afridi, Z., “Experimental Characterization Of Hybrid Composite Materials for tension bending and impact behaviour”, International Research Journal of Engineering and Technology, Volume- 9, No. 6, pp. 3148–3160, 2022.
6. Sandhya. V., Nagini, Y., Chinta, V. S., Reddy, J. V., Jyothirmayi, N., “Numerical Analysis of Engine Hood”, Journal of Xi'an University of Architecture & Technology”, Volume- 13, pp. 729-736, 2021.
7. Raj, S. S., Chinta, V. S., Afridi, Z., “Numerical Analysis of an Aircraft Wing”, Turkish Journal of Computer and Mathematics Education, Volume- 12, No.11, pp. 3760- 3766, 2021.
8. Raj, S. S., Chinta, V. S., Afridi, Z., “Modal Analysis of carbon/epoxy plate by varying fibre orientation”, Turkish Journal of Computer and Mathematics Education, Volume- 12, No.10, pp. 7580-7586, 2021.
9. Chinta, V. S., Raj, S. S., Reddy, P. R., Vincent, E., “Numerical and Experimental Investigation of Effect of Stacking Sequence on the Fracture Parameters of Composite Materials”, Journal of Xi'an University of Architecture & Technology, Volume- 13, No.2, pp. 76-86, 2021.
10. Chinta, V. S., Prasad, R. P., “Investigation of damage detections on glass/jute-epoxy, glass-epoxy and jute-epoxy composite beams with an edge crack using modal analysis”, International Journal of Mechanical and Production Engineering Research and Development, Volume- 10, No. 3, pp. 401-408, 2020.
11. Chinta, V. S., Reddy, P. R., Prasad, K. E., “Experimental and FE Analysis of Tensile and Bending Properties of Glass/Jute Epoxy Hybrid Composite,” International Journal of New Innovations in Engineering and Technology, Volume- 15, No- 4, pp. 31-39, 2021.
12. Chinta, V. S., Reddy, P. R., Prasad, K. E., Vadapally, K. S., Anand, S., Sai Kiran, B. V., “Characterization of Glass/Jute Hybrid Fibre Reinforced Epoxy Composite for Axial Flow Fan Blade”, J. Polym. Compos., Volume-7, No- 3, pp. 32–43, 2019, doi: 10.37591/jopc.v7i3.3427.
13. Chinta, V. S., Reddy, P. R., Prasad, K. E., “Analysis of Axial Flow Frp Fan Blade Material with Jute Fiber Reinforcements And Investigation of Mechanical Properties,” International Journal of Mechanical and Production Engineering, Volume- 7, No- 6, pp. 86–89, 2019.
14. Chinta, V. S., Reddy, P. R., Prasad, K. E., Anand, S., “Investigation of Fracture Toughness of Bidirectional Jute / Epoxy Composite and Analysis by using FEA”, Int. J. Mech. Prod. Eng. Res. Dev., TJPRC, Volume- 8, No- 6, pp. 227–238, 2018, doi: 10.24247/ ijmperddec 201827.
15. Chinta, V. S., Nagini, Y., Sandhya, V., Hima Nandini, E., Shaheen., Suteja, J., “Investigation of Mechanical properties of bidirectional carbon / glass reinforced Epoxy hybrid composites”, International journal of Mechanical and production Engineering Research and Development, Volume- 8, pp. 449-456, 2018.
16. Chinta, V. S., Monika, K., “Augmentation of Heat Transfer In Forced Convection Using Twisted Tape Inserts”, International Journal of Creative Research Thoughts, Volume- 6, No. 1, pp. 955-965,2018.
17. Gopinah, D., Chinta, V. S., “Design and Optimization of Four Wheeler Connecting Rod Using Finite Element Analysis”, Materials Today: Proceedings, Volume- 2, No. 4–5, pp. 2291-2299, 2015.
18. Ramayee, L., Chinta, V. S., Reddy, P. R., Reddy, P. S., “Design And Analysis of a Mechanical Bus Seat Recliner”, International Journal On Mechanical Engineering And Robotics, Issn:2321-5747
19. Chinta, V. S., Reddy, P. R., Reddy, P. S., Ramayee, L., “Thermal And Structural Analysis of Disc Brake With Square/ Circular Groove For Two-Wheeler”, International Advanced Research Journal In Science, Engineering And Technology, Volume- 2, No. 7, pp. 74-79, 2015.
20. Sankar, A. J. G., Reddy, P. R., Reddy, V. N. K., Chinta, V. S., “Buckling Analysis of Thin Carbon/ Epoxy Plate with Circular Cut-Outs Under Biaxial Compression by Using FEA”, International Journal of Research in Engineering and Technology, Volume - 2, No.10, pp. 296-301, 2013.
21. Sankar, A. J. G., Reddy, P. R., Chinta, V. S., “Buckling Analysis of Thin Carbon/Epoxy Plate by Using FEA”, International Journal of Engineering Research and Technology, Page no: 515-523 Volume- 2, No. 9, 2013.
22. Chinta, V. S., Reddy, P. R., Ramalakshmi, P., “Investigation of fracture parameters of compact tension specimen by FEA”, International Journal of Engineering Research and Technology, Volume - 2, No. 6, pp. 1587-1591, 2013.

International /National Conferences

1. Presented paper entitled ‘Smart Phone Controlled Robot Manipulator for Pick and Place Applications’, 2nd congress on control, Robotics and Mechtronics (CRM-2024), SR university, Warangal, feb 03-04, 2024.
2. Presented paper entitled **Investigation of flexural Properties of Jute Fibre Reinforced Hybrid Composite Material for Axial Flow Fan Blades**, in the Second International Conference on Modern Materials for Engineering and Research (ICMMER 2023). ICMMER 2023 during 26 - 27, October 2023.

3. Kiran Kumar Amireddy, S. Solomon Raj, Sushma Chinta and G. Laxmaiah, “Ultrasonic Evaluation of Paint Canisters”, E3S Web of Conferences, 2023.
4. Chinta, V. S., Reddy, P. R., Prasad, K. E., Investigation of shear properties of axial flow fan blade material with partial woven jute reinforcements, 2023. https://doi.org/10.1016/j.matpr.2023.02.426

5. Chinta, V. S., Reddy, P. R., Prasad, K. E., “Experimental investigation of high cycle fatigue life of jute fibre reinforced hybrid composite material for axial flow fan blades”, Mater. Today Proc., Volume- 59, pp. 357–367, 2022, doi: 10.1016/j.matpr.2021.11.317.

6. Chinta, V. S., Reddy, P. R., Prasad, K. E., “The effect of stacking sequence on the tensile properties of jute fibre reinforced hybrid composite material for axial flow fan blades: An experimental and finite element investigation”, Mater. Today Proc., Volume- 59, pp. 295–302, 2022.
7. Chinta, V. S., Reddy, P. R., Prasad, K. E., Sai Kiran, B. V., “Experimental and Finite Element Analysis of Fracture Parameters of woven Glass/Epoxy Composite”, Recent Trends in Mechanical Engineering, Eds. Singapore: Springer Singapore, pp. 649–660, 2020, Doi: 10.1007/978-981-15-1124-0_56.
8. Chinta, V. S., Reddy, P. R., Prasad, K. E., Vadapally, K. S., “Investigation of Fracture Parameters of Jute/Glass Reinforced Hybrid Composite and Analysis by Using FEA,” in Emerging Trends in Mechanical Engineering, Eds. Singapore: Springer Singapore, pp. 215–228, 2020, Doi: 10.1007/978-981-32-9931-3_22.