

Avatharam Ganivada, M.Tech., Ph.D.

Asst. Professor,
School of Computer and Information Sciences,
University of Hyderabad

Email: avatharg@uohyd.ac.in
Phone: 8013902064
<https://scis.uohyd.ac.in/~avatharg/>

a) Full Time Work Experience

S.No.	Employer	Duration of Service		Designation, Pay-level
		From (MM/YY)	To (MM/YY)	
1.	University of Hyderabad	01/03/2017 to present.		Asst. Professor, Level 11
2.	ProKarma Soft. Pvt. Ltd., Hyderabad	02/09/2015 to 28/ 02/2017		Equivalent to Asso. Professor scale.

b) Sponsored Projects Undertaken

S.No.	Sponsoring Agency	Title of Project	Amount of Grant	Period	Co-PI/ PI	Amount paid or to be paid a student per month
1.	IoE, UoH	FuzzyRoughKernel Based Extreme Learning Machine	1.4,83,000	2021-24	--	25,000/-
2.	ANRF, DST	Classification of New Mineral Prospectivity for Harnessing Gold Resources using Machine Learning and Deep Convolutional Neural Networks	18,63,000 (Co-PI grant) + 30,00,000 (PI Grant)	2023-26	Prof. P. V. S. Raju, Chief Scientist, NGRI, CSIR	38,440/-
3.	ANRF, DST	AI and ML based Methods based Discovery of Novel Drugs for Blood and Breast cancers	100 crores (shared by all Co-PIs of UoH)	2025-2030	Prof. Lalitha Guru Prasad, School of Chemistry	30,000/-

c) Doctoral Students' Thesis supervision

S.No.	Name of the Student	Title of Thesis	Co-guide	Year of Completion	Status of Degree
1.	Shadab Ahmad	Rank and Score Level Fusion of Multimodal Biometrics for Person Authentication	Dr.R.Pal	2023	Awarded
2.	Yara Srinivas	Moving Object Detection and Tracking in Videos using Interframe and Deep Neural Networks Methods	--	2025	- Awarded
3.	Mohsin F.Dar	Advanced Deep Learning Techniques for Breast Ultrasound Image Segmentation and Classification	--	2025	Thesis submitted

d) Administrative Activities at SCIS, UoH

S.No	Administrative Position Held	From (MM/YY)	To (MM/YY)	Major responsibilities	Significant Outcomes
1.	M.Tech. Coordinator	July, 2024	Present	<ul style="list-style-type: none"> -Collecting a list of project titles from students -Allocating students into different panels for conducting mid-term evaluation -Announcing the date of final viva-voce of students within the school. - Listing the dates of Viva conducted for all the students - Allocating students to faculty as Teaching Assistants 	M.Tech. students' activities like project allocation, midterm and final evaluations are being done in the right time.
2.	Member of School Level Admission Committee	July, 2018	Present	<ul style="list-style-type: none"> -Since 2018, I have been actively involved in the selection process - Interviewing doctoral candidates for admission into Ph.D programme - Submitting recommendations 	Successfully interviewed several students over 8 years
3.	Member of Academic Planning Committee	July, 2024	Present	<ul style="list-style-type: none"> - Evaluation of course curriculum to be offered to the students of post graduate studies of MCA, IM.Tech. and M.Tech. - Evaluation of academic issue. 	Evaluated a MCA curriculum in 2024 and recommended for its implementation
4.	Member of Time-Table Committee	July, 2023	June, 2024	<ul style="list-style-type: none"> -Preparing time-tables for all the courses to be taught - Preparing exam time-table for conducting semester examinations - Including courses for recourse students by avoiding overlaps 	-No remarks received from faculty/students
5.	Member of Grievance Committee	July 2025	Present	<ul style="list-style-type: none"> -Collecting students' complaints - Discussing with the concerned people or committee - Solving the problems of students - Preparing final minutes by addressing grievances 	Recommended revaluation and supplementary exam for the students who failed in Software Engineering course, 2025.
6.	Member of Screening Committee for CAS	July, 2023	Present	<ul style="list-style-type: none"> - Actively Involved in short listing applications of faculty according to UGC guidelines -preparing minutes of meeting 	Significantly supported or contributed to the committee.

f) Research Publications: #24 (1 book, 13 journals, and 10 selected conference proceedings)

Book: Granular Neural Networks, Pattern Recognition and Bioinformatics, Series: Studies in Computational Intelligence by S. K. Pal, S. S. Ray and A. Ganivada, Springer-Verlag, 2017.

International Journals: out of 13, 8 papers are published at SCIS, UoH. All the papers are indexed in UGC care list/SCI.

13. P. V. S. Raju, V. S. Mudili, and A. Ganivada, "A hybrid framework for detecting mineralization

zones in the G.R.Halli, Western Dharwar craton, Karnataka, India,” *Minerals*, vol.15, pp.1125, 2025 (IF: 2.2).

12. M. F. Dar, and **A. Ganivada***, “Adaptive ensemble loss and multi-scale attention in breast ultrasound segmentation with UMA-Net”, *Medical & Biological Engineering & Computing*, vol.63, pp. 1697--1713, 2025 (IF: 2.6).

11. M. F. Dar, and **A. Ganivada***, "Deep Learning and Genetic Algorithm-based Ensemble Model for Feature Selection and Classification of Breast Ultrasound Images", *Image and Vision Computing*, vol.146, pp. 105018, 2024 (IF: 4.7)

10. **A. Ganivada** and S. Yara, A Modified Interframe Difference Method for Detection of Moving Objects in Videos, *I. J. of Information Technology*, vol. 17 (2), pp. 749- 754, 2024.

9. **A. Ganivada** and S. Yara, "A Novel Deep Convolutional Encoder-Decoder Network: Application to Moving Object Detection in Videos", *Neural Computing and Applications*, vol. 35, no. 39, pp. 22027-22041, 2023 (IF: 5.9).

8. M. F. Dar, and **A. Ganivada***, "EfficientU-Net: A Novel Deep Learning Method for Breast Tumor Segmentation and Classification in Ultrasound Images", *Neural Processing Letters*, vol. 55, pp. 10439-10462, 2023 (IF: 3.1).

7. **A. Ganivada** and S. Ramanna, "Self-organizing map with granular competitive learning: Application to microarray clustering", *Intelligence. Decision Technology*, vol. 16(3), pp. 505-521, 2022 (IF: 1.2).

6. S. Ahmad, R. Pal, **A. Ganivada**, "Rank level fusion of multimodal biometrics using genetic algorithm", *Multimedia Tools and Applications*. vol. 81, no. 28, pp. 40931-40958, 2022 (IF: 3.6).

5. S. S. Ray, **A. Ganivada*** and S. K. Pal, "A Granular Self-Organizing Map for Clustering and Gene Selection in Microarray data", *IEEE Transactions on Neural Networks and Learning Systems*, vol. 27, no. 9, pp. 1890--1906, 2016 (IF:11.45).

4. **A. Ganivada**, S. S. Ray and S. K. Pal, "Fuzzy Rough Sets, New Granular Neural Networks for Unsupervised Feature Selection", *Neural Networks*, vol. 48, pp. 91--108, 2013 (IF: 5.75).

3.**A. Ganivada**, S. S. Ray and S. K. Pal, "Fuzzy Rough Granular Self-Organizing Map and Fuzzy Rough Entropy", *Theoretical Computer Science*, vol. 466, pp. 37--63, 2012 (IF: 1.2).

2. **A. Ganivada**, S. Dutta, and S. K. Pal, "Fuzzy Rough Granular Neural Networks, Fuzzy granules and Classification", *Theoretical Computer Science*, vol. 412, pp.5834--5853, 2011 (IF: 1.2).

1. **A. Ganivada** and S. K. Pal, "A Novel Fuzzy Rough Granular Neural Network for Classification", *International Journal of Computational Intelligence Systems*, vol. 4(5), pp.1042--1051, 2011(IP: 1.3).

International Conferences: 10 selected papers are:

10. MF Dar, **A. Ganivada**, “Dynamic Weight-Adjusted Ensemble Loss for Enhanced Medical Image Segmentation”, in Proceedings of 4th international conference on Computing and Communication Networks, LNNS, Springer, Manchester, UK,2024.

9. S. Ahmad, R. Pal, **A. Ganivada**, "Identifying a Person in Mask: Fusion of Masked Face and Iris", in Proceedings of 7th international conference on Pattern Recognition and Machine Intelligence, LNCS, Springer, Kolkata, **2023**.

8. **A. Ganivada**, S. Mukhtar, "Type-II Fuzzy Kernel-Based Multi-layer Extreme Learning Machine", in Proceedings of 7th international conference on Soft Computing: Theories and Applications, LNNS, Springer, Himachal Pradesh, 2023.

7. S. Yara, **A. Ganivada**, "Detection of Moving Objects and Enhancement Using Motion Features in Various Video Sequences", in Innovations in Computer Science and Engineering, LNNS, Springer, Hyderabad, 2022.

6. S. Ahmad, R. Pal, **A. Ganivada**, "Matching Score-Based Biometric Quality Estimation for Score and Rank Level Fusion for Person Identification", in Proceedings of ICVGIP, ACM DI, Rajasthan, 2022.

5. **A. Ganivada**, "Fuzzy Methodologies for Forecasting Usage and Wet-Bulb Data Variables", IEEE International Conference on Intelligent Systems, Smart and Green Technologies, Vizag, 2021.
4. S. Ahmad, R. Pal, **A. Ganivada**, "Score Level Fusion of Multimodal Biometrics Using Genetic Algorithm", IEEE Congress on Evolutionary Computation, Krakow, Poland, 2021.
3. S. Ahmad, R. Pal, and **A. Ganivada**, "Rank Level Fusion of Multimodal Biometrics using Particle Swarm Optimization", 9th International Conference on Pattern Recognition and Machine Intelligence (PReMI), Kolkata, Springer, 2021.
2. S. Ahmad, R. Pal, and **A. Ganivada**, Rank Level Fusion of Multimodal Biometrics Based on Cross-Entropy Monte Carlo Method, Signal Processing and Intelligent Recognition Systems (SIRS), Kottayam, Kerala, Springer, 2019.
1. **A. Ganivada**, "Generalized Fuzzy Rough Sets Based on New Fuzzy Similarity Relation", in Proceedings of 7th International Conference Soft Computing and Pattern Recognition, Hyderabad, 2019.

e) **PG Students' Dissertation Supervision:** # students completed--**11**

g) **Teaching:** # courses taught--**12**

1. Computer Based Numerical Methods and Statistics **2.** Neural Networks **3.** Image Processing **4.** Pattern Recognition **5.** Object Oriented Analysis and Design, Theory and Lab **6.** Data And File Structures, Theory and Lab **7.** RMCS Lab **8.** Computer Graphics **9.** Web technology lab **10.** Programming Methodology **11.** IT162, Theory and Lab, College of Integrated Studies, UoH **12.** IT101 course, College of Integrated Studies, UoH.

h) **Invited talks delivered at** different organizations including: i) Department of CS & E, NIT Patna, 2016. ii) CVR College of Engi., Hyderabad, 2018. iii) Vignana Bharathi Institute of Technology, Hyderabad, 2019. iv) Muffakham Jah College of Eng. & Tech. Banjara Hills, 2020. v) Vardhaman College of Engineering, Hyderabad, 2020. vi) Sasi College of Engineering, 2021 & 2022.

i) **Award/Honor:** Young Researcher Awarded by STEM Research Society and Shimla University.

j) **Educational Qualifications:**

Examination	Academic Title	University/ Institution	Main Subjects	Year of Passing	CGPA	Class / Division	Amount received from
Doctoral level:	Ph.D.	Indian Statistical Institute/ Calcutta University	Computer Science & Engineering	2016	---	Awarded	DST-Project PI: Prof. S. K. Pal, I.S.I.
Post-Graduation (Master's)	M.Tech.	University of Mysore	Computer Science & Technology	2008	4.25/5	Distinction	AICTE-GATE Fellowship

k) **References:**

1. Prof. Sankar K. Pal, Former Director, Distinguished Scientist, Indian Statistical Institute, E-mail ID: sankarpal@yahoo.co.in, Office No.: 033 25752208
2. Prof. Shubhra S. Ray, Professor, Machine Intelligence Unit, Indian Statistical Institute, Office Phone No.: 033 25752208
3. Prof. Sheela Ramanna, Professor, Chair ACS Graduate Program, Department of Applied Computer Science, University of Winnipeg, Canada, E-mail ID: s.ramanna@uwinnipeg.ca