Name of Faculty

Designation

Nature of Job/Appointment

Date of Joining

E-mail

**Education Qualifications** 

Ph. D PG

UG

Dr. T SATYANARAYANA MURTHY

Associate Professor

Regular

09-05-2022

tsmurthy\_it@cbit.ac.in

Name of the Degree

Doctor of Philosophy (CA) NIT-T

M. Tech. (CST with AI&R )

B. Tech. (IT)

Class

Awarded

First /Distinction

First /Distinction

Cleared UGC-NET (Lectureship) Computer Science and Applications 2012

## Work Experience

Teaching Research 16 Years (Includes research and industry)

4.8 Years

Industry 0.9 Months

Others

Area of Specialization

Professional Memberships

Responsibilities held at Institution Level

Responsibilities held at Department Level

Data Mining, Privacy Preserving Data Mining, Natural Language Processing, Artificial Intelligence, Machine Learning

Member, IFERP Membership: PM07138265

SCRS Member

NAAC Co-Ordinator,

Tecstasy 2023 Co-Ordinator

NBA Criteria-3 In-charge

- Final Thesis on "Controllable and Abstractive Summarization of Clinical Trail Descriptions" in AUGUST 2022 by Vedavyas Burli, for partial fulfilment of the Requirements for the award of the degree of Master of science in machine learning and artificial intelligence, Liverpool John Moores University (LJMU) & upGrad India.
- A Final Thesis on "Extractive Text Summarization using Topic Modelling and Entropy" in AUGUST 2022 by Sujit Vakkalagadda, for partial fulfilment of the Requirements for the award of the degree of Master of science in machine learning and artificial intelligence, Liverpool John Moores University (LJMU) & upGrad India.
- 3. A Final Thesis on "Multi-modal summarization using pre-trained vision-and-language model" in AUGUST 2022 by Sreejith Sreekumaran, Student Id: 1023126, for partial fulfilment of the Requirements for the award of the degree of Master of science in machine learning and artificial intelligence, Liverpool John Moores University (LJMU) in collaboration with upGrad India.

Research Guidance

- 4. A Final Thesis on "Text-to-text transfer transformer data augmentation over bert and gpt comparison" by Rashmita Karak Student no.: 1029985 in NOVEMBER 2022 for partial fulfilment of the Requirements for the award of the degree of Master of science in machine learning and artificial intelligence, Liverpool John Moores University (LJMU) in collaboration with upGrad India.
- 5. A Final Thesis on "Translating Questions In Natural Language To Sql Queries, Sindhuja Swamidorai, Thesis Report, November 2022 for partial fulfilment of the Requirements for the award of the degree of Master of science in Data Science, Liverpool John Moores University (LJMU) in collaboration with upGrad India.
- 6. A Final Thesis on "A Comparative Analysis of Text Classification Using DistillBERT and GCN", Anusha Danday Id: 988798, Thesis Report, June 2022 for partial fulfilment of the Requirements for the award of the degree of Master of science in Data Science, Liverpool John Moores University (LJMU) in collaboration with upGrad India.
- 7. A Final Thesis on "Predicting a Heart Disease based on risk factors using classification techniques", Sruthi Keerthi Tabathia Id: 988798, Thesis Report, August 2022 for partial fulfilment of the Requirements for the award of the degree of Master of science in machine learning, Liverpool John Moores University (LJMU) in collaboration with upGrad India.
- Certificate of Appreciation by IBM, TGMC 2011
- Letter of recommendation by Vignan University as Best teacher and Researcher.

Courses Handled at Under Graduate / Post Graduate Level.

DWDM, ITK, U&SP, MAD, DBMS, DAA, OS, WT, C, JAVA, OSWT, Data Structures, AI, ML, Python etc..

No. of Papers Published

National Journals – 2 International Journals - 18

data) using machine learning programming. 2020

Teachable Oxygen flow Control June 2021.

National Conference – 2

International Conference - 9

**Projects Carried out** 

Awards Received

**Patents** 

Technology Transfer

**Invited Speaker** 

Resource person for the three day workshop on "Internet of Things and its Applications(FDP-IoTA-2020)", CSE Dept. Bapatla Engineering College,

1. ICML- Data Cleaning: Intelligent cloud data cleaning (unused data, used

PIG- Intelligent Chatbot System: Process (Sales Transaction) to use

Information Gathered by an Intelligent Chatbot System. December 2020.

17th Dec-2020 to 19thDec2020, Resource person for "DB2" Workshop at Vignan Lara Engg. College-Department of CSE, Guntur.

N.P.Gopalan, T.Satyanarayana Murthy, "Association Rule Hiding using Chemical Reaction Optimization", SOCPRO, AISC Spinger Book Series, ISI Proceedings, EI-Compendex, DBLP, SCOPUS, Google Scholar and Springer link.2017.

Satyanarayana Murthy, T., Mohan Krishna Varma, N., Roy, S., Nazeer, S. (2022). Effective Classification of Tweets Using Machine Learning. In: Kumar, R., Ahn, C.W., Sharma, T.K., Verma, O.P., Agarwal, A. (eds) Soft Computing: Theories and Applications. Lecture Notes in Networks and

No. of Books/Chapter Published with details

- Systems, vol 425. Springer, Singapore. doi.org/10.1007/978-981-19-07074 40.
- Sathyanarayana Murthy, T., Mohan Krishna Varma, N., Ravuri, D., Kishore Babu, D., Nazeer, S. (2022). Classification of Precious and Nonprecious Tweets Using Deep Learning. In: Rout, R.R., Ghosh, S.K., Jana, P.K., Tripathy, A.K., Sahoo, J.P., Li, KC. (eds) Advances in Distributed Computing and Machine Learning. Lecture Notes in Networks and Systems, vol 427. Springer, //doi.org/10.1007/978-981-19-1018-0\_33.

Details of Short-Term Training Programs/Faculty Development Programs/Seminars/Workshops.Other Trainings (**Attended and/or Organized**).

- 1. Attended a One day National workshop on advances in Soft Computing and Signal Processing (WAS2P-07) on 23-12-2007 organised by IETE at DIET Anakaplalle.
- 2. Attended a Two day National workshop on Signal Processing Evolutionary Computation and Modeling (WOSEM-09) on 14-03-2009 to 15-03-2009 organised by IETE at DIET Anakaplalle.
- 3. Attended a Five day **IUCEE** International workshop on Data Mining a part of **Indo-US** engineering from 07-07-2012 to 11-07-2012 at Vignan University, Vadalmudi Guntur.
- Attended a Five day Faculty Enablement Campus Connect Program held at RISE Groups of Institutions, Ongole from 25-06-2012 to 29-06-2012 conducted by INFOSYS LIMITED.
- 5. Attended a Three day Faculty Development Program (FDP)-2014 on Linux Internals from 27-04-2014 to 29-04-2014 held at Vignan University, Vadalmudi Guntur in association with OPEN KITE.
- Attended an Eight day Faculty Induction Program (FDP)-2011 from 23-07-2011 to 30-07-2011 at Vignan University, Vadalmudi Guntur.
- 7. Attended a Four day Faculty Development Programme on IBM Academic Initiative conducted by Department of CSE from 21-11-2011 to 24-11-2011 conducted at LBRCE Maylavaram.
- 8. Attended a One day National workshop on Agile Methodologies SCRUM Method held on 25-11-2011 at Vignan University, Vadalmudi Guntur.
- Attended a One day Faculty Development and Training Program on Spoken Tutorials based software training held on 25-12-2013 at Vignan University, Vadalmudi Guntur.
- 10. Co-ordinated and Attended a Two day workshop on Mobile Application Development from 22-03-2014 to 23-04-2014 at Vignan University, Vadalmudi Guntur in collaboration with WebTek Labs.
- 11. Attended a Two day workshop on Tools and Techniques for Information Processing Research conducted from 11-09-2015 to 12-09-2015 at National Institute of Technology, Tiruchirapalli.
- 12. Attended a Two day workshop on R Programming Language conducted from 16-10-2015 to 17-10-2015 at National Institute of Technology, Tiruchirapalli.
- 13. Attended a Two day workshop on Video Analytics conducted from 27-11-2015 to 28-11-2015 at National Institute of Technology, Tiruchirapalli.
- 14. Attended a Two day workshop on IOT and SMART HOME conducted from 13-11-2015 to 14-11-2015 at National Institute of Technology, Tiruchirappalli.
- 15. Attended a Five Day Professional Development Programme from 08-02-2016 to 12-02-2016 at Indian School of Mines, ISM Dhanbad.
- 16. Attended a Three day workshop on *Data mining and Social Media* from 02-03-2017 to 04-03-2017 at Vignan,s Institute of information Technology, Visakhapatnam.
- 17. Attended a Five day workshop on *Software engineering* at NIT Tiruchirappalli in 2017 from 27-11-2017 to 01-12-2017 at National Institute of Technology, Tiruchirappalli.
- 18. Attended a One day workshop on IOT and MACHINE LEARNING held on 27-10-2018 at at National Institute of Technology, Tiruchirappalli.
- 19. Attended a Five day workshop on *Deep Learning with Tensorflow and R Programming* at Kalasilingam Academy of Research and Education, Krishnankoil in 2018 from 11-12-2018 to 15-12-2018.
- 20. Attended a Three day FDP on IOT from 30-08-2019 to 01-09-2019 at Vignan University, Vadalmudi Guntur.
- 21. Attended a Five day workshop on Emerging Trends in application of Machine Learning at GMRIT Rajam in 2020 from 20-07-2020 to 24-07-2020.
- 22. Attended a one week FDP on High Quality Medical Diagnosis using Data Science for Societal Benefits at VR Siddartha Engineering College in 2020 from 21-09-2020 to 25-09-2020.
- 23. Attended a Five day workshop on Systems Engineering from 30-09-2020 to 04-10-2020 at Dr. SPM International Institute of Information Technology Naya Raipur.
- 24. Attended a one week FDP on Machine Learning for Natural Language Processing at NIT Jalandar in 2020 from 12-10-2020 to 17-10-2020.
- 25. **Co-Ordinated** a Six Day workshop on Digital Teaching Techniques for 100 members from 16-11-2020 to 21-11-2020 at Bapatla Engineering College, Andhra Pradesh.
- 26. Attended a Three day workshop on Recent Trends in Machine Learning from 10-12-2020 to 12-12-2020 at Bapatla Engineering College, Andhra Pradesh.
- 27. Attended two day national seminar on Quality Improvement via Accreditation and Ranking from 28-06-2021 to 29-06-2021 at Bapatla Engineering College.
- 28. Attended a ten day(i.e 40 hrs) online FDP on "Data Science and its applications using python" sponsored by MeitY GoI, organized by E&ICT Academy, NIT Warangal and Bapatla Engineeering College from 09-08-2021 to 19-08-2021

Details of Journal Publications/ Conferences (National and International)

## **International Journals**

- T.Satyanarayana Murthy, N.P Gopalan, Banothu Balaji (2023) A modified un-realization approach for effective data perturbation, International journal of Intelligent Enterprise, Inder science pp 408-421. <a href="https://doi.org/10.1504/IJIE.2023.10054103">https://doi.org/10.1504/IJIE.2023.10054103</a>, SCOPUS INDEXED.
- 2. **T. Satyanarayana Murthy (2023)**, P. Udayakumar, F. Alenezi, E. Laxmi Lydia and M. K. Ishak, "Coot optimization with deep learning-based false data injection attack recognition," *Computer Systems Science and Engineering*, vol. 46, no.1, pp. 255–271, 2023. **SCIE, SCOPUS INDEXED.**
- 3. S. Yonbawi, S. Alahmari, **T. Satyanarayana Murthy (2023)**, P. Maddala, E. Laxmi Lydia *et al.*, "Harris hawks optimizer with graph convolutional network-based weed detection in precision agriculture," *Computer Systems Science and Engineering*, vol. 46, no.2, pp. 1533–1547, 2023. **SCIE, SCOPUS INDEXED.**
- 4. **T. Satyanarayana Murthy (2023)** "Artificial Humming Bird Optimization with CNN for Fruit Classification Model", Machine Learning, Accepted(In-press) SCIE, SCOPUS INDEXED. (Accepted .. In-press).
- T. Satyanarayana Murthy (2023) "Hybrid Multi- Strategy Aquila Optimization with Deep Learning Driven Crop Type Classification on Hyperspectral Images, CSSE Accepted (In-press) SCIE, SCOPUS INDEXED. (Accepted .. In-press).
- 6. Francis Saviour Devaraj, **T. Satyanarayana Murthy (2023)**, F. Alenezi, E. Laxmi Lydia, M. A. Md Zawawi *et al.*, "Enhanced metaheuristics with trust aware route selection for wireless sensor networks," *Computer Systems Science and Engineering*, vol. 46, no.2, pp. 1431–1445, 2023. **SCIE, SCOPUS INDEXED.**
- 7. K. Kalyani, V. S. Parvathy, H. A. M. Abdeljaber, **T. S. Murthy (2023)**, S. Acharya *et al.*, "Effective return rate prediction of blockchain financial products using machine learning," *Computers, Materials & Continua*, vol. 74, no.1, pp. 2303–2316, 2023. **SCIE, SCOPUS INDEXED.**
- 8. T.Satyanarayana Murthy (2022) An efficient diabetic prediction system for better diagnosis, International journal of Intelligent Enterprise, Inder science pp 408-421. <a href="https://doi.org/10.1504/IJIE.2022.126397">https://doi.org/10.1504/IJIE.2022.126397</a>, SCOPUS INDEXED.
- T.Satyanarayana Murthy, N.P.Gopalan, Athira T R, (2022) Hiding Critical Transactions using Modified Unrealization Approach", International Journal of Business Intelligence, Inder science Publishers, <u>Vol. 15, No. 3</u>, 2020 pp.223-234 https://doi.org/10.1504/IJEB.2020.109071 SCOPUS INDEXED.,
- 10. S. Navaneetha Krishnan, P. Sundara Vadivel, D. Yuvaraj, **T. Satyanarayana Murthy**, S. J. Malla *et al.*, "Enhanced route optimization for wireless networks using meta-heuristic engineering," *Computer Systems Science and Engineering*, vol. 43, no.1, pp. 17–26, 2022. **SCIE, SCOPUS INDEXED.**
- 11. S. Shanmuga Priya, D. Yuvaraj, **T. Satyanarayana Murthy**, V. S. Chooralil, S. Navaneetha Krishnan *et al.*, "Secure key management based mobile authentication in cloud," *Computer Systems Science and Engineering*, vol. 43, no.3, pp. 887–896, 2022. **SCIE, SCOPUS INDEXED.**
- 12. **Teki, Satyanarayana murthy.**, Varma, M.K., Yadav, A.K. (2021). A Diaetic Prediction System based on Mean Shift Clustering. ISI, IIETA Publisher, Vol. 36, No. 2, pp. 231-235. https://doi.org/10.18280/isi.260210 **SCOPUS INDEXED.**
- 13. **Teki, Satyanarayana murthy.,** Varma, M.K., Harsha. (2021). Brain tumour segmentation using U-net based adversarial networks. Traitement du Signal, IIETA Publisher, Vol. 36, No. 4, pp. 353-359. https://doi.org/10.18280/ts.360408 **SCIE INDEXED**
- 14. **Teki**, **Satyanarayana Murthy**, Banothu, B., Varma, M.K. (2019) An un-realization algorithm for effective privacy preservation using classification and regression trees, Revue d'Intelligence Artificielle, IIETA Publisher, Vol. 33, No. 4, pp. 313-319. https://doi.org/10.18280/ria.330408. **SCOPUS INDEXED**
- 15. Teki, Satyanarayana murthy., Varma, M.K., Sumender Roy.,(2020) Improving the Performance of Association rules hiding using Hybrid Optimization Algorithm, Journal of Applied Security Research, Taylor & Francis, ESCI JOURNAL,SCOPUS INDEXED.Issue-3,Vol-15,pp423-437, <a href="https://doi.org/10.1080/19361610.2020.1756155">https://doi.org/10.1080/19361610.2020.1756155</a>.
- 16. **T.Satyanarayana Murthy, N.P.Gopalan** (2021), A Modified Un-realization Approach for effective perturbation, *International Journal of Intelligent Enterprise*, Inderscience Publishers, **SCOPUS INDEXED**,(In-press).
- 17. **T.Satyanarayana Murthy,** N.P.Gopalan, Yalla Venkateswarlu," An efficient method for hiding association rules with additional parameter metrics ", International Journal of Pure and Applied Mathematics (IJPAM), Vol. 118,No.7,2018, 285-290,IJPAM, **SCOPUS INDEXED**.
- 18. Banothu Balaji,Mohammad Hassan Khan,T.S.N.Murthy,Tai-hoon Kim "A defence mechanism for EOLSR against DOS Attacks in Adhoc Networks using Trust Based System" International Journal of Security and its Applications, vol 8,No 5,pp 51-64,2014, ISBN:1738-9976. **SCOPUS INDEXED**.
- 19. N.P.Gopalan, **T.Satyanarayana Murthy**, Yalla Venkateswarlu, "Hiding Critical Transactions using Un-realization Approach", International Journal of Pure and Applied Mathematics (IJPAM), Vol. 118,No.7 ,2018, 629-633, **SCOPUS INDEXED**.
- 20. **T.Satyanarayana Murthy**, N.P.Gopalan, D.Yakobu," An Efficient un-realization algorithm for privacy preserving decision tree learning using McDiarmid's Bound", International Journal of Innovative Technology and Exploring Engineering (IJITEE), Vol-8, Issue-4S2, 499-502, 2019. **SCOPUS INDEXED**.
- 21. **T.Satyanarayana Murthy,** N.P.Gopalan, Sasidhar Gunturu, " A Novel Optimization based Algorithm to Hide Sensitive Item-sets through Sanitization Approach", International Journal of Modern Education and Computer Science (IJMECS), Vol.10, No.10, pp. 48-55, 2018.DOI: 10.5815/ijmecs.2018.10.06.**SCOPUS INDEXED**

- 22. T.Satyanarayana Murthy, N.P.Gopalan, Datta Sai Krishna Alla, "The Power of Anonymization and Sensitive Knowledge Hiding Using Sanitization Approach", International Journal of Modern Education and Computer Science (IJMECS), Vol.10, No.9, pp. 26-32, 2018.DOI: 10.5815/ijmecs.2018.09.04.SCOPUS INDEXED
- 23. **T.Satyanarayana Murthy**, N.P.Gopalan, "A Novel Algorithm for Association Rule Hiding", International Journal of Information Engineering and Electronic Business (**IJIEEB**), Vol.10, No.3, pp. 45-50, 2018. DOI: 10.5815/ijieeb.2018.03.06.
- 24. A.SaiBabu, **T.S.N.Murthy**, Security Provision in Publicly Auditable Secure Cloud Data Storage Services Using SHA-1 Algorithm ,2012, (IJCSIT) International Journal of Computer Science and Information Technologies, Vol. 3 (3) , 4084-4088,2012...
- 25. **T.Satyanarayana Murthy**, B. Sivaiah, P Seshu Babu, "Pine Apple expert system using improved C4.5 algorithm", Global Journal of Computer Application and Technology (GICAT), vol 3 (3), pp. 1264 1266, 2013, ISSN: 2249-1945.
- 26. **T.S.N.Murthy**, Vandana babu T,D.nagabushanam,P.Seshu babu, "Privacy Preserving for expertise data using kanonymity technique to advise farmers", International Journal of Electrical, Electronics and Data Communication IJEEDC, Volume-1, Issue 10, 2013, ISSN:2320-2084.
- 27. Dammalapati Rama Krishna, Bode Prasad, **Teki Satyanarayana Murthy**, "Placement Prediction Analysis in University Using Improved Decision Tree Based Algorithm". International Journal of Computer Trends and Technology (IJCTT) V17(4):190-195, Nov 2014. ISSN:2231-2803. www.ijcttjournal.org. Published by Seventh Sense Research Group.

## International /National Conferences

- 1. Vedavyas Burli, **T. Satyanarayana Murthy**, (2023) "Controllable And Abstractive Summarization Of Clinical Trial Descriptions Using LEX-LDA Model" in 2<sup>nd</sup> International Conference of Cognitive and Intelligent Computi.ng (ICCIC 22) on conference at Vasavi College of Engineering, Hyderabad.
- 2. Sujit Vakkalagadda, **T. Satyanarayana Murthy**, (2023) "Extractive Summarization using topic Modelling and Entropy" in 2<sup>nd</sup> International Conference of Cognitive and Intelligent Computing (ICCIC 22) on conference at Vasavi College of Engineering, Hyderabad.
- 3. Satyanarayana Murthy T , Mohan Krishna Varma N , Daniel Ravuri , Kishore Babu D , Shaik Nazeer "Classification of precious and non-precious tweets using Deep Learning" ICADCML 2021, 3rd International Conference on Advances in Distributed Computing and Machine Learning(ICADCML-2022) at National Institute of Technology Warangal.(Accepted). Springer Scopus Indexed.
- 4. Satyanarayana Murthy T , Mohan Krishna Varma N , Sumender Roy , Shaik Nazeer "Effective Classification of tweets using machine learning" 6th international conference Soft Computing Theories and Applications (SoCTA-2021) at IIIT Kota Rajasthan.. Springer Scopus Indexed.
- T. S. Murthy, N. P. Gopalan and V. Ramachandran, "A Naive Bayes Classifier for Detecting Unusual Customer Consumption Profiles in Power Distribution Systems - APSPDCL," 2019 Third International Conference on Inventive Systems and Control (ICISC) at JCT College, Coimbatore, India, 2019, pp. 673-678. Indexed in IEEE
- 6. **T.Satyanarayana Murthy**, G.Preethi, N.P.Gopalan "An Efficient way of Anonymization without subjecting to attacks using Secure Matrix Method", in proceedings of the IEEE International Conference on Intelligent Computing and Control Systems at VAIGAI COLLEGE OF ENGG, MADURAI, June-2018, pp 1462-1465. **Indexed in IEEE**.
- 7. **T.Satyanarayana Murthy**, N.P.Gopalan "An Efficient meta-heuristic Chemical Reaction based algorithm for Association rule Hiding using an advanced perturbation approach", in proceedings of the IEEE International Conference on Intelligent Computing and Control Systems, at VAIGAI COLLEGE OF ENGG,MADURAI, June-2018. **Indexed in IEEE**.
- 8. N.P.Gopalan, **T.Satyanarayana Murthy**, "Association Rule Hiding using Chemical Reaction Optimization" Presented a paper at 7<sup>th</sup> International Conference on Soft Computing for Problem Solving SocProS 2017, December 23-24, 2017, **IIT Bhubaneswar, ORISSA.**
- Mr.Vandana Babu, Mr.T.Satyanarayana Murthy, Mr.B.Sivaiah, Asst. Professor, CSE presented and published a
  paper in titled "Detecting unusual customer consumption profiles in Power Distribution Company, APSPDCL", in,
  IEEE International Conference on Computational Intelligence and Computing Research, 26-28, December 2013
  organized by Department of Computer Engineering, Vickram Colllege of Engineering, Madurai Tamilnadu. Indexed
  in IEEE.
- 10. Mr. B Sivaiah, **Mr.T.Satyanarayana Murthy**, Mr.Vandana Babu "Boot Multiple Operating Systems using USB Disk", in proceedings of the IEEE International Conference on Electronics and Communication Systems, Coimbatore, February-2014. **Indexed in IEEE**.
- 11. **T.Satyanarayana Murthy**, N.P.Gopalan "A Meta-Heuristic based algorithm for Association Rule Hiding ", in proceedings of the International Conference on Intelligent Computing and Control Systems, at RVS COLLEGE OF ENGG, COIMBATORE, July-2018.
- 12. **T.Satyanarayana Murthy**, N.P.Gopalan, S. Raja Sekhar Reddy, N. Suguna "An Advanced algorithm for Association Rule Hiding", in proceedings of the International Conference on Intelligent Computing and Sustainable Systems ICICSS, at AKSHAYA COLLEGE OF ENGG, COIMBATORE, 20-21 September-2018.
- 13. **Mr.T.Satyanarayana Murthy**, Nitta Gnaneswara rao, "Privacy Preserving using C4.5 Decision Tree Learning algorithm" at International Conference on Communication and Signal Processing ,April 2014,at Adiparasakhti College of Engg, Melmaruvathur,**Tamilnadu**.