# **CURRICULUM VITAE**









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#### S. R. TANDAN

Ph.D (Computer Science & Engineering) (Qualified UGC NET 2017, 2020, CG SET 2017, GATE -2007) Assistant Professor & Head,

Department of Computer Science, Govt. Rajmata Vijaya Raje Sindhiya Girl's College, Kawardha, Dist. – Kabirdham (C.G.), INDIA

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### WORK EXPERIENCE



GOVT. RAJMATA VIJAYA RAJE SINDHIYA KANYA MAHAVIDYALAYA, KAWARDHA

Kawardha, Dist:- Kabirdham, Chhattisgarh Registered Under Section 2(F) of UGC Act Affiliated to Hemchand Yadav University, Durg (C.G.) Accreditated 'B' Grade by NAAC



15-03-2022 - Present



25-02-2022 - 14-03-2022



01-08-2009 - 23-02-2022

# **ACADEMIC RESPONSIBILITY**

- Nodal Officer, Institute Development Plan (IDP)
- Coordinator, Self Finance Scheme
- Nodal Officer, Institute & Higher Education Web Portal

#### RESEARCH SUPERVISION

Ph.D Scholar Awarded	05
M.Phil Scholar Awarded	02
M.Tech. Scholar Awarded	22

# **RESOURCE PERSON**

- Invited Talk on ICT Tools A New Paradigm of Learning by Department of Computer Science and Engineering at J. K. Institute of Engineering, Bilaspur C.G. 17<sup>th</sup> March, 2023.
- 15 Days interdisciplinary Student Development Programme on "Interdisciplinary Aspects of Science and Technology" organized at P.G. College Kawardha, Dist.- Kabirdham C.G. 11<sup>th</sup> January, 2023
- 3rd International E-Conference on Emerging Trends in Computer Science, December 17-18, 2022" organized by Department of Computer Science Govt. Vijay Bhushan Singh Deo Girls PG College Jashpur, C.G., India.
- Invited Talk on E-Waste Management by Department of Information Technology and Computer Science at Govt. P.G. College Kawardha C.G. 12<sup>th</sup>September, 2022
- Resource Person at 3 Days National Level Online Webinar on Current & Emerging Trends in Computer Technology Organized by Department of Computer Science and Application, Govt. Digvijay Autonomous P.G. College, Rajnandgaon, C.G. 2<sup>nd</sup> – 4<sup>th</sup> June, 2022
- Invited Talk on Professionalism and The Importance of Values Organized by Department of Computer Science and Engineering, at Lakhmi Chand Institute of technology, C.G. 2<sup>nd</sup> May, 2022
- 1st International E-Conference on Emerging Trends in Computer Science, December 19-20,2020" organized by Department of Computer Science Govt. Vijay Bhushan Singh Deo Girls PG College Jashpur, C.G., India.

### REVIEWERSHIP/ PROGRAM COMMITTEE MEMBER

- 2022 IEEE World Conference on Applied Intelligence and Computing (AIC 2022)
- AICTE Sponsored Springer International Conference on "Recent Evolutions in Energy, Drives and E- Vehicles (REEDeV-2022)"
- World Academy of Science, Engineering and Technology, Connecticut, CT 06878, USA

### **EDUCATION**

• Doctor of Philosophy (Ph.D) (2012 - 2018)

Information Retrieval Algorithm and Pattern Classification System Using Neuro-Fuzzy Technique. Dr. C.V. Raman University, Kota, Bilaspur (Chhattisgarh) (<a href="http://www.cvru.ac.in">http://www.cvru.ac.in</a>) India, 495001

• 2 Years Post Graduation (M.Tech.) (2007-2009)

Birla Institute of Technology, Mesra, Ranchi (Jharkhand) (<a href="http://www.bitmesra.ac.in">http://www.bitmesra.ac.in</a>) CGPA: 7.95/10

• 4 Years Graduation (B.E.) (2002-2006)

National Institute of Technology, Raipur, (Chhattisgarh) (<a href="http://www.nitr.ac.in">http://www.nitr.ac.in</a>)

Aggregate: 65.14%

## • Higher Secondary School Certificate Examination (Class XII) (2002)

Govt. Higher Secondary School, Patharia, Bilaspur (Chhattisgarh)

Chhattisgarh Board of Secondary Education,

Aggregate: 79.33%

# • High School Certificate Examination (Class X) (2000)

Govt. Higher Secondary School, Patharia, Bilaspur (Madhya Pradesh)

Madhya Pradesh Board of Secondary Education,

Aggregate: 75.20%

#### **ELIGIBILITY TEST**

• UGC - National Eligibility Test (NET) – 2020

- UGC National Eligibility Test (NET) 2017
- CG State Eligibility Test (CG SET) 2017
- Graduate Aptitude Test in Engineering (GATE) 2007

#### **ORIENTATION PROGRAMME**

- Participated in 33 Days UGC Sponsored Faculty Induction Programme Organized by UGC HRDC, Kumaun University Nainital U.K. India from 24<sup>th</sup> February – 28<sup>th</sup> March, 2023.
- Attended 21 Days UGC Sponsored Orientation ProgrammeOrganized by UGC HRDC, Guru GhasidasVishwavidyalya, Koni, Bilaspur form 5<sup>th</sup> 25<sup>th</sup> January, 2020.

#### REFRESHER COURSE

• Participated in UGC Sponsored Two Week Inter – Disciplinary Refresher Course Organized by HRDC Centre Mizoram University from 1<sup>st</sup> – 14<sup>th</sup> December, 2020.

### **PATENT**

• Title – Home Automation Based on User Detection Using Internet of Things (IoT) Patent New Application (Innovation)

✓ Patent Filing Date : 21-01-2021✓ Application No. : 2021100439

✓ Status : Patent Accepted

### **AWARD**

• RULA AWARD: Research Leadership Award of the Year – 2020"International Distinguished Research in Neuro – Fuzzy Based Information Retrieval Algorithm".

#### **BOOK CHAPTERS**

• Rohit Raja, S.R.Tandan, RohitMiri and Priya Data Mining Technologies using Machine Learning Algorithms Published by Crivener publishing and Wiley 2021.

- Animesh R. Tayal, S.R.Tandan, M.A. Tayal "Brief Review on Discourse Analysis" International Conference on Artificial Intelligence and Robotics 2019, Institute for Engineering Research and Publication (IFERP) Mumbai India 23<sup>rd</sup> -24<sup>th</sup> August 2019, ISBN 978-93-89107-27-2.
- Amruta K. Chimote, S.R.Tandan "A Review on Detection of Sarcasm using Machine Learning Techniques" International Conference on Artificial Intelligence and Robotics 2019, Institute for Engineering Research and Publication (IFERP) Mumbai India 23<sup>rd</sup> -24<sup>th</sup> August 2019, ISBN 978-93-89107-27-2.
- Santosh Kumar Miri, NeelamSahu, RohitMiri and S.R.Tandan "Association Rules Mining for STO Dataset of HSES Knowledge Portal System" Springer Nature Signature Pte. Ltd. 2021 S.C. Satapathy et al Intelligent System Design, Advances in Intelligent Systems and Computing 1171 ISBN 978-981-15-5400-1 60.
- S.R.Tandan, PriyankaTripathi, Rohit Miri Neuro-Fuzzy Based Integrated and Optimized Search Engine for Effective and Reliable Information Retrieval System (ICTCS '14 Proceedings of the 2014 International Conference on Information and Communication Technology for Competitive Strategies) November 2014 ISBN: 978-1-4503-3216-3 doi>10.1145/2677855.2677920 ACM Digital Library
- S.R.Tandan, PriyankaTripathi, Rohit Miri Novel Algorithm for Reduced Computational Data by Using Fuzzy Classification and Data Mining Techniques (ICTCS '14 Proceedings of the 2014 International Conference on Information and Communication Technology for Competitive Strategies) November 2014 ISBN: 978-1-4503-3216-3 doi>10.1145/2677855.2677930 ACM Digital Library
- Amruta K. Chimote, S.R. Tandan "Detection of Sarcasm Using Deep Learning Techniques" in "1st International E-conference on Emerging Trends in Computer Science, December 19-20,2020" Organized by Department of Computer Science Govt. Vijay Bhushan Singh Deo Girls PG College Jashpur, C.G., India. ISBN: 978-93-5437-137-0

## **PUBLICATIONS**

### Web of Science, Scopus, UGC Listed, UGC Care and ESCI Indexed Journal

- Nisarg Gandhewar, S.R.Tandan, Rohit Miri (2020) Comprehensive Study on Recent Advances and Future Trends in Detection & Recognition of Scene Text. Test Engineering and Management, ISSN: 0193-4120, Page No. 16917 16930. (Scopus Index Journal)
- NisargGandhewar, S.R.Tandan, Rohit Miri (2020) Scene Text Detection Using YOLOv4 Framework. Bioscience Biotechnology Research Communications. ISSN: 0974-6455, Special Issue Vol 13 No 14, On Recent Research on Intelligent Systems, Data Science Communication and Computing, pp-181-184. (ESCI Journal)
- Sunil Wanjari, Dr.S.R.Tandan, Dr. R. Miri (2020) Comprehensive Survey Based on 3D Fingerprint Matching Technique -Minutiae Cylindrical Code (MCC)PENSEE Journal Volume 50 Issue 12 2020 ISSN: 0031-4773 (Scopus Indexed)
- RamakantChandrakar, Rohit Raja, RohitMiri, S.R.Tandan, K. Ramya Laxmi (2020) Detection and Identification of Animals in Wild Life Sanctuaries using Convolution Neural Network, International

- Journal of Recent Technology and Engineering (IJRTE)Volume 8 Issue 5 January 2020. (Scopus Indexed)
- RushikeshDande, Dr. Rohit Miri, Dr. S.R.Tandan (2020) Dimension Merger in Spatial Domain: A Review on Image Processing, TEST Engineering & Management Page No. 16931-16935(Scopus Indexed)
- Amruta K Chimote, S.R. Tandan (2019)A Research on Detection of Sarcasm using Machine Learning Techniques International Journal of Recent Technology and Engineering (IJRTE)10.35940/ijrte.B1160.0982S1119.(Scopus Indexed)
- Amruta K. Chimote, S.R.Tandan, RohitMiri(2020) An Approach to Detect Sentence Level Sarcasm Using Deep Learning Techniques, In Bioscience Biotechnology Research Communications (Special issue) Volume 13, Issue 12, 2020 (Dec 2020 issue). Doi: <a href="http://dx.doi.org/10.21786/bbrc/13.14/30">http://dx.doi.org/10.21786/bbrc/13.14/30</a> (Indexed in Scopus and Web of Science)
- RamakantChandrakar, Rohit Raja, RohitMiri, S.R.Tandan (2020) Vehicle Detection on Sanctuaries Using Spatially Distributed Convolutional Neural Network, SAMRIDDHI Volume 12, Special Issue 3 2020.(UGC Care)
- Santosh Kumar Miri, Dr. NeelamSahu, Dr. Rohit Miri, and Dr. S.R.Tandan (2019) Performance Evaluation of Knowledge Portal Using Fuzzy Logic Technique, Journal of Scientific Computing, Volume 9 Issue 1 2020.(UGC Care)
- AnimeshTayal, S.R.Tandan, M.A. Tayal (2019) A Research on Discourse Access, International Journal of Recent Technology and Engineering (IJRTE) (Scopus Journal) ISSN: 2277-3878, Volume-8, Issue-2S11, September 2019. (Scopus Indexed)
- AnimeshTayal, S.R.Tandan, Rohit Miri (2020) Development of an Approach for Discourse Analysis of Natural Language", Bioscience Biotechnology Research Communications (Special issue) Volume 13, Issue 12, 2020 (Dec 2020 issue). Doi: <a href="http://dx.doi.org/10.21786/bbrc/13.14/30">http://dx.doi.org/10.21786/bbrc/13.14/30</a>.(Indexed in Scopus and Web of Science)
- NisargGandhewar, S.R.Tandan (2019), A Survey on Multi Oriented Text Recognition, Anusandhan Rabindranath Tagore University Journal Volume VIII Special Issue XVI April 2019 ISSN 2278-4187(UGC Listed)
- ReshamlalPradhan, S.R.Tandan (2019) Recent Machine Learning Approaches to Explore Performance, Security Issue: A Review Anusandhan Rabindranath Tagore University Journal Volume VIII Special Issue XVI April 2019 ISSN 2278-4187. (UGC Listed)
- AnimeshTayal, A K. Chimote, S.R.Tandan (2019) Prediction of Lifestyle Diseases such as Diabetes Using Supervised Machine Learning Approach: A Review Anusandhan Rabindranath Tagore University Journal Volume VIII Special Issue XVI April 2019 ISSN 2278-4187. (UGC Listed)
- Anjli Barman, S.R.Tandan, Rohit Miri (2019) User Identification Across Multiple Social Networks Anusandhan – Rabindranath Tagore University Journal Volume VIII Special Issue XVI April 2019 ISSN 2278-4187. (UGC Listed)
- Sunil M. Wanjari, S.R.Tandan (2019) A Survey Based on 3D Fingerprint Matching Technique Anusandhan Rabindranath Tagore University Journal Volume VIII Special Issue XVI April 2019 ISSN 2278-4187. (UGC Listed)
- Amrita Verma and Dr. S.R.Tandan(2019)Obstacle Detection To Navigate Driverless Car In Static And Dynamic Environment International Journal of Research Review Of Research Vol-8, Issue-9 June 2019, ISSN 2249-894X,

- Amrita Verma and Dr. S.R.Tandan (2020) A Comparative Paper on Real time road, object & Passenger detection system for Driver less Car Journal of The Maharaja Sayajirao University of Baroda Vol-IX, Issue-VI June 2020, ISSN NO: 2347-3150.
- Amrita Verma and Dr. S.R.Tandan (2020) Comparative Study on Road Lane Detection on Image for Driverless Car on Journal of Bioscience Biotechnology Research Communications Special Issue Vol 13 No 10(2020) Pp-249-255. (Indexed in Scopus and Web of Science)
- S R Tandan, Rashmi Sahay, N. Verma (2009) "Dynamic Motion Planning of Mobile Robot with Fuzzy ApproachCiiT International Journal of Automation and Autonomous
- S R Tandan, Rohit Miri (2010) Algorithm for Position and Path Estimation of Mobile Robot In Dynamic Environment Using Fuzzy ApproachCiiT International Journal of Fuzzy System
- S Pandey, R Miri, SR Tandan (2013) Diagnosis And Classification of Hypothyroid Disease Using Data Mining Techniques" International Journal of Engineering Research and Technology. (IJERT)
- S R Tandan, Niharika Vaishnav (2016) A Bird's Eye View of Anti-Phishing Techniques for Classification of Phishing E-Mails"International Journal for Research in Applied Science & Engineering Technology (IJRASET)
- S.R. Tandan RichaHanda, H.S. Hota (2016) "Stock Market Prediction with Various Technical Indicators Using Neural Network Techniques" International Journal for Research in Applied Science & Engineering Technology (IJRASET)
- SudiptaGhosh, SR Tandan, KamleshLahre (2013) Shielding Android Application Against Reverse Engineering"International Journal of Engineering Research and Technology
- Roma Yadav, SR Tandan (2016) Web Content Mining Applications And Methods-A SurveyCiiT Journal of Software Engineering and Technology
- SudiptaGhosh, KamleshLahre, SR Tandan (2013) Securing Android Application with Anti-Reversing Techniques" CiiT International Journal of Automation and Autonomous.
- Roma Yadav, SR Tandan (2016) N-ary Relation Approach for Open Domain Question Answering System Based on Information Extraction through World Wide WebInternational Journal of Engineering and Applied Sciences (IJEAS)
- P. Gupta, S.R. Tandan, R Miri (2013) Decision Tree Applied For Detecting Intrusion International Journal of Engineering Research and TechnologyInternational Journal of Engineering Research and Technology. (IJERT)
- AshimaSahu, S.R.Tandan,(2013) Attention Analysis of Candidates for Creating Virtual Interactive E-ClassroomInternational Journal of Engineering Research and Technology. (IJERT)
- Khushboo Sharma, S.R.Tandan,(2013) AN Optimized Parallel Confidence Measures Algorithm on Web Log DataInternational Journal of Engineering Research and Technology. (IJERT)
- Shikha Gupta, S.R. Tandan, R Miri (2013) Modeling of Election Algorithm for Coordinator Selection Using Neuro Fuzzy Approach in Distributed Computing EnvironmentInternational Journal of Engineering Research and Technology. (IJERT)
- AshaMiri, S.R.Tandan, RohitMiri (2015) Pseudo Code to Eliminate Unwanted Data Sets for Fuzzy Mining Association RuleInternational Journal for Research in Applied Science & Engineering Technology (IJRASET)
- S.R.TandanRohitMiri, Priyanka Tripathi(2015) Exploration of Novel Algorithm for Reduced Computational Time by Using Fuzzy Classification Technique in Data MiningInternational Journal for Research in Applied Science & Engineering Technology (IJRASET)

- S.R.Tandan ,RohitMiri, Priyanka Tripathi (2015) Novel Algorithm For Finding The Range Of Fuzzy Values For Quantitative Data Sets By Data Mining And Fuzzy Technique Journal Of Advanced Database Management & Systems.
- Gaurav Kumar Rai, S. R. Tandan, Rohit Miri (2014) Enhanced Security Technique in WAP & WEP Based Wireless (Wi-Fi) Network for the Protection against Unauthorized Usersinternational journal for advance research in engineering and technology(ijaet)
- S.R.Tandan,RohitMiri,DrPriyanka Tripathi (2014) A Bird Eye Review on Reduced Time Complexity by Using Data Mining and Fuzzy TechniquesInternational journal for research in applied science and engineering technology (ijraset)
- S.R.Tandan, PriyankaTripathi, Rohit Miri (2014) A Bird Eye Review On Search Engine Optimization For Information Retrieval System" international journal for research in appl i edsc i enc e and engineering technology (ijraset)
- S.R.TandanRohitMiri, PriyankaTripathi(2014) TRApriori Classification Based Algorithm by Fuzzy Techniques to Reduced Time ComplexityInternational Journal of Computer Science & Information Technology.
- TarunDharDiwan, S.R. Tandan, RohitMiri, GloriGunjanBagh (2014) Current Approaches and Challenges for Skin Cancer DetectionCIIT-Digital Image Processing
- R Miri, P Sharma, SR Tandan (2013) Fraud Detection and Integrity Of Database Without Using Pl-SQL LogicInternational Journal of Engineering Research and Technology.
- S. Gupta, R Miri, S.R. Tandan (2013) Modeling of Election Algorithm For Coordinator Selection Using NeuroFuzzy Approach In Distributed Computing Environment" International Journal of Engineering Research and Technology
- G Singhal, S.R. Tandan, R Miri (2013) IAA (Internet access account) based security modal for detection and prevention of cybercrime (2013) International Journal of Engineering Research and Technology.
- S.R.Tandan, Abhishek Shukla, Rohit Miri (2013) A Review on Web-Based Fuzzy Neural Networks for Stock Prediction International Journal of Innovations in Computing.
- A.Sahu, S.R. Tandan, R Miri (2013) Smart E-Classroom Artificial Intelligent Systems and Machine Learning-CIIT Artificial Intelligent Systems and Machine Learning
- S Gupta, R Miri, S.R. Tandan(2013) MVC Model 2 Architecture with AJAX Technology Makes Web More Efficient and More Powerful By Reducing Web Traffic and Man Power Load Software Engineering and Technology
- S.R. Tandan, P Tripathi, R Miri (2012) Fuzzy Logic based Information Retrieval System Fuzzy Systems-CIIT
- S.R. Tandan, S. Pandey, R Miri(2012) A Fuzzy Approach to Multimodal Biometric Authentication Biometrics and Bioinformatics-CIITBiometrics and Bioinformatics
- R. Miri, P. Tripathi, S.R. Tandan, S Gupta(2012) Improved MVC for J2EE Architecture Software Engineering and Technology-CIIT
- K.Lahre, S.R. Tandan, R. Miri (2011) Implementation of Improved Distributed Wireless Channel Allocation Algorithm for Mobile Computing Wireless Communication-CIIT
- R. Miri, P. Tripathi, S.R. Tandan (2014) Novel Algorithm for Reduced Computational Data by Using Fuzzy Classification and Data Mining Techniques Proceedings of the 2014 International Conference on Information and Communication Technology for Competitive Strategies" ACMProceedings of the 2014 International Conference on Information and Communication Technology for Competitive Strategies" ACM

- P. Tripathi, SR Tandan, Rohit Miri, (2014) Neuro-Fuzzy Based Integrated and Optimized Search Engine for Effective and Reliable Information Retrieval System" Proceedings of the 2014 International Conference on Information and Communication Technology for Competitive Strategies" ACMProceedings of the 2014 International Conference on Information and Communication Technology for Competitive Strategies
- Niharika Vaishnav, S R Tandan (2015) Development of Anti Phishing Model for Classification of Phishing E-MailInternational Journal of Advanced Research in Computer and Communication Engineering.
- Rohit Miri, PriyankaTripathi, KeshriVerma, S.R. Tandan (2015) Novel Algorithm to Reduced Computational Data Sets for Fuzzy Association RuleInternational Journal For Research In Applied Science And Engineering Technology (IJRASET)
- NishuAgrawal, S. R. Tandan (2016)An Advancement Of K-Means Clustering Algorithm Using Multicore ComputationInternational Journal For Research In Applied Science And Engineering Technology (IJRASET)
- PratikshaAshiwal, S. R. Tandan, Rohit Miri (2016)Web Information Retrieval Using Python And BeautifulsoupInternational Journal For Research In Applied Science And Engineering Technology (IJRASET)
- NamitaAgrawal, Praveen Chouksey, S. R. Tandan (2017)Development Of Virtual Infrastructure In Academic Premises For Better Utilization Of Computing RecoursesInternational Journal For Research In Applied Science And Engineering Technology (IJRASET)
- SoniyaDewangan, S.R.Tandan, ShaguftaFarzana (2017)Prediction Of Stock Market Using Financial News Analysis And Supervised Data Mining TechniqueInternational Journal For Research In Applied Science And Engineering Technology (IJRASET)
- SuyashBahadur, S.R.Tandan (2017)A Novel Approach For Face Detection And Recognization With Multi Scale Colour Restoration Technique Using Combination Of Knowledge Based And Feature SegmentationInternational Journal For Research In Applied Science And Engineering Technology (IJRASET)
- Neha Patnaik, S.R. Tandan (2017)Congestion Control Inventive Approach For Active Queue Management System In Wireless NetworkInternational Journal For Research In Applied Science And Engineering Technology (IJRASET)
- SakshiShukla, S.R.Tandan (2017)Motion Planning Of Mobile Robot Using Fuzzy ApproachInternational Journal For Research In Applied Science And Engineering Technology (IJRASET)
- RohitMiri, S.R.Tandan (2017)A Positive And Negative Approach For Association Rule In Data Mining TechniquesInternational Journal For Research In Applied Science And Engineering Technology (IJRASET)
- RohitMiri, S.R.Tandan(2015) Fuzzy Association Rule by Classification TechniqueInternational Journal For Research In Applied Science And Engineering Technology (IJRASET)
- NishuAgrawal, S.R.Tandan (2016)Bird Eye Review: Distributed Approach for Advancement of K Means Clustering AlgorithmInternational Journal For Research In Applied Science And Engineering Technology (IJRASET)

# **CONFERENCE/ SEMINAR**

- International Conference on International Conference on International Conference on Artificial Intelligence and Robotics (ICAIR-2019)" Organized by Institute For Engineering Research and Publication on 23rd 24th August 2019 at Mumbai, India"A Brief review on Discourse Analysis".
- International Conference on ICSIST-21: International Conference on Sustainable Innovation in Science & Technology-2021., Feb-2021 "DARNN:Discourse Analysis for Natural languages using RNN".
- National Conference on NCACSIT-2019 "Prediction of Lifestyle Diseases Such as Diabetes Using Supervised Machine Learning Approach A Review".
- International Conference on International Conference on Artificial Intelligence and Robotics (ICAIR-2019)" Organized by Institute For Engineering Research and Publication on 23rd 24th August 2019 at Mumbai, India "A Review on Detection of Sarcasm using Machine Learning Techniques".
- 3<sup>rd</sup> International Conference on Intelligent Communication Technologies and Virtual Mobile Networks (ICICV 2021)Deep Learning Based Framework for Text Detection. (Proceeding to be published in IEEE Explorer)
- National Conference on Advances in Computer science and Information Technology (NACACSIT) A survey on Multi Oriented Text Recognition. 22<sup>nd</sup> -23<sup>rd</sup> February, 2019.
- ReshamlalPradhan, S.R.Tandan, Rohit Miri, Green Computing for Better Tomorrow National Seminar on Recent Trends and Development in Science for Humanity Organized by Govt. E.RaghvendraRao PG Science College Bilaspur CG Sponsored by Chhattisgarh Council of Science and Technology from 13<sup>th</sup> 14<sup>th</sup> January, 2019.
- Anjli Barman, S.R.Tandan, Rohit Miri Unique User Identification Across Multiple Social Network National Conference on Advances in Computer Science and Information Technology Organized by Department of Computer Science Engineering, IQAC Dr. C.V. Raman University Bilaspur and Rabindranath Tagore University Bhopal MP, India from 22<sup>nd</sup> and 23<sup>rd</sup> February, 2019.
- SandeepSuryavanshi, S.R.Tandan, Amrita Verma Application of Machine Learning Techniques National Conference on Advances in Computer Science and Information Technology Organized by Department of Computer Science Engineering, IQAC Dr. C.V. Raman University Bilaspur and Rabindranath Tagore University Bhopal MP, India from 22<sup>nd</sup> and 23<sup>rd</sup> February, 2019.
- Satish Kumar, S.R.Tandan Wireless Technologies in E- Business: Services & Security National Conference on Advances in Computer Science and Information Technology Organized by Department of Computer Science Engineering, IQAC Dr. C.V. Raman University Bilaspur and Rabindranath Tagore University Bhopal MP, India from 22<sup>nd</sup> and 23<sup>rd</sup> February, 2019.
- YashodaDansena, S.R.Tandan, ShaguftaFarzana An Approach to Predict Stock Market Using Financial News Using Supervised Data Mining Technique National Conference on Advances in Computer Science and Information Technology Organized by Department of Computer Science Engineering, IQAC Dr. C.V. Raman University Bilaspur and Rabindranath Tagore University Bhopal MP, India from 22<sup>nd</sup> and 23<sup>rd</sup> February, 2019.
- ReshamLalPradhan, S.R.Tandan, Studies on Recent Machine Learning Approaches to Explore Performance, Security Issues and New Dimensions to Deal with the Challenges National Conference on Advances in Computer Science and Information Technology Organized by Department of Computer Science Engineering, IQAC Dr. C.V. Raman University Bilaspur and Rabindranath Tagore University Bhopal MP, India from 22<sup>nd</sup> and 23<sup>rd</sup> February, 2019.

- 2nd International Conference on Artificial Intelligent, Blockchain & data Science (ICAIBDS-2019) "Concept of Advanced Driver Assistance Systems In Driver Less Car" Organized by Sreyas Institute of Engineering & Technology, Hyderabad. Held on November 29-30, 2019.
- International Conference on Innovative Research In Science, Management And Technology New Era Of Automatized Vehicles Based On Sensors, Organized by Department of Computer Science and Application Atal Bihari Vajpayee University, Bilaspur (C.G.), India in association with MTMI, USA and sponsored by Chhattisgarh Council of Science and Technology (CCOST), Raipur (C.G.) India during January 04-05,2020
- National Seminar on Impact of Computer Science And Information Technology On Modern Society A Study On Advance Vehicle Technology, Organized by Gov. E. RaghvendraRao Postgraduate college, Bilaspur (C.G.) held on Jan 18-19, 2020.
- International e-Conference on Bio-Electronics & Informatics In Present Scenario Presented a Research Paper on the topic entitled "A Comparative Paper On Real Time Street, Object And Passenger Location Framework For Driver Less Car" Organized by Department of Electronics & Communication Engineering ShobhitInstitute of Engineering and Technology (Deemed-to-be-University), Meerut, India during June 26-27, 2020.
- National E-Conference on Business Practices In Post COVID Scenario Presented a Research Paper entitled Impact Of Autonomous Vehicle Market During Covid -19 Pandemic, Organized by Department of commerce & Management under the aegis of IQAC, Dr. C.v. Raman University, Kargi Road Kota, Bilaspur (C.G.) during 21-22 July 2020
- International Conference on "Technological Quality Enhanced E-Learning" at Amrita University, Kollam, Kerela, India. 2<sup>nd</sup> 5<sup>th</sup> January, 2012.
- Participated in National Level Technical Symposium on "Innovations in Science & Technology" at All Saint's College of Technology, **Bhopal, March 2011**
- Presented paper entitled "Role of Data Warehousing and Data Mining in Implementation of E-Governance" in National Conference on "Emerging Technologies and Practices in e-Governance", with Technical Collaborations with **IEEE & IEEE Computer Society** held at Dr. C.V. Raman University, Kota, Bilaspur, 9-10 December 2011.
- Participated in National Seminar on "Green Computing" at Birla Institute of Technology, **Mesra**, **Ranchi** Organized by Department of Computer Science and Environmental Science, **December**, 2008
- Participated in National Conference on "Application of Computer in Rural Development" at CiT,
   Rajnandgaon, 2009
- Participated in National Seminar on "Vedic Mathematics" at Dr. C.V. Raman University, Kota,
   Bilaspur, 2009
- Presented paper entitled "Need of Vocationalization in Educational Sector" in National Conference on "Role of Universities in Vocational Education and Skill Development", organized by Dr C V Raman University, **Kota Bilaspur CG India**
- Scalable Load Distribution and Load Balancing for Dynamic Parallel Programs organized by Chouksey Engineering College
- Communication Skill: Gateway to the Global World organized by Dr C V Raman University, Kota Bilaspur CG India
- Distributed Computing Research Issue in Grid Computing organized by Chouksey Engineering College
- Technology Enhanced School Education January 2-4, 2012 Kerala, India

- Experiential Faculty Development Programme In collaboration with AuropathPuducherry and Internal Quality Assurance Cell Dr C V Raman University 15<sup>th</sup> and 16<sup>th</sup> December, 2015
- National Conference on Integral Education In collaboration with AuropathPuducherry and Internal Quality Assurance Cell – Department of Education, Dr C V Raman University 28<sup>th</sup> and 29<sup>th</sup> January, 2015

### WORKSHOP

- Three days online workshop on Use of Technology for Online Teaching and Learning Organized by Pt. Sundarlal Sharma (Open) University Chhattisgarh in Collaboration with Commonwealth Educational Media Centre for Asia (CEMCA), New Delhi from 05 07 December, 2020.
- International Workshop on A-VIEW at Amrita University, Kollam, Kerela, India. 2<sup>nd</sup> 5<sup>th</sup> January, 2012.
- Workshop on A-View, Amrita University Kerala Supported by MHRD and Supported by IIT Bombay, October 06, 2012 Duration -01 Day (Online)
- National Mission on Education Through ICT (MHRD) Certified as A-View Trainer January 4, 2012 Duration -01 Day
- Object Oriented Modeling and Designing with UML Using Modeling Tool, March 15-20, 2011 Dr. C V Raman University, Kota, Bilaspur, India Duration- 5 Days
- Ethical Hacking September 19-20, 2013 Dr. C V Raman University, Kota, Bilaspur, India Duration- 2 Days
- Attended one day workshop on "Role of Universities in Vocational Education & Skill Development", conducted by AISECT University, Bhopal & Dr. C.V. Raman University, Kota, Bilaspur held at Scope College of Engineering, Bhopal, 22<sup>nd</sup> October, 2011
- Attended One week workshop on "Software Project Management" by TCS (Tata Consultancy Services) at Birla Institute of technology, Mesra Ranchi
- National Program on Technology Enhanced Learning July 29, 2013 Organized by NPTEL, IIT Bombay in Association with Dr C V Raman University and Classle Knowledge Pvt. Ltd.
- MATLAB Workshop organized by Department of Computer Science and Engineering, Dr C V Raman University, Kota Bilaspur CG India, In Collaboration with SparkLab and Technical IIT Kanpur.07 Days
- Java EE7 Enterprise Application Development, IEEE Bombay Section and CG Cost Sponsored National Level Workshop at O.P Jindal Institute of Technology Raigarh, 27<sup>th</sup> Jan 31<sup>st</sup> Jan, 2015

### **WORKSHOP ORGANIZED**

- Two Days Online Workshop on Basics of Python Programming Organized by Department of Computer Science and Engineering, Dr. C.V. Raman University & IQAC from 27<sup>th</sup> 28<sup>th</sup> July, 2020.
- One Days Online Workshop on Cloud Computing Organized by Department of Computer Science and Engineering, Dr. C.V. Raman University & IQAC from 29<sup>th</sup> July, 2020.
- Coordinators for workshop organized by the Department of Computer Science and Engineering on Robotics 7-9 Dec, 2012 by Robosepiance, IIT Kanpur
- Coordinators for workshop organized by the Department of Computer Science and Engineering on Ethical Hacking 19-20 Sep, 2013 by Wigilence PVT LTD, An Association with IIT Bombay

#### TRAINING AND CERTIFICATION

- Two weeks training programme on High End Computing Based on Artificial Intelligence, Machine Learning and Deep Learning Techniques Organized by Department of Computer Science and Engineering, Rabindranath Tagore University, Bhopal in Join Collaboration with Microfocus and HP, Banglore, India from 18<sup>th</sup> – 29<sup>th</sup> April, 2019
- Short Term Training Program Certificate(FDP) On PHP and MYSQL Training offered by the Spoken Tutorial Project, IIT Bombay, funded by National Mission on Education through ICT, MHRD, Govt. of India
- Short Term Training Program (FDP) Certificate On LATEXTraining offered by the Spoken Tutorial Project, IIT Bombay, funded by National Mission on Education through ICT, MHRD, Govt. of India
- Short Term Training Program Certificate On JAVATraining offered by the Spoken Tutorial Project, IIT Bombay, funded by National Mission on Education through ICT, MHRD, Govt. of India
- Short Term Training Program Certificate On C Programing Training offered by the Spoken Tutorial Project, IIT Bombay, funded by National Mission on Education through ICT, MHRD, Govt. of India
- Short Term Training Program Certificate On BlenderTraining offered by the Spoken Tutorial Project, IIT Bombay, funded by National Mission on Education through ICT, MHRD, Govt. of India

# **ACADEMIC RESPONSIBILITIES**

- Incharge RUSA, Govt. RVRS Girls College, Kawardha
- Nodal Officer, IDP, Govt. RVRS Girls College, Kawardha
- Member of Academic Council (AoC) at CVRU
- Member of Board of Study (BoS)at CVRU
- Member of Board of Exam (BoE)at CVRU
- Member of Departmental Research Committee (DRC)at CVRU
- Member of Magazine Publication Cellat CVRU
- Departmental ICT in charge at CVRU
- Departmental web portal coordinatorat CVRU
- Departmental Sports In charge at CVRU
- Student Mentor
- Departmental Scheme and Syllabus related activities at CVRU
- M.Tech Project and Seminar in Charge at CVRU

#### AREAS OF INTEREST

- Data Structure
- Operating System
- Distributed Computing
- Robot Motion Planning
- Neural Networks and Fuzzy Logic
- Virtualization Technology

### **SCHOLARSHIPS**

- Scholarship from State Government, Govt. Hr. Sec. School, Patharia worth Rs. 500 Hundred/Month.
- GATE stiffened for pursuing M.Tech. worth Rs. 8,000 per month (2 academic years)

#### **MEMBERSHIP**

- IAENG International Association of Engineers Membership Number 216951
- Universal Association of Computer and Electronics Engineers Associate Member –AM101000582343
- The Society of Digital Information and Wireless Communication Membership Number 21782
- Internet Society Membership Number 195506
- ResearchGate

#### **TECHNICAL EDITOR**

Bharat Journal of Science Technology and Humanities (<u>www.cvruresearch.org</u>)

#### **ACHIEVEMENT**

- Organized National Level Research paper presentation on Emerging Technologies & Practices on e-Governance
- Member of IAENG (International Association of Engineers. Membership No. 106279)
- Qualified GATE 2007 in Computer Science & Engineering.
- Class Topper in 12<sup>th</sup>& 10<sup>th</sup> Standard.
- Active Member of MaaSaraswatiPooja Committee at Birla Institute of Technology, Ranchi, Jharkhand.
- Member of Golden Jubilee organizing Committee at National Institute of Technology, Raipur, C.G.

### THESIS/ PROJECTS

### Ph.D. Thesis

Advancement in communication and information technologies increases the challenges in information retrieval system. In the digital world almost every things is available in the web which is being used by the human. People are rapidly producing information, sharing and circulating it on the web. Day by day getting more updates on the web has become a routine. Many a times it creates ambiguous situation for the user to decide that the available data is valid or not. The outcome of information retrieval system has become an issue of irrelevant search results and ambiguous retrieval of answers.

It is observed that rapid production of information gives genesis to design a system which can automatically manage and extract the right and precise information. In this thesis entitled 'Information Retrieval Algorithm and Pattern Classification System Using Neuro-Fuzzy Technique' major issues which have been focused are: Search engine working pattern, followed by the design and implementation of Information Retrieval Algorithm for Question Answering System. Those issues are resolved by the use of soft computing approach. The sandwiched of Neuro-Fuzzy technique smoothly handled uncertain query and provide best optimal information in available database.

An integrated search engine model based on traditional model and Neuro-Fuzzy Technique. Neuro-Fuzzy techniques are very good in modeling linguistic queries of real world. To simulate the integrated model, combined approach of neural network and fuzzy system is applied to process query term. MATLAB based ANFIS (Adaptive Neuro-Fuzzy Inference System) tool has been used to perform experimental work. The experimental results are obtained in controlled environment. The integrated system simulated for uncertain query by considering various fuzzy data.

In the proposed Neuro-fuzzy based model, fuzzy system have been selected to enhance the capability of document retrieval process. To obtain this, fuzzy parameter or variables that can describe main features of the document are the term Frequency ratio (tfr), Document frequency ratio (dfr), Term frequency (tf), ratio of the number of search terms that occurs in one document to the length of the search term, Inverse document frequency (idf). In the proposed Neuro-fuzzy model for Information Retrieval, three fuzzy values have been used which are Low, Medium and High to represent fuzzy linguistic values. Various membership functions were tested for fuzzy linguistic value to identify the relevancy in document for query term. The query term is tested in three datasets and computed performance of methods using confusion matrix. The performance of the proposed model is compared with existing models, such as cosine similarity, L-shape, and S-shape membership functions. The comparison is based on precision (p), recall (r), and accuracy (a) parameters. Three standard text datasets, viz. Movie Review, Polarity and ACL IMDB (Large movie review) are used to evaluate the comparative models. The data source here is http://www.cs.cornell.edu/people/pabo/movie-review-data.

Further to meet the said objectives, existing information retrieval algorithms viz, Web Page Ranking, Hits, Weighted Page Ranking, Eigen Rumor and Web Page Ranking using Link Attributes along with Question Answer Technique has been worked upon extensively. Algorithms to extract entities and relation from string Entity Relationship Extractor ERE(S) and to extract Answer for Queried Question algorithms have been proposed which is based on N-ary relation on question answer system for information retrieval. Existing approaches are applicable to answer the binary relation based query term mostly. Proposed algorithm can retrieve more complex binary as well as N-ary relations. The algorithm also replaces the information searching and matching of Ephyra. N-ary algorithm reduces the complexity of the searching. N-ary relation to extract more complex query fired by the users, is implemented using Bing API free subscription of 5000 by default data set for online mode and offline mode respectively. Method used in OpenEphyra while simulating proposed algorithms are mainly INDRI search engine, Indexing Wiki using Indri, Open NLP Toolkit, Pling Stemmer, Standford NER, Standford POS Tagger, Java WordNet Library, Snowball, LingPipe API and WordNet.

Web scraping is used to extract URL using Python scripting and BeautifulSoup for proposed algorithm. Focus on entity relation extraction and answer retrieval for queried question and method for URL retrieval technique has been developed and done on online data. URL extraction method has been implemented to classify the web links using Python and BeutifulSoup. On the basis of retrieved URLs analysis, link monitoring for various security reasons and to reduce the load of server by removing dummy links have been suggested.

# M.Tech. Thesis

# Birla Institute of Technology, Mesra Ranchi, Jharkhand, India

Position and Path Estimation of Mobile Robot in both Static and Dynamic Environment (July 2008- May 2009) – One of the key challenges in Mobile Robot navigation is positioning and estimating the shortest path which takes minimum travel time and minimum distance to reach the goal position but this task becomes more difficult when the environment that are cluttered with obstacle also play major role during navigation of robot

system. Navigation of mobile robot in dynamic environment is quite complex than static one because obstacle position and its feature are also not in priori.

### **B.E.** Project

# Government Engineering College Raipur, Raipur, Chhattisgarh

### **Branch Automation System (6 months)**

# Language Used: JAVA

This is a facility to provide a Branch Automation system for the easy maintenance of the student database. We have provided students different facilities, which are helpful for maintaining different database related to them and provides the current status of branch.

This project provides facility likes student database, which consist of unique user ID and Password assigned to each user by which a user can access and update data related to him and can get the desire information about current activities happening in his branch.

## Government Engineering College Raipur, Raipur, Chhattisgarh

# **Library Management System (6 months)**

# Language Used: Visual Basic

Library Management System helps in library to store the record of books and student can check the status of issued books, available book in library and easy to manage of department wise book detail.

# **COURSES TAKEN**

- Programming with C for 2nd year undergraduate ECE students
- Software Engineering for 3<sup>rd</sup> year undergraduate CSE students
- Data Structure for 2<sup>nd</sup> year undergraduate CSE students
- Software Project Management for 4<sup>th</sup> year undergraduate CSE students
- Mobile and Cellular Computing for 4<sup>th</sup> year undergraduate CSE students
- Operating System for 2<sup>nd</sup> year undergraduate CSE students
- Neural Network and Fuzzy Logic for 4<sup>th</sup> year undergraduate CSE students
- Object Oriented Modeling and Design for 1<sup>st</sup> year postgraduate students
- Distributed Operating System for 1<sup>st</sup> year postgraduate students
- Informational Retrieval System for 2<sup>nd</sup> year postgraduate students
- Research Methodology for Ph.D Course Work

#### RESEARCH SCHOLAR

#### Ph.D. Scholars

NisargGandhewar

Registered Title: A NOVEL APPROACH TO UNDERSTAND SCENE TEXT FOR COMPUTER VISION APPLICATIONS

Status Awarded

• Amruta K. Chimote

Registered Title :NOVEL APPROACH TO DETECT SARCASM BASED ON MACHINE LEARNING TECHNIQUE Status \_ Awarded

AnimeshTayal

Registered Title :GENERIC APPROACH DEVELOPMENT FOR DISCOURSE ANALYSIS OF NATURAL LANGUAGE

Status Awarded

Amrita Verma

Registered Title :A NOVEL APPROACH FOR OBSTACLE DETECTION TO NAVIGATE DRIVERLESS CAR IN STATIC AND DYNAMIC ENVIRONMENT USING LEARNING TECHNIQUE
Status \_ Awarded

Sunil M. Wanjari

Registered Title :IMPLEMENTATION OF FINGERPRINT RECOGNITION BASED ON COMPARATIVE ANALYSIS OF 2-D AND 3-D MINUTIAE MATCHING SCHEME
Status Awarded

#### M.Phil Scholars

Khursheed Ahmad Teeli

Registered Title: Offline Signature Recognition and Verification using Convolution Networks Model

Status M.Phil Awarded

#### M.Tech. Scholars

- AshimaSahu, Dr. C.V. Raman University, Bilaspur (Completed)
- Poonam Gupta, Dr. C.V. Raman University, Bilaspur (Completed)
- Gaurav Rai, Dr. C.V. Raman University, Bilaspur (Completed)
- Gaurav Singhal, Dr. C.V. Raman University, Bilaspur (Completed)
- Glory Gunjan Bagh, Dr. C.V. Raman University, Bilaspur (Completed)
- RichaHanda, Dr. C.V. Raman University, Bilaspur (Completed)
- Roma Yadav, Dr. C.V. Raman University, Bilaspur (Completed)
- Niharika Vaishnav, Dr. C.V. Raman University, Bilaspur (Completed)
- Asha Miri, Dr. C.V. Raman University, Bilaspur (Completed)
- SuyashBahadur Singh, Dr. C.V. Raman University, Bilaspur (Completed)
- Sakshi Shukla, Dr. C.V. Raman University, Bilaspur (Completed)

- Neha Patnaik, Dr. C.V. Raman University, Bilaspur (Completed)
- SoniyaDewangan, Dr. C.V. Raman University, Bilaspur (Completed)
- PratikshaAshiwal, Dr. C.V. Raman University, Bilaspur (Completed)
- NishuAgrawal, Dr. C.V. Raman University, Bilaspur (Completed)
- Akash Deep Anchal, Dr. C.V. Raman University, Bilaspur (Completed)
- KarishmaDewangan, Dr. C.V. Raman University, Bilaspur (Completed)
- PallaviSahu, Dr. C.V. Raman University, Bilaspur (Completed)
- Akanksha Sharma, Dr. C.V. Raman University, Bilaspur (Completed)
- SurjeetKour, Dr. C.V. Raman University, Bilaspur (Completed)

# LECTURES AND INVITED TALKS

- Lab Instructor for course titled C Programming for 1st year students BITMesra Ranchi (August, 2008 to December, 2008)
- Lectures on Data Structures and Algorithms for training program, BITMesra Ranchi (August, 2008 to December, 2008)

# **CONTACT**

#### Dr. S.R.Tandan

S/o. Late Shri B. D. Tandan

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D/120 SristiSanskriti Colony Near Kota Road, Landmark Kota Mod, Parsada, Bilaspur CG INDIA, 495112

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# **Permanent Address**

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