


## CURRICULUM VITAE

<b>Name</b>	<b>SOMSUBHRA GUPTA</b>	 <p style="text-align: center;"><u>PHOTO</u></p>
<b>Qualification</b>	<b><u>PH.D.</u></b>	
<b>Designation, Department and School</b>	<b><u>SCHOOL OF COMPUTER SCIENCE</u></b>	
<b>Subject teach</b>	Research Methodology Artificial Intelligence Machine Learning Soft Computing Digital Image Processing Big Data Analytics Operations Research Design Analysis of Algorithms Advanced Algorithms Programming and Problem Solving	
<b>Research Interest</b>	<b><u>MACHINE INTELLIGENCE AND MACHINE LEARNING</u></b>	
<b>Experience</b>	<b>25 +years</b>	
<b>Publications</b>	<p style="text-align: center;"><b>Science Direct</b></p> <p>[1] S. Gupta, P.K. Datta, "Topic objective and outcome: Performance indicators in Knowledge Transfer through in-depth Curriculum content analysis", <i>Procedia Computer Science</i>, Elsevier Science, ISSN:1877-0509, Vol. 172, pp. 331-336, 2020.  <a href="https://doi.org/10.1016/j.procs.2020.05.053">https://doi.org/10.1016/j.procs.2020.05.053</a> <b>(SCOPUS Indexed, Science Direct)</b></p> <p>[2] P. Das, S. Gupta, B. Neogi, "Measurement of effect of music on human brain and consequent impact on attentiveness and concentration during reading", <i>Procedia Computer Science</i>, Elsevier Science, ISSN:1877-0509, Vol. 172, pp. 1033-1038, 2020. <b>(SCOPUS Indexed; Science Direct)</b>  <a href="https://doi.org/10.1016/j.procs.2020.05.151">https://doi.org/10.1016/j.procs.2020.05.151</a></p> <p>[3] S. Gupta, S. Sinha, "Academic Staff planning allocation and optimization using Genetic Algorithm under the framework of Fuzzy Goal Programming", <i>Procedia Computer Science</i>, Elsevier Science, ISSN:1877-0509, Vol.172, pp. 900-905, 2020. <b>(SCOPUS Indexed, Science Direct)</b>  <a href="https://doi.org/10.1016/j.procs.2020.05.130">https://doi.org/10.1016/j.procs.2020.05.130</a></p> <p>[4] S. Gupta, S Das, P K Pal, "Predictability in viral computing", <i>Procedia Technology</i>, Elsevier Science , ISSN: 2212-0173, Vol. 4, pp. 530-535, 2012  <a href="https://doi.org/10.1016/j.protcy.2012.05.084">https://doi.org/10.1016/j.protcy.2012.05.084</a> <b>(SCOPUS and WoS Indexed) (Available at Science Direct)</b></p> <p>[5] S. Gupta, B. Chatterjee, "Compiler with auto-debugger: an intelligent computing approach towards self-improvised correction of errors", <i>Procedia Technology</i>, Elsevier Science, ISSN: 2212-0173, Vol. 4, pp. 286-296, 2012. <b>(SCOPUS and WoS Indexed); Science Direct)</b>  <a href="https://doi.org/10.1016/j.protcy.2012.05.044">https://doi.org/10.1016/j.protcy.2012.05.044</a></p> <p>[6] Banerjee Majumder, Annwasha and Gupta, Somsubhra and Singh, Dharpal, "An Intelligent BAN Routing Mechanism for Transferring Remote Patient Monitoring Data using</p>	

- K Means Clustering”, Social Science Research Network Electronic Journal, ISSN: 1556-5068, SSRN, Elsevier July 16, 2021. Available at SSRN: <https://ssrn.com/abstract=3884383> or <http://dx.doi.org/10.2139/ssrn.3884383>
- [7] Panda, Kritisha and Das, Paromita and Gupta, Somsubhra and Neogi, Biswarup, “GA-FGP based Intelligent Systems incorporating on-board Music Systems for stress relief for Solar Power Driven and Wirelessly charged Electric Car” , Social Science Research Network Electronic Journal, ISSN: 1556-5068, SSRN, Elsevier, July 18, 2021. Available at SSRN: <https://ssrn.com/abstract=3888942> or <http://dx.doi.org/10.2139/ssrn.3888942>
- [8] Datta, Atanu and Gupta, Somsubhra, Proposed Safety and Security Model for Hand-Held Mobile Devices, Social Science Research Network Electronic Journal, ISSN: 1556-5068, SSRN, Elsevier , March 18, 2022, Available at SSRN: <https://ssrn.com/abstract=4060930> or <http://dx.doi.org/10.2139/ssrn.4060930>
- [9] Gupta, Somsubhra and Kumar Srivastav, Manoj, “Analysis and Prediction of Friendship Model in Social Networks like Facebook using Binomial Distribution and Supervised Learning”, Social Science Research Network Electronic Journal, ISSN: 1556-5068, SSRN, Elsevier, April 22, 2022. Available at SSRN: <https://ssrn.com/abstract=4090505> or <http://dx.doi.org/10.2139/ssrn.4090505>

### Springer

- [10] D. Barik, S. Gupta, S. Som, “The concept of detecting Autism Spectrum Disorder in Toddlers through Quantum inspired algorithms”, to be published at Lecture Notes in Network and Systems, **Springer**, through the International Conference on Innovations in Data Analytics (ICIDA), ISSN: 2367-3370, 2024  
(SCOPUS indexed) (Available to be in Springer Link)
- [11] P. Das, S. Gupta, B. Neogi, “Emotion Recognition System using Indian Music for Therapeutic Cause”, presented at SSWC 2024. To be published in *Springer nature Smart Innovations, System and Technologies*, **Springer** , ISSN: 2190-3018 ISBN: 978-981-96-1347-2, (In Press), 2024  
(SCOPUS indexed) (Available to be in Springer Link)
- [12] M.K. Srivastav, S. Gupta, V.M. Priyadarshini, S. Som, B. Acharya , V.C.Gerogiannis , A.Kanavos , J. Karamitsos, “Utilizing Degree Centrality Measures for Product Advertisement in Social Network”, *Lecture Notes in Business Information Processing*, **Springer** DOI: 10.1007/978-3-031-56481\_9\_6, Vol. 502, pp. 77-91, 2024  
[https://doi.org/10.1007/978-3-031-56481-9\\_6](https://doi.org/10.1007/978-3-031-56481-9_6)  
(SCOPUS indexed) (Available in Springer Link)
- [13] S. Mitra\*, S. Gupta, “Mobile Learning under Personal Cloud with a Virtualization Framework for Outcome Based Education”, *Journal of Education and Information Technologies (EAIT)*, **Springer**, Vol. 25, No. 3, pp. 2129-2156, ISSN 1360-2357, 2020 (DOI: 10.1007/s10639-019-10043-z).  
(DBLP, SCOPUS and WoS indexed) (Available in Springer Link)
- [14] A. Banerjee, S. Gupta, “Proposed Intelligent System to identify the level of risk of Cardiovascular Diseases under the framework of Bioinformatics”, *Advancement of Medical Electronics, Information- and Communication Theory in Molecular Biology Lecture Notes in Bioengineering*, **Springer**, ISBN: 978-81-322-2255-2, pp. 3-12, 2015. (WoS indexed) (Available in Springer Link)
- [15] S. Gupta, S. Chatterjee, “Text Dependent Voice Based Biometric Authentication System using Spectrum Analysis and Image Acquisition”, *Advances in Intelligent and Soft Computing*, **Springer** DOI: 10.1007/978-3-642-30157-5\_7, ISBN: 978-3-642-30156-8, Vol. 166, pp. 61-70, 2012  
(SCOPUS indexed) (Available in Springer Link)
- [16] S. Gupta, S. Mazumder, S. Mondal, “Interactive Investigation Support System Design with Data Mining Extension”, *Advances in Intelligent and Soft Computing*, **Springer** DOI: 10.1007/978-3-642-30157-5\_7, ISBN: 978-3-642-30156-8, Vol. 166, pp. 71-81, , 2012  
(SCOPUS Indexed) (Available in Springer Link)
- [17] A. Banerjee Majumder, S. Gupta, “CBSTD: A Cloud Based Symbol Table Driven DNA Compression Algorithm”, *Engineering Signals and Communications, Lecture Notes in Networks and Systems*, **Springer**, ISBN: 978-981-10-3952-2, DOI: 10.1007 / 978-981-10-3953-9, Vol.11, pp. 467-476, 2018.  
(SCOPUS Indexed) (Available in Springer Link)
- [18] A. Banerjee Majumder, S. Gupta, “An Energy Efficient Congestion Avoidance Priority Based Routing Algorithm for Body Area network”, *Engineering Signals and Communications, Lecture Notes in Networks and Systems*, **Springer**, ISBN: 978-981-10-3952-2, DOI: 10.1007 / 978-981-10-3953-9 , Vol-11, pp 545-552, 2018.  
(SCOPUS Indexed) (Available in Springer Link)
- [19] A. Banerjee Majumdar, S. Majumdar, S. Gupta, D. Singh, “An intelligent, Geo-Replication, Energy Efficient BAN Routing algorithm under Framework of Machine Learning and Cloud Computing”, *Data Management, Analytics and Innovations*, Lecture Notes on Data

- Engineering and Communication Technologies, **Springer**, ISSN: 2367-4520, DOI: [https://doi.org/10.1007/978-981-16-2937-2\\_4](https://doi.org/10.1007/978-981-16-2937-2_4), 71, pp. 43-53, 2022 (**SCOPUS Indexed**)
- [20] A. Banerjee Majumdar, S. Gupta, D. Singh, "A survey paper on Algorithms of Wireless Body Area Network", *Applications of Networks, Sensors and Autonomous Systems Analytics*, Studies in Automatic, Data-driven and Computing (SADIC) series, **Springer**, ISSN: 2730-6437, [https://doi.org/10.1007/978-981-16-7305-4\\_33](https://doi.org/10.1007/978-981-16-7305-4_33), pp. 335-342, 2021 (**SCOPUS Indexed**)
- IEEE Xplore:**
- [21] M.K. Srivastav, S. Gupta, S.Som, " **Utilizing Social Network Analysis to Model Social Media Post Popularity with Bayesian Belief Networks**", International Conference on Big Data Analytics in Bioinformatics (DABCON-24), to be available at IEEE Xplore, 2024. (**SCOPUS Indexed**),
- [22] A. Banerjee Majumdar, S. Majumdar, S. Gupta, D. Singh, "A Heart Disease Prediction Model using Merged XGBoost-SVM Classifier and Particle Swarm Optimization", Proceedings of the 5<sup>th</sup> Int. Conf. on Mobile Computing and Sustainable Informatics (ICMCSI) 2024, ISBN: 979-8-3503-9523-5/24, pp. 241-248, 2024. <https://doi.org/10.1109/ICMCSI61536.2024.00042> (**SCOPUS Indexed**), (Trivuban University NEPAL)
- [23] S. Gupta, M. Chakraborty, S. Halder, "Digital Image Processing based Cognitive System for Human Detection using Six Rotor Unmanned Airborne Cubot 'The EAGLE' under the Framework of Mechatronics", Proceedings of the Int. Conf. on Computing, Power and communication Technologies (GUCON) 2018, ISBN: 978-1-5386-4491-1/18, pp. 1003-1009, 2018. (**SCOPUS and WoS Indexed**), (Galgotia Univ, New Delhi)
- [24] S. Roy, S. Gupta, "The Green Cloud Effective Framework: An Environment Friendly Approach Reducing CO<sub>2</sub> Level", Proceedings of the 1<sup>st</sup> International Conference on Non-conventional Energy (ICONCE) -2014, ISBN: 978-1-4799-3340-2, pp.301-304, 2014. (**SCOPUS and WoS Indexed**)
- [25] R. Chowdhury, S. Gupta, A. Saha, "Stochastic Seed Based Cryptographic Technique [SSCT] Using Dual Formula Key [DFK]", Proceedings of the International Conference on Communication and Industrial Applications (ICCIA) 2011, ISBN: 978-1-4577-1915-8, pp.1-5, 2011. (**SCOPUS Indexed**)
- [26] S. Gupta, M. Bhattacharyya, S. Chatterjee, "Variable length cumulative key size and seed based symmetric key cryptographic algorithm using composite 3-D transposition substitution and Chaining Technique", Proceedings of the IEEE International Conference on Advances in Communication, Network and Computing (CNC) 2010, ISBN: 978-0-7695-4209-6, pp.109-113, 2010. (**SCOPUS Indexed**),
- [27] B.B. Pal, S. Gupta, D. Chakraborti, "A Genetic Algorithm Based Stochastic Simulation Approach to Chance Constrained Interval Valued Multiobjective Decision Making Problems", Proceedings of the IEEE International Conference in Computer, Communication and Network Technology (ICCCN) 2010, ISBN: 978-1-4244-6591-0, pp.1-7, 2010. (**SCOPUS Indexed**), (IEEE ED Society)
- [28] B.B. Pal, S. Gupta, "A Genetic Algorithm Approach to Fuzzy Goal Programming Formulation of Chance Constrained Problems Using Stochastic Simulation", Proceedings of the 4<sup>th</sup> International Conference on Industrial and Information Systems (ICIIS) 2009, EICS1-6, ISBN: 978-1-4244-4837-1, pp.1-6, 2009. (**SCOPUS and WoS Indexed**), (Peradeniya University, SRI LANKA and IEEE Region 10<sup>th</sup> Colloquium)
- [29] B.B. Pal, S. Gupta, P. Biswas, "Fuzzy goal Programming Approach to Chance Constrained Multiobjective Decision Making Problems using Genetic Algorithm", Proceedings of the 4<sup>th</sup> International Conference on Industrial and Information Systems (ICIIS 2009), EICS3-3, ISBN: 978-1-4244-4837-1, pp.1-6, 2009. (**SCOPUS and WoS Indexed**), (Peradeniya University, SRI LANKA and IEEE Region 10<sup>th</sup> Colloquium)
- [30] B.B. Pal, S. Gupta, "A Genetic Algorithm Approach to Fuzzy Goal Programming Formulation of Fractional Multiobjective Decision Making Problems", Proceeding of the IEEE International Conference on Advanced Computing (ICAC) 2009, IEEE CS Press, ISBN: 978-1-4244-4787-9, pp. 55-60, 2009. (**SCOPUS and WoS Indexed**) (DIT, Anna University, Chennai and IEEE Chennai Section)
- [31] S. Gupta, S. Sengupta, M. Bhattacharyya, S. Chatterjee, B. Sen Sharma, "Cellular Phone Based Web Authentication System Using 3-D Encryption Technique under Stochastic Framework", Proceedings of the 1<sup>st</sup> IEEE Asian Himalayas International Conference on Internet (AH-ICI) 2009, (**SCOPUS Indexed**) ISBN: 978-1-4244-4569-1, pp.1-5, 2009. (IEEE Asian Himalayas Chapter, NEPAL)
- [32] B.B. Pal, S. Gupta, "A Goal Programming Approach for solving Interval Valued Multiobjective Fractional Programming Problems using Genetic Algorithm", Proceedings of the IEEE Region 10<sup>th</sup> Colloquium and 3<sup>rd</sup> International Conference on Industrial and Information Systems (ICIIS) 2008, (**DBLP. SCOPUS Indexed**), ISBN: 978-1-4244-2806-9, 440, pp.1-6, 2008. (IEEE Khargpur Sec. and IEEE Sri Lanka Sec. at IIT, KGP)
- [33] J.K.Pal, J.K.Mandal, S.Gupta, "Composite transposition substitution chaining based cipher technique", Proceedings of the 16<sup>th</sup> IEEE International Conference on Advanced Computing and Communications (ADCOM) 2008, (**SCOPUS and WoS Indexed**), IEEE CS Press, ISBN: 978-1-4244-2963-9, pp. 433-439, 2008. (DIT, Anna University, Chennai and IEEE Chennai Section)

**Other International Journal:**

- [34] I. Paul, A. Roy, Md. R. Khan, M. Mondal, S. Gupta, "Predictive Analytics driven time oriented prioritized Task Assistant under the framework of Machine Intelligence", *International Journal of Computing, Programming and Database Management (IJCPDM) through (ICIAMS) 2023*, ISSN: 2707-6636 Vol. 5, No. 1, pp.1-10, 2024.  
<https://doi.org/10.33545/27076636.2024.v5.i1a.86>
- [35] A. Banerjee Majumder, S. Gupta, D. Singh, B. Acharya , V.C.Gerogiannis , A.Kanavos , P. Pintelas, "Heart Disease Prediction Using Concatenated Hybrid Ensemble Classifiers", *Algorithms 2023*, ISSN: 1999-4893, Volume 16, No. 538. Pp. 1-19, 2023 IF 2.3  
<https://doi.org/10.3390/a16120538>  
**(ESCI, SCOPUS)**
- [36] A. Banerjee Majumder, S. Gupta, D. Singh, S. Majumder,"An Ensemble Model for Predicting Cardiovascular Disease utilizing Nature Inspired Optimization", *Baghdad Science Journal* ISSN: 2411-7986, First online version, 2024.  
<https://doi.org/10.21123/bsj.2024.9973>  
**(ESCI, SCOPUS)**
- [37] A. Banerjee Majumder, S. Gupta, D. Singh, S. Majumder, "Intelligent healthcare for cardiac patients utilizing neural networks, k-means clustering, and ad hoc routing" *Science Engineering and Health Studies (SEHS)*. ISSN 2630 – 0087, Vol. 18, 2405007, pp.1-12, 2024, accepted in Press. <https://doi.org/10.69598/sehs.18.24050007> )  
**(SCOPUS indexed)**
- [38] A. Banerjee Majumder, S. Gupta, D. Singh, "Performance Analysis of Different Feature Selection Methodologies in Classification of COVID-19 with Detail Feature Analysis", *Indian Journal of Natural Sciences (IJONS)*, ISSN: 0976 -0997, Vol-15 Issue-84 pp 74634-74641, 2024  
**(Web of Science indexed)**
- [39] C.Thakur, S.K. Gupta, S. Gupta "Heart Disease Prediction using Machine Learning and Multi Agent Systems", *Indian Journal of Natural Sciences (IJONS)*, ISSN: 0976 -0997, Vol: 15, Issue: 84, pp. 75972-75980, 2024 **(Web of Science Indexed)**
- [40] C.Thakur, S.K. Gupta, S. Gupta "Heart Disease Prediction using Artificial Neural Network and Multi Agent Systems", accepted for publication at *Indian Journal of Natural Sciences (IJONS)*, ISSN: 0976 -0997, Vol: 15, Issue: 87, 2024 (in Press). **(Web of Science Indexed)**
- [41] A. Roy, S.Gupta, P.Das, R.K.Mondal, "Noodle: An Innovative, Affordable Virtual Learning Device for Inclusive Education", *Educational Administration Theory and Practise*, ISSN 2148-2403, Vol. 30, No: 1, pp. 4664-4674, January 2024  
<https://doi.org/10.53555/kuey.v30i1.8149>  
**(SCOPUS Indexed)**
- [42] A. Datta, S.Gupta, S.Som, "Ubiquitous Hand held device's SIGMA LFSR driven security model", *Educational Administration Theory and Practise*, ISSN 2148-2403, Vol. 30, No: 1, pp. 4488 -4492, January 2024 <https://doi.org/10.53555/kuey.v30i1.7969>  
**(SCOPUS Indexed)**
- [43] M. Mukherjee, K, Rajhans, S. Gupta, "Illustrative Rubric for accreditational research methodology", accepted for publication at the *Journal of Engineering Education Transformation (JEET) through ICTIEE 2025*, ISSN 2349-2473, 2025  
**(In press; SCOPUS indexed)**
- [44] N. Chaudhuri, S. Gupta, "Student Activity recognition using Machine Learning Approaches", accepted for publication at the *Journal of Engineering Education Transformation (JEET) through ICTIEE 2025*, ISSN 2349-2473, 2025 **(In press; SCOPUS indexed)**
- [45] S. Bhowmik, A. Mandal, A. Bose, S. Singha Roy, A. Vishwakarma, S. Gupta, "Machine Learning driven healthcare through online Gym under the framework of Artificial Life", *Educational Administration: Theory and Practice*, ISSN 2148-2403, Vol: 30, No.3, pp. 2215-2225, 2024  
<https://doi.org/10.53555/kuey.v30i3.3669>  
**(SCOPUS indexed)**
- [46] M. Chowdhury, S. Ghosh, S. Gupta, "Intelligent System with Food and Nutrition criterion", *Educational Administration: Theory and Practice*, ISSN 2148-2403, Vol: 30, No.3, pp. 2244-2253, 2024 <https://doi.org/10.53555/kuey.v30i3.3684> **(SCOPUS indexed)**
- [47] P. Das, S. Gupta, B. Neogi, "Enhancing Music Classification: Machine Learning Approaches to Song Type Recognition", *Educational Administration: Theory and Practice*, ISSN 2148-2403, Vol. 30, No. 1, pp. 4718 – 4724, Jan 2024  
<https://doi.org/10.53555/kuey.v30i1.8148>  
**(SCOPUS Indexed)**
- [48] A. Roy, S. Gupta, "Interactive Low-Cost Virtual Learning Device NOODLE to get rid of Digital Divide in Outcome Based Education", accepted at *Journal of Engineering Education Transformation (JEET)*, ISSN 2349-2473, Manuscript ID: JEET-2022-268-R2, 2024
- [49] S. Gupta, P. Das, B. Neogi, A. Roy, M. Sur, M. Maity, T. Majumder, "Technology Enhanced Learning driven music inspired LEARN with NOODLE model for inclusive education", *Journal of Engineering Education Transformation (JEET)*, ISSN 2349-2473, Vol. No: 37, pp. 156-164, 2024  
**DOI: 10.16920/jeet/2024/v37is2/24036**  
**(SCOPUS indexed)**

- [50] A. Banerjee Majumdar, S. Gupta, D. Singh, S. Majumder, "Genetic Algorithm Inspired Intelligent COVID-19 Prediction Model using Data Mining", *Indian Journal of Natural Sciences (IJONS)*, ISSN: 0976 -0997, Vol: 14, Issue: 79, pp, 58969 -58978, 2023 **(Web of Science Indexed)**
- [51] N. Chaudhuri, S. Gupta, S. Banik, S. Das, R. Singh, "Approximate measure of class response through Content Based Video Retrieval using Digital Image Processing under the framework of Machine Intelligence", *Indian Journal of Natural Sciences (IJONS)*, ISSN: 0976 -0997, Vol 14, Issue: 81, pp. 65915-65921, Dec 2023. **(Web of Science Indexed)**
- [52] A. Banerjee Majumdar, S. Gupta, D. Singh, S. Majumder, "An Advanced Model to Predict Heart Disease applying Random Forest Classifier and Whale Optimization Algorithm", *Indian Journal of Science and Technology (IJST)*, ISSN: 0974-6846, Vol. 16, No. 43, pp. 3679 - 3690, 2023. ([https://doi.org/ 10.17485/IJST/v16i41.1756](https://doi.org/10.17485/IJST/v16i41.1756)) **(Web of Science Indexed)**
- [53] A. Banerjee Majumdar, S. Gupta, D. Singh, S. Majumder, " An optimized Model for Heart Disease Prediction with Customized Ensemble Voting Classifier and Nature Inspired Optimization ", *Indian Journal of Science and Technology (IJST)*, ISSN: 0974-6846, Vol. 16 No. 34 pp. 2719-2729, 2023 (<https://doi.org/10.17485/IJST/v16i34.1004>) **(Web of Science Indexed)**
- [54] A. Banerjee Majumdar, S. Gupta, D. Singh "AN EXPLAINABLE HYBRID INTELLIGENT SYSTEM FOR PREDICTION OF CARDIOVASCULAR DISEASE", *Journal of Mines, Metals and Fuels (JMMF)*, ISSN: 0022-2755, Vol: 71, Issue: 5, pp, 687-694, 2023 **(SCOPUS Indexed)**
- [55] M.K. Srivastav, S Gupta, "An approach for exploring practical phenomena in Social Network Analysis", *Journal of Mines, Metals and Fuels (JMMF)*, ISSN: 0022-2755, , Vol: 71, Issue: 5, pp 583-587, 2023 **(SCOPUS Indexed)**
- [56] A. Banerjee Majumdar, S. Gupta, D. Singh, "Analysis and Observations of Associated Factors of Cardiovascular Disease", *Journal of Physics (IOP Publishing UK)*, ISSN 1742-6588, 2286(1), 012024, 2022 **(SCOPUS Indexed)** (DOI 10.1088/1742-6596/2286/1/012024)
- [57] A. Banerjee Majumdar, S. Gupta, D. Singh, "An Ensemble Heart Disease Prediction Model Bagged with Logistic Regression, Naïve Bayes and K Nearest Neighbour", *Journal of Physics (IOP Publishing UK)*, ISSN 1742-6588, 2286(1), 012017, 2022(DOI 10.1088/1742-6596/2286/1/012017) **(SCOPUS Indexed)**
- [58] A. Banerjee Majumdar, S. Gupta, D. Singh, S. Majumdar, " An Intelligent System for Prediction of COVID-19 Case using Machine Learning Framework-Logistic Regression", *Journal of Physics (IOP Publishing UK)*, ISSN 1742-6588, Volume- 1797 012011, pp. 1-10, 2021. (DOI: [http://dx.doi.org/ 10.1088/1742-6596/1797/1/012011](http://dx.doi.org/10.1088/1742-6596/1797/1/012011)) **(SCOPUS Indexed)**
- [59] K. Panda, P. Das, S. Gupta, "Genetic algorithm to priority based fuzzy goal programming model for solar power driven and wirelessly charged electric car", *Journal of Critical reviews (JCR)*, ISSN- 2394-5125, Vol: 7, Issue: 9, pp. 2031-2037, 2020. **(SCOPUS Indexed)**
- [60] S. Mitra, S. Gupta, "Own Device-Based Mobile Learning in Personal Cloud Environment: A framework to address Digital Divide", *Journal of Engineering Education Transformation (JEET)*, ISSN 2349-2473, Volume-32, issue 4, pp. 46-54, 2019. (<http://dx.doi.org/10.16920/jeet%2F2019%2Fv32i4%2F145520>) **(SCOPUS Indexed)**
- [61] P. Das, S. Gupta, B. Neogi, "Emotion Recognition System for Therapeutic cause through identification of Indian Music", *International Journal for Research in Engineering Application & Management (IJREAM, UGC approved J. No: 64077)*, ISSN : 2454-9150, vol-07, issue-03, pp. 315-319, June 2021 (<http://dx.doi.org/10.35291/2454-9150.2021.0355>)
- [62] A. Banerjee Majumdar, S. Gupta, "Body Area Network using Cluster Based Energy Efficient Routing", *International Journal of Research and Analytical Review (IJRAR: UGC approved J.No: 43602, IF: 5.75 Google scholar )* ISSN: 2349-5138, Volume-6, Issue-1, pp. 42 -45, March, 2019.
- [63] S. Chatterjee, S. Gupta, " The Impact of Usability on E-Marketing Strategy of Electronic Business for Growth of Cottage Industry under the framework of Information Mining ", *International Journal of Research and Analytical Review (IJRAR: UGC approved J. No. 43602, IF: 5.75 Google scholar )* ISSN: 2349-5138, Volume-6, Issue-1, pp. 46-49, March, 2019.
- [64] A. Banerjee Majumdar, S. Gupta, "Dynamic Programming Based DNA Compression Algorithm through Substitution Method ", *International Journal of Engineering and Applied Sciences (IJEAS: Thomson Reuters / UGC approved, SJIF: 5.138 ; PIF:3.854 )* ISSN: 2394-3661, Volume-4, Issue-10, pp. 73-75, Oct 2017.
- [65] S. Chatterjee, S. Gupta, "Information mining and e-marketing plan on real time data in cottage industries ", *International Journal of Engineering and Applied Sciences (IJEAS: Thomson Reuters / UGC approved, SJIF: 5.138 ; PIF:3.854 )* ISSN: 2394-3661, Volume-4, Issue-10, pp.104-107, Oct. 2017.
- [66] S. Chatterjee, S. Gupta, T. Saha, "An E-commerce Portal for online Medicine Trading ", *International Journal of Engineering and Applied Sciences (IJEAS: Thomson Reuters / UGC approved, SJIF: 5.138 ; PIF:3.854 )* ISSN: 2394-3661, Volume-4, Issue-11, pp.144-147,Nov.. 2017.
- [67] S. Gupta, A. Pramanik, "Prototype development of a Dimensional Model of Data Warehouse for the Engineering Education Information System in West Bengal, India", *International*

	<p><i>Journal of Engineering and Applied Sciences</i> (IJEAS: <b>Thomson Reuters / UGC approved</b>, SJIF: 5.138 ; PIF:3.854 ) ISSN: 2394-3661, Volume-4, Issue-11, pp. 48-54, Nov, 2017.</p> <p>[68] K.G. Verma, S. Gupta, D. Mitra, "Identification of mass of tissue growth in brain –region under the framework of image segmentation", <i>International Journal of Latest Trend in Engineering Technology</i> (IJLTET: <b>Thomson Reuters / UGC approved</b>, Impact: 4.490, GI: 0 .685/1) ISSN: 2319 -3778 / 2278-621X(e), Volume 8, Issue: 4, pp.179-186, 2017</p> <p>[69] S. Gupta, R. Chowdhury, "An embedded AI system for enhancement of computer literacy rate with case study in INDIA ", <i>International Journal of Latest Trend in Engineering Technology</i> (IJLTET: <b>Thomson Reuters / UGC approved</b>, Impact: 4.490, GI: 0 .685 / 1) ISSN: 2319 -3778 / 2278-621X(e), Volume 8, Issue: 4, pp. 36-44, 2017.</p> <p>[70] S. Gupta, D. Mula, "Precaution of heart failure based on computer aided diagnosis system ", <i>International Journal of Latest Trend in Engineering Technology</i> (IJLTET: <b>Thomson Reuters / UGC approved</b>, Impact: 4.490, GI: 0 .685/1) ISSN: 2319 -3778 / 2278-621Xe, Volume 8, Issue: 4, pp. 25-35, 2017.</p> <p>[71] S. Gupta, A. Halder, D.G. Ganguly, "Heuristic detection of blockage in coronary arteries from cardiac magnetic resonance imaging images and predicting heart failure risk using digital image processing ", <i>International Journal of Latest Trend in Engineering Technology</i> (IJLTET: <b>Thomson Reuters / UGC approved</b>, Impact: 4.490, GI: 0 .685 / 1) ISSN: 2319 -3778 / 2278-621Xe, Volume 8, Issue: 4, pp. 06-14, 2017.</p> <p>[72] S. Ganguly, S. Gupta, S.B. Saha, "A secured heuristic routing algorithm For vehicle ad-hoc network", <i>International Journal of Latest Trend in Engineering Technology</i> (IJLTET: <b>Thomson Reuters / UGC approved</b>, Impact: 4.490, GI: 0 .685/1) ISSN: 2319 -3778 / 2278-621Xe, Volume 8, Issue: 3, pp. 361-371, 2017.</p> <p>[73] S. Palui, S. Gupta, "An Unique Sorting Algorithm With Linear Time and Space Complexity", <i>International Journal of Research in Engineering and Technology</i> (IJRET), Impact: 2.375, Vol.3, Issue. 11, pp. 264-268, ISSN No. 2321-7308 (p), 2014.</p> <p>[74] S. Palui, S. Gupta, "An Unique Sorting Algorithm With Linear Time Complexity", <i>International Journal of Computer Science and Network</i> (IJCSN), Impact: 0.274, Vol.3, Issue. 6, pp. 430-434, ISSN No. 2277-5420 (e), 2014. <b>Elsevier Medley indexed</b></p> <p>[75] S. Roy, S. Gupta, "An Inter-dependent Cloud Computational Framework Incorporating Multi-platform Switchover", <i>International Journal of Advance Research in Science and Engineering</i> (IJARSE), ISSN: 2319 -8346 (p) / 54(e), Vol-1, Iss-2, pp. 11-14, 2013.</p> <p>[76] A. Banerjee, S. Gupta, "Production Systems for Identification of Correspondence between Genetic Patterns and Hand-written Signatures in a Family Hierarchy", <i>International Journal of Advance Research in Science and Engineering</i> (IJARSE), ISSN: 2319 -8346 (p) / 54(e), Vol-1, Iss-1, pp. 42-48, 2013.</p> <p>[77] S. Sarkar, S. Gupta, "A Comprehensive Approach for Fruit Pattern Recognition Under the Framework of Digital Image Processing", <i>International Journal of Advance Research in Science and Engineering</i> (IJARSE), ISSN: 2319 -8346 (p) / 54(e), Vol-1, Iss-2, pp. 68 -71, 2013.</p> <p>[78] B.B. Pal, S. Gupta, "A Genetic Algorithm Based Fuzzy Goal Programming Approach for Solving Fractional Bilevel Programming Problems", <i>International Journal of Operational Research</i> (IJOR), Vol. 14, No.4, pp. 453-471, DOI: 10.1504/IJOR.2012.047515, InderScience 2012. <b>(SCOPUS Indexed)</b></p> <p>[79] S. Gupta, S. Ghosh, P. Ghosh, "Compiler With A Different Framework of Floating Point Arithmetic: Bridging Language Processor with Computational Intelligence by Providing Variable Length of Datatype", <i>International Journal of Logic Based Intelligent Systems</i>, Vol. 3, No. 2, pp. 157-169, ISSN No: 0975-4776, International Science Press, 2009.</p> <p>[80] R. Maity, S. Dutta Ghoshal, S. Ghosh, S. Shaha, S. Chakraborty, S. Gupta, "Computational Linguistic and Machine Learning in analyzing lyrics of the music for therapeutic cause", Third concept: An International Journal of ideas, ISSN: 0970-7247 (<b>UGC CARE1</b>), Vol. 37, No. 436, pp. 155-168 June 2023.</p> <p>[81] P.K. Maji, S. Dasgupta, S. Gupta, "Computational Linguistic with Predicate Calculus in MRI document image analysis for measuring effect of music in human brain", Third concept: An International Journal of ideas, ISSN: 0970-7247 (<b>UGC CARE 1</b>), Vol. 37, No. 437, pp pp. 83-92, April 2023.</p> <p>[82] D. Barik, S. Som, S. Gupta, "Part of Speech Tagging in Toddlers' feedback in detecting Autism Spectrum Disorder (ASD) using quantum inspired algorithm", Third concept: An International Journal of ideas, ISSN: 0970-7247 (<b>UGC CARE 1</b>), Vol. 37, No. 437, pp 130-135, April 2023.</p> <p>[83] A. Roy, P.Das, M.Sur, M. Maity, T. Majumdar, S. Gupta, "Technology-driven cost friendly Virtual Learning device for inclusive education", Third concept: An International Journal of ideas, ISSN: 0970-7247 (<b>UGC CARE1</b>), Vol. 37, No. 437, pp 100- 113, April 2023.</p> <p>[84] A. Chakraborty, R.K. Keshari, D. Dey, S. Gupta "A novel approach to find Personally Identifiable Information from an image using transfer learning with dilated convolutions in a CNN for a wide field of view", Third concept: An International Journal of ideas, ISSN: 0970-7247 (<b>UGC CARE 1</b>), Vol. 37, No. 437, pp 16-22, April 2023.</p> <p>[85] R. Jana, P. Pal, S.A. Ali, D. Das, S. Gayan, S. Gupta, "Part of Speech Tagging in Toddlers' feedback in detecting Autism Spectrum Disorder (ASD) using quantum inspired algorithm Processor to compile and execute algorithms written in Natural Language", Third concept: An International Journal of ideas, ISSN: 0970-7247 (<b>UGC CARE 1</b>), Vol. 37, No. 437, pp 93-99, April 2023.</p> <p>[86] S. Banik,, N. Biswas, R. Singh, A. Chatterjee, P. Das, S. Das, Y.K. Prasad, S. Gupta, "Emotion Analysis using PoS tagging of the online education participants under the framework of Natural Language Processing", Third concept: An International Journal of</p>
--	--

ideas, ISSN: 0970-7247 (**UGC CARE 1**), Vol. 37, No. 437, April 2023. (In press through ICLMC 2023)

#### **Book Chapters /Proceedings:**

- [87] D. Barik, A.Roy, M.K. Stivastav, A. Datta, S. Som, S. Gupta, "Social Network Security for specially designed device to train Toddlers" accepted for presentation at International Conference on Business Innovation Technology Startups (ICBITS) 2024, San Jose State University (SJSU), California USA 19 August 2024.

#### **AIP proceedings**

- [88] A Roy, S Gupta, "New-normal Object-Oriented Dynamic Learning Environment (NOODLE) to address Digital Divide", ICIS 2022, published as Research Article, AIP proceedings (**both Scopus and WoS**), ISSN:1551-7616, ISBN: 978-0-7354-4751-6, Vol: 2878, 020013-1–020013-6, 2023. (<https://doi.org/10.1063/5.0171355>)  
(Ibn -Zohr Univ., Agadir, MOROCCO)

- [89] A Datta, S Gupta, "Ubiquitous Devices Safety using Cyber Security", ICIS 2022, published as Research Article, AIP proceedings (**both Scopus and WoS**), ISSN:1551-7616, ISBN: 978-0-7354-4751-6, Vol: 2878, 020014-1–020014-5, 2023.  
(<https://doi.org/10.1063/5.0171358>)

(Ibn -Zohr Univ., Agadir, MOROCCO)

- [90] A Banerjee Majumder, S Gupta, D. Singh, S. Majumder, "A COVID-19 Prediction Model using Bagging under the framework of Machine Learning", ICIS 2022, published as Research Article, AIP proceedings (**both Scopus and WoS**), ISSN:1551-7616, ISBN: 978-0-7354-4751-6, Vol: 2878, 020021-1–020021-6, 2023. (<https://doi.org/10.1063/5.0171279>)  
(Ibn -Zohr Univ., Agadir, MOROCCO)

- [91] A. Chakraborty, AK Shaw, M. Chakraborty, S.Gupta, "Exploring Genetic Algorithm to optimize hyper parameter for training of Artificial Neural Network", ICIS 2022, published as Research Article, AIP proceedings (**both Scopus and WoS**), ISSN:1551-7616, ISBN: 978-0-7354-4751-6, Vol: 2878, 020022-1–020022-6, 2023. (<https://doi.org/10.1063/5.0170980>)  
(Ibn -Zohr Univ., Agadir, MOROCCO)

- [92] P. Das, S. Gupta, B. Neogi, "Music Therapy for hearing impaired: Measuring impact of vibration on deaf and dumb using Digital Signal Processing and Machine Intelligence", ICIS 2022, published as Research Article, AIP proceedings (**both Scopus and WoS**), ISSN:1551-7616, ISBN: 978-0-7354-4751-6, Vol: 2878, 020023-1–020023-6, 2023.  
(<https://doi.org/10.1063/5.0171157>) (Ibn -Zohr Univ., Agadir, MOROCCO)

- [93] S. Saha, A. Dhar, S. Gupta, "Mining Math-Bio rule in recognizing pattern using Machine Intelligence", ICIS 2022, published as Research Article, AIP proceedings (**both Scopus and WoS**), ISSN:1551-7616, ISBN: 978-0-7354-4751-6, Vol: 2878, 020025-1–020025-6, 2023.

(<https://doi.org/10.1063/5.0171360>)

(Ibn -Zohr Univ., Agadir, MOROCCO)

- [94] B. Sutradhar, S. Rakshit, S.Gupta, "Multimodal identification of face mask as a precautionary measure using Digital Image Processing", ICIS 2022, published as Research Article, AIP proceedings (**both Scopus and WoS**), ISSN:1551-7616, ISBN: 978-0-7354-4751-6, Vol: 2878, 020026-1–020026-5, 2023. (<https://doi.org/10.1063/5.0171365>)  
(Ibn -Zohr Univ., Agadir, MOROCCO)

#### **CRC Press - Taylor and Francis**

- [95] M.K. Srivastav, S. Gupta, S. Som, "Analyzing Trust Relationships within Social Networks: A Comprehensive Study", accepted Book Chapter, Industry 5.0: A transformation towards Human centered AI, ISBN: 9781032026053, CRC Press, Taylor and Francis, 2024 (**Scopus indexed**)

- [96] D. Barik, S. Gupta, S. Som, "Evaluation of Autism Screening Tools for Toddlers: A Comparative Approach", accepted Book Chapter, Industry 5.0: A transformation towards Human centered AI ISBN: 9781032026053, CRC Press, Taylor and Francis, 2024 (**Scopus indexed**)

- [97] K.Ghosh, A. Deb, R.K. Mandal, S. Gupta, "ATbot: Data Science driven Intelligent System for improved Trading Strategies", accepted for publication in *Recent Advancements in Computational Intelligence and Design Engineering*, Chapter 19, Routledge **CRC Press, Taylor & Francis**, ISBN: 978103298036, February 2025.

(In Press: Scopus indexed)

- [98] A. Datta, S. Gupta, S. Som, "Addressing security challenges of Payment Systems in hand-held devices", accepted for publication in *Recent Advancements in Computational Intelligence and Design Engineering*, Chapter 26, Routledge **CRC Press, Taylor & Francis**, ISBN: 978103298036, February 2025.

(In Press: Scopus indexed)

- [99] M.K. Srivastav, S. Gupta, S. Som, "Exploring Influence Score Determinants in Social Network Analysis and Clustering via K-Means Algorithm", accepted for publication in *Recent Advancements in Computational Intelligence and Design Engineering*, Chapter 28, Routledge **CRC Press, Taylor & Francis**, ISBN: 978103298036, February 2025.

(In Press: Scopus indexed)

- [100] D. Dasgupta, S. Daw, S. Chakraborty, A. Chakraborty, S. Gupta, "Application of Machine Learning to detect speech emotions", accepted for publication in *Recent Advancements in*

*Computational Intelligence and Design Engineering*, Chapter 28, Routledge **CRC Press, Taylor & Francis**, ISBN: 978103298036, February 2025.

(In Press: Scopus indexed)

[101] S. Shaha, S. Gupta, "Smell sensing and actuation using embedded device over the network", accepted for publication in *Recent Advancements in Computational Intelligence and Design Engineering*, Chapter 21, Routledge **CRC Press, Taylor & Francis**, ISBN: 978103298036, February 2025. (In Press: Scopus indexed)

[102] K. Mandal, S. Gupta, "Design and development of an automated prototype machine for grass cutting and seed sowing", accepted for publication in *Recent Advancements in Computational Intelligence and Design Engineering*, Chapter 19, Routledge **CRC Press, Taylor & Francis**, ISBN: 978103298036, February 2025. (In Press: Scopus indexed)

#### **AKINIK: Fusion of minds**

[103] A. Datta, S. Gupta, S. Som, "Exploring USB security of Hand-held Devices", published as Book chapter at **Fusion of Minds: Multidisciplinary Research in Emerging Technologies** (Dr.R. Kumar Eds.), ISBN 978-93-6135-962-0, DOI: <https://doi.org/10.22271/ed.book.2972> , Publication date: 7<sup>th</sup> oct 2024, through International Conference on Integrative Science and Engineering (ICISE) 2024.

[104] S.Dutta Ghoshal, S. Saha, S. Mukherjee, S. Gupta, "Geo locational data analysis using Machine Learning", published as Book chapter at **Fusion of Minds: Multidisciplinary Research in Emerging Technologies** (Dr.R. Kumar Eds.), ISBN 978-93-6135-962-0, DOI: <https://doi.org/10.22271/ed.book.2972> , Publication date: 7<sup>th</sup> oct 2024, through International Conference on Integrative Science and Engineering (ICISE) 2024.

[105] S. Biswas, A Banerjee, S. Gupta, "Heart Disease Prediction from Symptom Analysis Using Machine Learning: An Overview", published as Book chapter at **Fusion of Minds: Multidisciplinary Research in Emerging Technologies** (Dr.R. Kumar Eds.), ISBN 978-93-6135-962-0, DOI: <https://doi.org/10.22271/ed.book.2972> , Publication date: 7<sup>th</sup> oct 2024, through International Conference on Integrative Science and Engineering (ICISE) 2024.

[106] R. Maity, S.Gupta, "Anti-Fraud System for Online Card Transaction using Machine Learning and Data Science" published as Book chapter at **Fusion of Minds: Multidisciplinary Research in Emerging Technologies** (Dr.R. Kumar Eds.), ISBN 978-93-6135-962-0, DOI: <https://doi.org/10.22271/ed.book.2972> , Publication date: 7<sup>th</sup> oct 2024, through International Conference on Integrative Science and Engineering (ICISE) 2024.

[107] P.Pradhan, S.Gupta, "Prediction of Vehicular Accidents Using Machine Learning", published as Book chapter at **Fusion of Minds: Multidisciplinary Research in Emerging Technologies** (Dr.R. Kumar Eds.), ISBN 978-93-6135-962-0, DOI: <https://doi.org/10.22271/ed.book.2972> , Publication date: 7<sup>th</sup> oct 2024, through International Conference on Integrative Science and Engineering (ICISE) 2024.

[108] A. Datta, S.Gupta, S.Som, "USB Security of Hand-Held Devices", published as Book chapter at **Fusion of Minds: Multidisciplinary Research in Emerging Technologies** (Dr.R. Kumar Eds.), ISBN 978-93-6135-962-0, DOI: <https://doi.org/10.22271/ed.book.2972> , Publication date: 7<sup>th</sup> oct 2024, through International Conference on Integrative Science and Engineering (ICISE) 2024.

#### **Wiley**

[109] D. Ghosh, K. Ghosh, C. Chakraborty, A. Datta, S. Gupta, "Securing the Future: Emerging Threats and Countermeasures in Cryptography", *Securing the Digital Frontier*, K. Sharma Eds. Wiley -Scrivener pub. LLC, ISBN: Chapter 5, pp. 91-108, 2025

[110] P.K.Dutta, S. Gupta, S. Kumari, A. Vinayak, "A Fuzzy Goal programming Model for Quality Monitoring of Fruits during Shipment Overseas", *Design and Development of Efficient Energy Systems, Artificial Intelligence and Soft Computing for Industrial Transformation Series*, Wiley-Scrivener pub, ISBN: 978-1-1197-6163-1, Vol-15, Page 265-284, 2021.

#### **Bloomsbury**

[111] R. Chowdhury, S.Gupta "Unique Grade-To Percentage Conversion [UGPC]: An Enhanced Knowledge Infrastructure For Better Performance Evaluation" , Inclusive financial infrastructure, R. Pradhan (Eds.), Bloomsbury Pub. pp. 464-475, 2012. ( IIT Kharagpur)

[112] G. Majumder, S. Gupta, "Scaling Conflict as a Rider of Organizational Output" , In Proc. of International Conference on Frontiers of Infrastructure Finance (ICFIF), Bloomsbury Pub. pp. , 2011, ( IIT Kharagpur)

#### **Allied Publishers**

[113] B.B. Pal, S. Gupta, "A Genetic Algorithm Based Stochastic Simulation Approach to Fuzzy Chance Constrained Interval-Valued Multiobjective Decision Making Problems", *Proceedings of the International Congress on Productivity, Quality, Reliability, Optimization and Modelling (ICPQROM) 2011*, ISBN: 978-81-8424-708-4, Vol-I, pp.254-266, 2011. (DRDO, QCI, Indian Statistical Institute, Delhi)

[114] S. Gupta, S. Das, "Document to Presentation Converter under the Framework of Natural Language Processing", *Proceedings of the International Conference of Business and Information Management (ICBIM) 2012*, ISBN: 978-81-8424-744-2, Vol-II, pp.92-112, 2012. (NIT, Durgapur)

#### **Information Institute, USA:**

[115] S. Gupta, S. Roy, S. Chakraborty, "Knowledge based Digital Image Processing Approach to identify unauthorized entry into a restricted zone with affordable cost", *Proceedings of the 7<sup>th</sup> International Conference on Information Science, Technology and Management (CISTM)*



2009, ISBN: 978-1-935160-06-9, 37, pp. 1-9, 2009.

(Virginia Commonwealth University USA and CII)

[116] S. Gupta, S. Roy, S. Chakroborty, "Automated Detection of Consumer Products and Security enabled Payment under the Framework of Radio Frequency Identification (RFID) Technology", Proceedings of 7<sup>th</sup> International Conference on Information Science, Technology and Management (CISTM) 2009, ISBN: 978-1-935160-06-9, 13, pp. 1-14, 2009.

(Virginia Commonwealth University USA and CII)

[117] S. Gupta, S. Sengupta, S. Chatterjee, B. Dey, "Prohibition of unauthorized copying and prevention of piracy through Crypt arithmetic measure", Proceedings of the 6<sup>th</sup> International Conference on Information Science, Technology and Management (CISTM) 2008, ISBN: 978-0-9772107-8-7, 60, pp. 1-5, 2008.

(Virginia Commonwealth University USA and CII)

[118] S. Gupta, "Smart Compiler: A Computational Linguistic Approach to Compile and Execute Pseudo Code", Proceedings of the 5<sup>th</sup> International Conference on Information Science, Technology and Management (CISTM) 2007, ISBN: 978-0-9772107-8-7, 18, pp. 1-10, 2007.

(Virginia Commonwealth University USA and CII)

[119] S. Gupta, "Music Perception, Cognition and Effect: A case study of Artificial Intelligence illustrating Disease Diagnosis", Proceedings of the 5<sup>th</sup> International Conference on Information Science, Technology and Management (CISTM) 2007, ISBN: 978-0-9772107-8-7, 50, pp. 1-16, 2007.

(Virginia Commonwealth University USA and CII)

IGI Global

[120] B. Pramanik, S. Gupta, "Obstacle Avoidance and Autonomous Maneuvers with Precise Area Scanning Robotic Vehicle using Arduino: A Comprehensive Study", accepted for presentation at ICAMEIM-2024. To be published in *Strategic Approaches in Advanced Mechanical Engineering and Industrial Management*, accepted IGI Global, 2024

#### OTHERS

[121] N. Chaudhuri, S. Gupta, "Enhanced Human Action Recognition Using the AdaBoost Algorithm: A Comprehensive Analysis", Paper ID: 88, Accepted for presentation at Scopus Conference RTET 2024, Hinweis Research, 2024 (Scopus indexed)

[122] A. Datta, S. Gupta, S. Som, "Sigma LFSR based security framework for fees payment transaction online through hand held devices", Paper ID: 60, Accepted for presentation at Scopus Conference RTET 2024, Hinweis Research, 2024. (Scopus indexed)

[123] M.K. Srivastav, S. Gupta, S. Som, "Sentiment Analysis in Student Engagement on Social Networks", Paper ID: 63, Accepted for presentation at Scopus Conference RTET 2024, Hinweis Research, 2024. (Scopus indexed)

[124] A. Roy, S. Gupta, R.K. Mondal, "NOODLE extension with music and aroma: Creating comfort zone for optimal knowledge transfer", Paper ID: 59, Accepted for presentation at Scopus Conference RTET 2024, Hinweis Research, 2024. (Scopus indexed)

[125] D. Barik, S. Gupta, S. Som, "Autism Spectrum Disorder: Toddlers learning privacy in social network with specially designed device" Paper ID: 62, Accepted for presentation at Scopus Conference RTET 2024, Hinweis Research, 2024. (Scopus indexed)

[126] B. Bhattacharjee, N. Prakash, M. Chowdhury, M. Maity, S. Gupta, "Nutritional Research Methodology Analytics", published in INTERDISCIPLINARY INSIGHTS: ADVANCES IN BASIC AND BIO SCIENCES IN DIGITAL AND ICT AGE, Eds. Dr. PK. Pal et al., New Delhi pub. ISBN: 9788197653506, Chapter: 28, pp. 343-360 through ICMRM 2023, Pid: 43, 2025

[127] P. Roy, S. Gupta, T. Chatterjee, K. Banerjee, S. Gupta, "Extended Analytics in Research Methodology across various verticals: A review", published in BEYOND BOUNDARIES: INSIGHTS FROM HUMANITIES, SOCIAL AND BIO SCIENCES, New Delhi Pub., ISBN: 9788197653544, Chapter: 21, pp. 223-238 through ICMRM 2023, Pid: 44, 2025

[128] P. Roy, S. Gupta, T. Chatterjee, K. Banerjee, S. Gupta, "A Generic Platform-independent research Methodology Framework Converging to Product Commercialization", published in BEYOND BOUNDARIES: INSIGHTS FROM HUMANITIES, SOCIAL AND BIO SCIENCES, New Delhi Pub., ISBN: 9788197653544, Chapter: 22, pp. 239-248 through ICMRM 2023, Pid: 45, 2025

[129] M. Mukherjee, S. Gupta, "Illustrative Accreditation Research Methodology", published in BEYOND BOUNDARIES: INSIGHTS FROM HUMANITIES, SOCIAL AND BIO SCIENCES, New Delhi Pub., ISBN: 9788197653544, Chapter: 23, pp. 249-260 through ICMRM 2023, Pid: 46, 2025

[130] M. Chowdhury, S. Ghosh, S. Gupta, "Enhancing Queue Management and Customer Satisfaction in University Canteens through Fuzzy Logic-based E-Canteen Automation", In Proc of International Conference on Integrative Science and Engineering (ICISE) 2023, August, 2023

[131] S. Gayan, Sk. Afsar Ali, D. Das, W.K. Mallick, S. Gupta, "Pseudo Code Processor with Hybrid Programming extension", In Proc of International Conference on Integrative Science and Engineering (ICISE) 2023, August, 2023

[132] R. Pal Das, P. Das, S. Karmakar, S. Saha, S. Roy Chowdhury, S. Gupta, "Human gesture incorporated Intelligent System Assistant", In Proc of International Conference on Integrative Science and Engineering (ICISE) 2023, August, 2023.

- [133] N. Roy, S. Debnath, A. Chowdhury, S. Mal, S. Gupta, "Multi-factor authentication System incorporating Fingerprint, Face and Voice tokens", In Proc of International Conference on Integrative Science and Engineering (ICISE) 2023, August, 2023.
- [134] A. Roy, N. Dey, J. Chakraborty, A.K. Prasad, P. Chakraborty, S. Gupta, "Auto-Sales: A Machine Learning and Data Mining driven Business Analytics System", In Proc of International Conference on Innovation and Advancements in Management and Social Science (ICIAMS) 2023, August, 2023. (In press)
- [135] M. Ghosh, S. Gupta, "INTERACTIVE GUARDIAN KIOSK SYSTEM FOR INFORMATION DISSEMINATION", In Proc of International Conference on Women Empowerment & Inclusivity: Emerging Trends (ICWEI) 2023, August, 2023.
- [136] P. Parui, P. Ghosh, S. Majumder, P. Mahato, R.K. Das, S. Gupta, "I2-Pedia: Artificial Intelligence driven System for imparting knowledge online", In Proc of International Conference on Women Empowerment & Inclusivity: Emerging Trends (ICWEI) 2023, August, 2023
- [137] A. Das, A. Sarkar, R. Shil, S. Gupta, "Found Code: Web resource provider and On-line educator of Programming Languages", In Proc of International Conference on Women Empowerment & Inclusivity: Emerging Trends (ICWEI) 2023, August, 2023.
- [138] S. Gupta, "The plausible direction of engineering education: a futuristic estimation for accreditation under outcome based framework", in Proc. of 3<sup>rd</sup> World Summit on Accreditation (WOSA)-2016 Bloomsbury Pub., pp. 307-312, 2016. organized by **National Board of Accreditation (NBA)**, New Delhi, March 18<sup>th</sup>-20<sup>th</sup>, 2016.
- [139] A. Banerjee Majumdar, S. Gupta, D. Singh "An Efficient Model to Predict Heart Disease applying Random Forest Classifier and SelectKBest Feature Selection Methods", In proceedings of Applied Science Confluence , Paper Id: 41, pp. 1-9, 2022. (MAKAUT, WB)
- [140] P. Das, S. Gupta, "Genetic Algorithm and Adaptive Neuro - Fuzzy Based Programming Model for Solar Power Driven Wirelessly Charged Electric Car", In Proc. of International Web Conference on Recent Trends and Developments in Applied Research and Industrial Practices (ICRTDARIP)-2020, AUK, ISBN: 978-81-946241-5-8, Nov- 2020.
- [141] A. Banerjee Majumdar, S. Gupta, D. Singh, S. Majumdar, "Survey on Cardiovascular Disease Prediction using Machine Learning Framework", International Conference on Human Factors in Computing Systems (ICHFCS) 2020, 978-93-89732-91-7, pp.1-7, August, 2020.
- [142] A. Banerjee Majumdar, S. Gupta, D. Singh, S. Majumdar, "Coronary Artery Disease Prediction System Considering Multifactor Weights using Naive Bayes ", International Conference on Human Factors in Computing Systems (ICHFCS) 2020, 978-93-89732-91-7, pp.8-14, August, 2020.
- [143] S. Das, S. Gupta, A. Pramanik, "Proposed System Control Flow for designing Curriculum under the framework of Outcome Based Education to optimize knowledge transfer", Int. Conf. on Transformation In Engineering Education (ICTIEE' 2018) organized by Indo-Universal Collaboration of Engineering Education ( IUCEE), AP, India, 15<sup>th</sup> -17<sup>th</sup> July, 2018. (SRM University, Amarabati)
- [144] S. Gupta, "Production Systems for Identification of Correspondence between Genetic Patterns and Hand-written Signatures in a Family Hierarchy", In Proc. of 3<sup>rd</sup> World Congress on Microscopy (WCM) -2015, 9<sup>th</sup> -10<sup>th</sup> October, 2016. (MG University, Kottayam, Kerala).
- [145] S. Sarkar, S. Gupta, "A Comprehensive Approach for Fruit Pattern Recognition Under the Framework of Digital Image Processing", In proc. of Int. Conf. on Electrical, Electronics and Computer Engineering (EECE) 2013, ISBN 978-81-927182-2-4 Page 19-23, 2013.
- [146] S. Roy, S. Gupta, "An Inter-dependent Cloud Computational Framework Incorporating Multi-platform Switchover", In proc. of Int. Conf. on Electrical, Electronics and Computer Engineering (EECE) 2013, ISBN 978-81-927182-2-4, pp. 24-29, 2013.
- [147] A. Banerjee, S. Gupta, "Production Systems for Identification of Correspondence between Genetic Patterns and Hand-written Signatures in a Family Hierarchy", In proc. of Int. Conf. on Electrical, Electronics and Computer Engineering (EECE) 2013, ISBN 978-81-927182-2-4 Page 12-18. (Published in Int. J. IJARSE)
- [148] B.B. Pal, S. Gupta, M. Kumar, "A Stochastic Simulation Based Genetic Algorithm for Solving Chance Constrained Fuzzy Goal programming Problems", Proceedings of the International Conference on Rough sets, Fuzzy sets and Soft Computing (ICRFSC) 2009, ISBN: 978-81-8387-417-5, pp.462-475, 2009. (Tripura University (Central))
- [149] B.B. Pal, S. Gupta, P. Biswas, "The Use of Genetic Algorithm to Priority Based Fuzzy Goal Programming Model for Patrol Manpower Deployment Problem in Traffic Management System: A Case Study", Proceedings of the ICRFSC 2009, ISBN: 978-81-8387-417-5, pp. 424-446, 2009.
- [150] B.B. Pal, S. Gupta, D. Chakraborti, "A Genetic Algorithm Based Goal Programming Approach for Interval Valued Bilevel Programming Problems", Proceedings of the ICRFSC 2009, ISBN: 978-81-8387-417-5, pp.447-461, 2009.
- [151] B.B. Pal, S. Gupta, P. Biswas, A. Mukhopadhyay, "A Goal Programming Method for Solving Academic Personnel Planning Problems with Interval-Valued Resource Goals in University Management System Using Genetic Algorithm", Proceedings of the ICRFSC 2009, ISBN: 978-81-8387-417-5, pp.489-508, 2009.
- [152] S. Gupta, S. Ghosh, P. Ghosh "A Compiler with a Different Computational Framework of Floating Point Arithmetic and Variable Length of Datatype", Proceedings of the 2<sup>nd</sup> IEEE International Conference on Computer Vision and Information Technology (ACVIT) 2009.

BAM University, Maharashtra, India, 2009.

(IEEE Bombay Section)

- [153] B.B. Pal, S. Gupta, "A Genetic Algorithm Based Fuzzy Goal Programming Approach for Solving Fractional Bilevel Programming Problems", Proceedings of the International Conference on Operations Research Applications in Engineering and Management (ICOREM) 2009, Anna University, Tiruchirappally, pp.306-325, 2009.
- [154] B.B. Pal, S. Gupta, S. Sen, "The Use of Genetic Algorithm for Solving a Long-Term Land Allocation Problem for Optimal Cropping Plan in Agricultural System", Proceedings of the ICOREM 2009, Anna University, Tiruchirappally, pp.306-325, 2009.
- [155] B.B. Pal, S. Gupta, A. Mukhopadhyay, P. Biswas, "An Application of Genetic Algorithm Method for Solving Patrol Manpower Deployment Problems through Fuzzy Goal Programming in Traffic Management System: A Case Study", Proceedings of the ICOREM 2009, Anna University, Tiruchirappally, pp.306-325, 2009.
- [156] B.B. Pal, S. Gupta, D. Chakraborty, "A Fuzzy Goal Programming Procedure for Solving Linear Multilevel Programming Problems via Genetic Algorithm", Proceedings of the ICOREM 2009, Anna University, Tiruchirappally, pp.306-325, 2009.
- [157] S. Gupta, S. Chakraborty, "Smart Compiler: A Natural Language Processing Approach to Compile and Execute Pseudo Code", Proceedings of the IEEE International Conference on Computer Vision and Information Technology (ACVIT) 2007, BAM University, Maharashtra, India, ISBN: 978-81-89866-74-7, 18, pp. 383-390, 2007. (IEEE Bombay Section, cosponsored by IETE, UGC, DST and CSIR)
- [158] S. Gupta, D. Sanki, "Analyzing the Trends through Measurement of Recorded Effect of Sound Wave on Human Brain in the Framework of Data Mining", Proceedings of the Conference on Theory and Practice of Operational Research in Information Technology & Supply Chain Management (ORITSCM) 2007, pp. 67-74, 2007. (ORSI Society, Bangalore Chapter and IISc Bangalore)
- [159] S. Gupta, A. Datta, "Cognitive Systems incorporating Artificial Intelligence: A behavioral model of Music Therapy Treatment Convention", Proceedings of the 7<sup>th</sup> International Conference on Cognitive Systems (ICCS) 2005, ISBN: 81-903047-2-0, 52, pp. 1-14, 2005.

#### IEEE/ IET National Conference:

- [160] B.B. Pal, S. Gupta, "Genetic Algorithm for Chance Constrained Fuzzy Goal Programming based on Stochastic Simulation", Proceedings of the 1<sup>st</sup> Indian Conference on Trends in Modern Engineering Systems (IConTiMES) 2008, ISBN: 978-81-906401-0-7, pp. 3-13, 2008. (JISCE, IEEE Kolkata Section and IET, UK)
- [161] S. Gupta, P. Mitra, "Nature Determination of Offspring from the Behavioral Analysis of parent using Fitter Cordon Selection based on Genetic Algorithm", Proceedings of the First Indian Conference on Trends in Modern Engineering Systems (IConTiMES) 2008, ISBN: 978-81-906401-0-7, 18, pp.14-20., 2008. (JISCE, IEEE Kolkata Section and IET, UK)
- [162] B.B. Pal, S. Gupta, "Fuzzy Linguistic approach to design Pseudo Code Compiler in Multiobjective Decision Making Framework", Proceedings of the 2<sup>nd</sup> National Conference on Recent Trends In Information Systems (ReTiS) 2008, pp. 143-148, 2008. (CSE Dept, JU, IEEE GOLD Affinity Group and IEEE Kolkata Section).

#### National Conference:

- [163] B.B. Pal, D. Chakraborti, P. Biswas, S. Gupta, "A Genetic Algorithm Based Mixed 0-1 Goal Programming Approach to Interval-Valued multiobjective Bilevel Programming Problem", Proceedings of the Recent Trends in Mathematical Modelling and Simulation (RTMMS) 2010, BHU, 2010.
- [164] S. Gupta, S. Sengupta, M. Bhattacharyya, S. Chatterjee, B. Sen Sharma, "Multi Channel Multi Factor User Authentication System Using Encryption Technique", Proceedings of the National Conference on Ubiquitous Computing (NCUBQT) 2009, pp. 35-38, 2009.
- [165] S. Gupta, N. Pandit, "A Cognitive Model of Interactive System Instructor incorporating Natural Language Understanding and Processing", Proceedings of the National Conference on Ubiquitous Computing (NCUBQT) 2009, pp. 30-34, 2009.
- [166] B.B. Pal, S. Gupta, "An application of Genetic Algorithm method to fuzzy goal programming model for academic personnel planning problems in University management system", Proceedings of the 7<sup>th</sup> All India People's Technology Congress (AIPTC) 2009, pp. 49-58, 2009.
- [167] S. Gupta, S. Sengupta, "Vigil-On: A Machine Intelligence Approach to design Open Source Vigilance Software under the framework of Digital Image Processing and Mobile Technology", Proceedings of the 22<sup>nd</sup> National Convention of Computer Engineers, 2008, pp. 52-57, 2008. (IE(I), CSI Kolkata Chapter)
- [168] S. Gupta, D. Sanki, "Analyzing the Trends through Measurement of Recorded Effect of Sound Wave on Human Brain in the Framework of Data Mining", Proceedings of the Conference on Theory and Practice of Operational Research in Information Technology & Supply Chain Management (ORITSCM) 2007, pp. 67-74, 2007. (ORSI Society, Bangalore Chapter and IISc Bangalore)
- [169] B.B. Pal, R.K. Jana and S. Gupta, "Genetic Algorithm Based Hybrid Goal Programming for Fuzzy Multi-objective Fractional Programming Problem", Proceedings of the National Conference on Trends and Advances on Computer Aided Design & Engineering (TACADE) 2007, pp. 190-201, 2007.
- [170] B.B. Pal, R.K. Jana and S. Gupta, "Using Genetic Algorithm For Solving Multi-objective Chance Constraint Programming Problem With Continuous Random Variables Through

	<p>Fuzzy Goal Programming Approach”, Proceedings of the National Conference on Trends and Advances on Computer Aided Design &amp; Engineering (TACADE) 2007, pp. 269-279, 2007.</p> <p>[171] B.B. Pal, R.K. Jana and S.Gupta, “Genetic Algorithm Based Hybrid Goal Programming for Fuzzy Linear Fractional Programming Problem”, Proceedings of the National Conference on Artificial Intelligence (NCAI) 2007, VPCOE, Baramati, Pune.</p> <p>[172] S. Gupta, “AMD: A case study of Artificial Intelligence illustrating Disease Diagnosis” published at the National Workshop on Artificial Intelligence (NWAII) 2006. (CDAC, Mumbai and Computer Society of India, Mumbai)</p> <p><b>Industry Text</b></p> <ol style="list-style-type: none"> <li>1. Author, “Overview of Analysis and Synthesis Phase” on Compiler Design, Instruction Guide, Manual, <b>Mission 10X Learning Approach, WIPRO</b>, 2011</li> <li>2. Author “Innovative Introduction on Artificial Intelligence”, Integrated Innovations, <b>Mission 10X Learning Approach, WIPRO</b>, 2010</li> </ol>
<p><b>Academic Awards</b></p>	<ul style="list-style-type: none"> <li>▪ <b>“Swami Vivekananda Excellence Award”</b>, a research award conferred by International Benevolent Research Foundation (IBRF) jointly with <b>Confederation of Indian Universities</b>, at its 10th edition hosted at Birla Industrial and Technological Museum Kolkata 12th Janury 2025.</li> <li>▪ <b>“IUCEE Individual honorary Membership (IIHM)”</b>, a recognition conferred by Indo Universal Collaboration for Engineering Education, at 12th International Conference ICTIEE 2025, 8th -10th January 2025, at VNRVJIET Hyderabad Telangana 2025</li> <li>▪ <b>“IUCEE Showcase awards”</b>, a Teaching-Learning award conferred by <b>Indo Universal Collaboration for Engineering Education</b>, at 11<sup>th</sup> International Conference ICTIEE 2024, 2<sup>nd</sup> -4<sup>th</sup> January 2024, KLE Tech. University, Hubballi, K'taka 2024.</li> <li>▪ <b>“Nikhil Bharat Banga Shiksha Samman”</b>, awarded by Nikhil Bharat Shiksha Parishad in the most Dynamic Professor (Research category) 2023-24 conferred on 23<sup>rd</sup> May 2024.</li> <li>▪ Appeared at <b>MIT (Massachusetts) Solve</b> for the innovation LEARN with NOODLE, 2022.</li> <li>▪ <b>“Certificate of Excellence”</b> conferred by <b>Indo Universal Collaboration for Engineering Education</b>, at Leadership Summit, Goa, 10<sup>th</sup> July 2022.</li> <li>▪ Prestigious <b>“Bharat Gaurav Shri Samman”</b> National Lifetime Achievement Award for Education and Research by BGSS Council (authorized by Govt. of India), New Delhi, 29<sup>th</sup> May 2022.</li> <li>▪ <b>“National Education Brilliance Award”</b> -Lifetime Achievements Awards for Research by NEBA, New Delhi, 15<sup>th</sup> May 2022.</li> <li>▪ <b>“Academic Excellence Award”</b>- Institution of Scholars (InSc) in association with IIP, USA (authorized by Ministry of Corporate Affairs, Govt. of India), New Delhi, April, 2022.</li> <li>▪ <b>“Certificate of Excellence in Research”</b> conferred by NESIN, Science Father, International Research Award on New Science Inventions (Id: 5293), 7<sup>th</sup> August 2020.</li> <li>▪ <b>“Honorary Rosalind Membership”</b> recognition given by <b>London Journal Press, United Kingdom</b> to their Editorial Board Membership ID#PS95598 30<sup>th</sup> July 2020,</li> <li>▪ <b>“Bharat Vidya Shiromani Award”</b> conferred by the International Business Council (IBC), New Delhi for contribution in Education and research in New Delhi, December, 21<sup>st</sup>, 2016,.</li> <li>▪ <b>“Outstanding Faculty Award”</b> by the Center for Advanced Research and Design (Trustee: Venus International Foundation), at <b>VIFFA 2015</b>, Chennai, 5<sup>th</sup> July, 2015.</li> <li>▪ Received <b>Certificate of appreciation</b> from the JISCE in the year 2017 for publication.</li> </ul>
	<ul style="list-style-type: none"> <li>▪ <b>“Best paper Award”</b> (Recipient Scholar) at International Conference on Smart Technologies for Sustainable Development (ICSTSD 2021 for the paper “An ensemble Heart Disease prediction Model Bagged with Logistic Regression, Naïve Bayes and K Nearest neighbor”, Proc. By Springer, 2021</li> <li>▪ <b>“Best paper Award”</b> (Recipient Scholar) at International Conference on Applications of Network, Sensors and Autonomous Systems Analytics (ICANSASA 2020) for the paper “A survey paper on Algorithm of Wireless Body Area Network”, Proc. by Springer, 2020</li> <li>▪ <b>“Best paper Award”</b> in Soft Computing Session I at IEEE International Conference on Advanced Computing (ICAC) 2009, Dept. of Information Technology, IEEE Chennai Section and Anna University, Chennai, TN, 2009.</li> </ul>

	<ul style="list-style-type: none"> <li>▪ <b>“Best paper Award”</b> (Recipient: Supervisor) in OR application in Management-ORSI Madurai Chapter Award at ICOREM 2009, Dept. of Management Studies, Anna University, Tiruchirappally, TN, 2009.</li> </ul>
<b>Journal Reviewer</b>	<p><b><u>MANY INCLUDING SORINGER NATURE</u></b></p> <p>Few are highlighted</p> <ul style="list-style-type: none"> <li>• <b>Springer Nature:</b> 3 in nos. <b>2024.</b></li> <li>• <b>Elsevier Science</b>, Information Science, Reviewer Paper Id; INS-D-12-1606</li> <li>• <b>Springer</b> : 1<sup>st</sup> International Conference on Advancement of Medical Electronics (ICAME) 2015 organized by JISCE – 6 papers (published in Springer), 2015.</li> <li>• <b>IEEE Xplore:</b> 1<sup>st</sup> International Conference on Non Conventional Energy (ICONCE) 2014 organized by JISCE – 6 papers (published in Xplore), 2014.</li> <li>• <b>Elsevier Science, Proceedia Technology:</b> 2<sup>nd</sup> International Conference of Computer, Communication, Control and Information Technology (C3IT)- organized by Academy of Technology (AOT) under WBUT- 3 papers, (Published in Science Direct), 2012.</li> <li>• <i>Educational Research and Reviews</i>, <b>Academic Journals</b>, “An investigation of Learning styles Influencing Mathematics Achievement of seventh - grade students”, 2011.</li> </ul>
<b>Other salient features</b>	<p><b><u>PATENT</u></b></p> <ol style="list-style-type: none"> <li>1. Published patent as inventor (Applicant: previous Institution) entitled: “System for medical treatment following music therapy and the method thereof” (Appl. No. 20 / KOL / 2014) in the Journal 6 / 2014. Publication date: 7th February 2014 (Joint) [JIS]</li> <li>2. Published patent entitled “A Natural Language Processing System having Computational Linguistic Approach” (Appl. No. 201731011952 A) in the journal 04 / 2017. Published on 21st April 2017 (Single) [JIS]</li> <li>3. Published patent entitled “Genetic Routing- Genetic Computing inspired Wireless Communication Network”, (Appl. No. 201931016210 A) in the journal 20/ 2019. Published on 17th May 2019 (Joint) [Amity]</li> <li>4. Published patent entitled “Interactive Technology driven Low-cost Virtual learning Devices NOODLE for equity to address digital divide”, (Appl. No. 202331012519A) published on 10th March 2023.(Joint) [SVU]</li> <li>5. Published patent entitled “MUSIC THERAPY DEVICE FOR DEAF AND DUMB”, (Appl. No. 202331085483 A) published on 19th January 2024. (Joint)</li> <li>6. Published patent entitled “Robotic vehicle using ATMEGA328 microcontroller, ultrasonic sensor and Bluetooth for wireless control and data feedback, obstacle avoidance and autonomous manoeuvres with precise area scanning”, (Appl. No. 202431006559 A) published on 9th February 2024. (Joint) [SVU]</li> <li>7. Published patent entitled “Hybrid Compiler”, (Appl. No. 202431039789 A) published on 19th July 2024. (Joint) [SVU]</li> <li>8. Published patent entitled “ROBAL: A robotic vehicle with auto balancing”, (Appl. No. 202431040106 A) published on 9th August 2024. (Joint) [SVU]</li> <li>9. Published patent entitled “Smell sensing and actuation using embedded device over the network”, (Appl. No. 202431040109 A) published on 9th August 2024. (Joint) [SVU]</li> <li>10. Published patent entitled “SHARP: A compiler incorporating auto-debugger with floating point arithmetic and Variable length of data”, (Appl. No. 202431056805 A) published on 9th August 2024. (Joint) [SVU]</li> </ol> <p><b><u>SCHOLARS</u></b></p> <p><b><u>Thesis submitted/ Pre-submission</u></b></p> <ol style="list-style-type: none"> <li>1. Annwasha Banerjee Majumdar, Asst. Prof. (IT Dept.), JIS College of Engg, <b>Registration no.</b> PhD/TECH/CSEIT/065/2018 at MAKAUT (WBUT), Sept, 2020 TITLE: “Human Disease Prediction using Machine Learning based Framework and Severity Related Information Transmission” (Submission: 2025)</li> <li>2. Manoj Srivastav, School of CS, Registration <b>no.</b> SVU/PhD/SCI/CS/002/2021 at SVU, August-2021, TITLE: “BEHAVIORAL TRENDS IN SOCIAL NETWORK ANALYSIS (SNA) USING GRAPH THEORY AND MACHINE LEARNING” (Pre-submission: 2025)</li> <li>3. Atanu Datta, School of CS, <b>Registration no.</b> SVU/PhD/SCI/CS/001/2021 at SVU, August-2021, TITLE: “SECURITY FRAMEWORK BASED ON FAULT TOLERANCE IN HAND-HELD DEVICES” (Pre-submission: 2025)</li> </ol>

4. Alok Roy, School of CS, **Registration no.** SVU/PhD/SCI/CS/004/2021 at SVU, August-2021, TITLE: "NOODLE: DEVICE DESIGNED TO SUPPORT VIRTUAL LEARNING" (Pre-submission: 2025)

**Pursuing:**

5. Paromita Das, Asst. Professor (ECE Dept.), AUK, **Registration no.** PhD/TECH/ECE055/2019 at MAKAUT (WBUT), Nov', 2021. TITLE: "Music Pattern Detection and Singer Recognition using Digital Signal processing under the framework of Machine Intelligence: Some approaches".

6. Debabrata Barik, School of CS **Registration no.** SVU/PhD/SCI/CS/003/2021 at SVU, August-2021, TITLE: "EARLY DETECTION OF AUTISM SPECTRUM DISORDER (ASD) IN TODDLERS USING QUANTUM INSPIRED ALGORITHMS" (registered: 2022)

7. Nirmalya Chaudhuri, Dept. of Computer Science and Engineering, **Registration no.** SVU/PhD/ENGG/CSE/002/2021 at SVU, August-2021, TITLE: "Human Action Recognition through Real Time Video Processing under the framework of Machine Learning" (registered: 2022)

8. Chandanita Thakur, Dept. of Computer Science and Engineering, **Registration no.** SVU/PhD/ENGG/CSE/001/2021 at SVU, August-2021, TITLE: "MULTI AGENT SYSTEM ANALYTICS IN HEALTH CARE" (registered: 2022)

**INVITED TALK**

1. Invited Speaker, titled " From AI to GenAI in Education", FDP at KJ Somaiya College of Engineering, Somaiya Vidyavihar University, Mumbai, Maharashtra on 10th December 2024

2. Invited Speaker, FDP on "Recent Advances and Future Trends in AI & NLP" hosted by Global Institute of Science and Technology (ICARE), April 2024 topic: "Human and Machine Learning evolution from the perspective of Natural Language Processing under the framework of Machine Intelligence" on 16<sup>th</sup> April 2024.

3. Invited Speaker, FDP on "Artificial Intelligence, Machine Learning and Deep Learning" hosted by Dept. of Computer Applications, Haldia Institute of Technology, February 2024 topic: "Experiential learning, Desing Thinking and Generative AI" on 20<sup>th</sup> February 2024.

4. Invited Speaker, FDP on "Recent Trends in Immersive Technologies" hosted by Government College of Technology (GCT), Coimbatore, June 2023 topic: "Digital Image Processing under machine Intelligence in Dimension 2D/3D" on 10<sup>th</sup> June 2023

5. Invited Speaker, One day seminar on "Artificial Intelligence and Machine Learning", Haringhata Mahavidyalaya (KU), 8<sup>th</sup> January, 2022.

6. Invited Speaker titled "Measurement of effect of music on human brain and consequent impact on attentiveness and concentration during reading" at Trans-disciplinary Information Science (TDI) Conference (WABD) 2021 at **Beijing, China**, 14<sup>th</sup> March 2021.

7. Invited Speaker, Key-note Speaker: e-Workshop on Bloom's Taxonomy, "Pedagogy in Virtual Framework under New Normal", **R.N. Tagore University (Bhopal)**, India, 20<sup>th</sup> March, 2021

8. Guest Lecture, National webinar on Industry -academia innovative practice, "Recent Advancement in Information Technology & Mathematics", **Swami Vivekananda Govt. College, Raisen (M.P.)** India, 6<sup>th</sup> March, 2020.

9. Invited Speaker, titled "Measuring Recorded Effect of Sound Wave on Human Brain Through Music Pattern Recognition Using Digital Signal Processing", Int. Con. on Neurology and Neuro-Disorders (ICNN 2021 online), **Paris, France**, December, 2021.

10. Invited Speaker, Int. Webinar, "Recent Advancement in Information Technology & Mathematics", Govt. Narmada College, Dist. Hoshangabad (M.P.) INDIA, 17<sup>th</sup> May 2020.

11. Invited Speaker, **MSME Development Institute**, Kolkata, Gol to the IEDS Cadre on Industry 4.0 measurable aspects, 10<sup>th</sup> March, 2020.

12. Invited Speaker, Anantham, Amrita School of Engineering and Technology, **Amrita University**, on "Mathematical backbone behind Pattern Recognition and Machine Intelligence" to UG/PG students across disciplines, 21<sup>st</sup> December, 2019.

13. IUCEE Webinar (jointly with Prof. S. Mitra) on "Own Device-Based Mobile Learning in Personal Cloud Environment: A framework to address Digital Divide" webcasted by **University of Massachusetts** at Lowell, **USA**. 19<sup>th</sup> March, 2019

14. Guest Speaker on "Preparation of Curriculum / Syllabus under the framework of Outcome Based Education" at **GNIT** on 5<sup>th</sup> December, 2016.

	<ol style="list-style-type: none"> <li>15. Guest lecture, on “Cloud Computing and Service oriented Architecture”, EAP Cell, <b>MCET</b> during 2<sup>nd</sup> -3<sup>rd</sup> April, 2016.</li> <li>16. Invited Speaker, topic: “Correlating every topic in the curriculum to Graduate Attribute in multiple levels under the Framework of Outcome Based Education”, at International Conference on Transformation In Engineering Education (ICTIEE’ 2016) organized <b>by Indo-US Collaboration of Engineering Education ( IUCEE)</b>, College of Engg., Pune, India, 8<sup>th</sup> -12<sup>th</sup> January, 2016.</li> <li>17. Invited Speaker, topic: “Production Systems for Identification of Correspondence between Genetic Patterns and Hand-written Signatures in a Family Hierarchy”, at <b>World Congress on Microscopy: Instrumentation, Techniques and Applications in Life Sciences and Materials Sciences (WCM 2015)</b> at Mahatma Gandhi University, Kottayam, Kerala, India, 9<sup>th</sup> -11<sup>th</sup> October 2015.</li> <li>18. Invited Speaker, topic: “Genetic Optimization in Machine Intelligence”, in the Faculty Development Programme on Optimization Technique and its Engineering Applications, <b>C V Raman College of Engineering</b>, Bhubaneswar, Odisha, 9<sup>th</sup> - 13<sup>th</sup> June, 2015.</li> <li>19. Guest Lecture, Remedial Teaching Session on “Software Testing and Tools”, Murshidabad College of Engineering and Technology (<b>MCET</b>) during 9<sup>th</sup> -10<sup>th</sup> November, 2013.</li> <li>20. Speaker presenting the Institution at the TEQIP sponsored Workshop on “Good Governance and the Role of HODs” at Dr. B.C.R Auditorium organized by IPMU JISCE on 7<sup>th</sup> June, 2013</li> <li>21. Invited Speaker, Digital Image Processing on Two day national Seminar “Science and Technology Meet 2013”, Dumkal Institute of Engineering and Technology (<b>DIET</b>), 31<sup>st</sup> March, 2013.</li> <li>22. Invited Speaker, Digital Image Processing, National Seminar on “Image processing and Network Security”, <b>Elite</b> Institute of Engineering and Management, 4<sup>th</sup> August, 2012.</li> <li>23. Invited Speaker, Pathways on Engineering/ Technology, Workshop on Career Guidance for PGT Teachers, Jawahar Navodaya Vidyalaya (<b>JNV</b>), 23<sup>rd</sup> January, 2012.</li> <li>24. Invited Speaker, Introductory session on Computer Science and Information Technology, Regional Level Science Congress, Patna Region, Jawahar Navodaya Vidyalaya (<b>JNV</b>), 17<sup>th</sup> November, 2011.</li> <li>25. Invited Speaker, Introduction to Genetic Algorithm in the Seminar “Science and Technology meet- 2011”, Dumkal Institute of Engineering and Technology (<b>DIET</b>), 19<sup>th</sup> February, 2011.</li> <li>26. Invited Speaker, Machine Intelligence Concept in the Seminar “Tech-Science Trend Today”, Dumkal Institute of Engineering and Technology (<b>DIET</b>), 13<sup>th</sup> March, 2010.</li> <li>27. Invited Speaker, Career Prospect in Information Technology, <b>NCC</b> Cadet Technical Training session, Indian Army, KAPA, 31<sup>st</sup> May 2007.</li> </ol>
<p><b>Symposium/Workshop/ Conference/Seminar/We binar</b></p>	<p><b><u>ORGANIZING</u></b></p> <ul style="list-style-type: none"> <li>• Convener, International Conference on Engineering Design and Computing (<b>ICEDC-2024</b>), 22<sup>nd</sup> -24<sup>th</sup> February 2024, Invited Speakers and Delegates from IITs, NITs and lead Universities.</li> <li>• Advisory Committee Member, International Conference on Transformation of Engineering Education (<b>ICTIEE-2024</b>), January 2<sup>nd</sup> -4<sup>th</sup>, 2024 organized by Indo-Universal Collaboration on Engineering Education (IUCEE) at KLE Technological University B’lore,</li> <li>• Program Chair, International Conference on Integrative Science and Engineering (<b>ICISE</b>) <b>2023</b>, Track -I- Next generation Computing, 28<sup>th</sup> -30<sup>th</sup> September proceedings in <b>Scopus indexed journals/ Book Chapter</b>.</li> <li>• Convener, International Conference on Engineering Design and Computing (<b>ICEDC-2023</b>), 28<sup>th</sup> -29<sup>th</sup> January, 2023 the proceedings of which is published at <b>Scopus indexed journal JMMF</b>. Invited Speakers and Delegates - National stalwarts Prof. E. Balagurusamy, Prof. RS Salaria including four Vice Chancellors and five national institute Directors.</li> <li>• Convener, International Conference on Industry Interactive Innovation in Science, Engineering and Technology (<b>I3SET-2016</b>) 20<sup>th</sup> -21<sup>st</sup> Jan, 2016 the proceedings of which is published at <b>Springer –Lecture Notes in Networks and Systems</b>.</li> </ul>

	<ul style="list-style-type: none"> <li>• <i>Convener</i>, International Conference on Computation and Communication Advancement (<b>IC3A</b>)-2013, 11<sup>th</sup>-12<sup>th</sup> Jan, 2013 – TEQIP sponsored and IEEE Kolkata Section technically cosponsored- Proceedings by <b>McGraw-Hill pub</b> – 76 papers selected for publication out of 144 paper submitted – Invited Speakers and Delegates from Germany, Netherlands, USA, Japan, Sri Lanka- National stalwarts Prof. E. Balagurusamy, Prof. S.K. Pal, Prof. A.K. Roy as inaugural and plenary speakers.</li> <li>• <i>Program Chair</i>, International Conference on Non-Conventional Energy (<b>ICONCE</b>)-2014, (<b>IEEE Xplore</b>), 16<sup>th</sup> -17<sup>th</sup> Jan, 2014.</li> <li>• <i>Program Chair</i>, International Conference on Advancement in Medical Electronics (<b>ICAME</b>)-2015, proceedings in Lecture notes in Bioengineering, <b>Springer</b>, 29<sup>th</sup>-30<sup>th</sup> January, 2015.</li> </ul> <p style="text-align: center;"><b><u>ATTENDING</u></b></p> <p>Over 200 events</p>
<b>Contact</b>	<a href="mailto:dean.science@svu.ac.in">dean.science@svu.ac.in</a> 9836545777