Dayananda Sagar Academy of Technology & Management

(Autonomous Institute under VTU)

Affiliated to VTU
Approved by AICTE
Accredited by NAAC with A+ Grade
6 Programs Accredited by NBA
(CSE, ISE, ECE, EEE, MECH, CV)

Faculty Name	Dr. Vanajaroselin Chirchi
Academic Designation	Professor
Educational Qualification	BE(CSE), M.Tech.(CSE), PhD(CSE)
Experience in Years	25Years
Area of Interest	Artificial Intelligence, Machine Learning, Computer Networks, Security Systems, Pattern Recognition, Image Processing and IoT
Email ID	vr.chirchi@gmail.com dr.vanajaroselin-ise@dsatm.edu.in

Educational Details

Ph.D. in Computer Science and Engineering, Nov 2018, from JNTUH, Hyderabad.
Master of Technology (M.Tech.) in Computer Science and Engineering, Sep 2006, from AAID University, Allahabad
Bachelor of Engineering(BE) in Computer Science and Engineering, December 1998, from Guru Nanak Dev Engineering, College, Bidar. Gulbarga University Gulbarga(GUG).

Personal Details

Date of birth**:** 20-11-1975
Hobbies: Listening Music, Gardening
Languages Known: Kannada, English, Hindi, Marathi

Professional Experience

- Working as Professor in Department of Information Science & Engineering, DSATM, Bengaluru from 16/03/2024 –till date
- Worked as Professor in Information Science and Engineering Department, The Oxford College of Engineering, Bangalore, from 27th April 2021 – 15th March 2024.
- Worked as Associate Professor, CSE Department, AMC Engineering College, Bangalore, from 20/02/2021 to 26thApril 2021.
- Worked as an Associate Professor at PG Department, College of Engineering Ambajogai, from 1/7/2016 to 15/02/2021.
- Worked as an Assistant Professor at PG Department, College of Engineering Ambajogai, from 3/7/2010 to30/6/2016.
- Worked as an Assistant Professor at UG, CSE Department, College of Engineering Ambajogai, from July 2007 to 2010.
- Worked as a Lecturer, College of Engineering Ambajogai, from July 2002 to July 2007.
- Worked as a Lecturer, Brindavan College of engineering, Bangalore, from June 2001 to July 2002.
- Worked as a lecturer, Guru Nanak Dev Engineering college, from Dec 1998 to May 2001.

Publications

Book Chapters

- Blockchain based voting system, Dr. Vanajaroselin Chirchi, Prof..Bindhyashree and Prof.Visalini, for Scopus indexed book titled "AI based Advancements in Biometrics and Application" under CRC Press(Taylor & Francis) Publishers,2023-**(Scopus index)** under Review

- IoT for Healthcare: A Sustainable Approach, Dr. Vanajaroselin Chirchi, Prof.Emmanvelraj Chirchi, Ms. Khushi E.C for Scopus indexed book titled "Sustainable IoT and Data Analytics Enabled Machine Learning Techniques and Applications" under Springer Nature,2023--**(Scopus index)** under Review
- Risk Assessment and Vulnerability analysis in IoT**,** Dr. Vanajaroselin Chirchi, Dr. Nirmala S, Prof. Emmanvelraj Chirchi, Prof. Karthik S L, Ms. Khushi E C, CRC Chapter. Taylor & Francis,2023, **-(Scopus index)** under Review
- Big Data Processing in Internet of Things (IoT) Systems, Dr.Nirmala S and Dr.Vanajaroselin E C for the Book Internet of Everything: Smart Sensing Technologies, NOVA Science Publishers **Scopus indexed**, 2022.

Patents:
- Patent No. 202341025128A, "Lower Extremity pressure device", April,2023
- Design Patent, Design No.371322-001, "Automatic pesticide spraying robot", Sep 2022
- Patent No.20221001148 A, "Soil Classification for Planting and Monitoring Using FCNN-based IoT Smart Agriculture Systems", July 2022

Funds Received:
- 5000/- VTU Sponsored Project for the title" Intelligence Surveillance Patrolling Drone", The Oxford College of Engineering, Bangalore,2021-22.
- 93000/- AICTE ATAL FDP title" AIOT (Artificial Intelligence with Internet of Things)" at AMC Engineering College,Bangalore. 13th -17th Dec, 2021.
- 220000/- TEQIP-3 Sponsored DBATU Lonere FDP on "Software Architecture", College of Engineering, Ambajogai. Maharashtra, 13 April 2018 to 17 April 2018(One week)

Conferences:
- Manush Prajwal and Vanajaroselin Chirchi et.al." Diabetes Mellitus Diagnosis using Optical RingResonators", Proceedings of the 18th INDIACom; INDIACom-2024; IEEE Conference ID: 61295 2024 11th International Conference on –Computing for Sustainable Global Development‖, 28th Feb. – 1st Mar., 2024**(Scopus Indexed)**
- Vanajaroselin Chirchi et.al.," Optical sensor for water bacteria detection using machine learning", Proceedings of the 18th INDIACom; INDIACom-2024; IEEE Conference ID: 61295 2024 11th International Conference on –Computing for Sustainable Global Development‖, 28th Feb. – 1st Mar., 2024**(Scopus Indexed)**
- Vanajaroselin chirchi et.al.," Machine Learning Classifier approach for Iris Biometric system for the person Identification", IEEE Conference with ID 57626, INDIACom 2023**(Scopus Indexed)**
- Vanaja Roselin.E.C, Dr.L.M.Waghmare, "Biometric Identification using Iris Pattern", National Level Conference on Emerging trends in Computer and Information Technology, J. T. Mahajan College of Engineering, Faizpur on March 4 & 5, 2010.
- Vanaja Roselin.E.C, Dr.L.M.Waghmare, "Enhancing person identification using Iris Patterns",IEEE International conference on Science, Engineering& Spirituality(ICSES),S.E.S.College of engineering, Navalnagar, Dhule,(MS),April 2010

Journal Publications

1. Dr.Vanajaroselin Chirchi et.al., " Pattern Matching for iris biometric recognition system uses KNN and fuzzy logic classifier techniques", International Journal of Information Technology(IJIT),Springer Nature, https://doi.org/10.1007/s41870-023-01710-z **(Scopus index-Q2 Journal)**
2. Dr.Vanajaroselin Chirchi, et.al., "Context Monitoring of patients using wireless Network", IEEE 2023 International Conference on Inventive Computation Technologies (ICICT) , DOI: 10.1109/ICICT57646.2023.10134482 **(Scopus Index -Q1 Journal)**.
3. Vanaja Roselin.E.Chirchi, Dr.L.M.Waghmare, "Enhanced isocentric and wavelet rectangular coder to iris segmentation and recognition", Publication in International Journal of Intelligent Engineering and Systems(INASS) Scopus Index, ISSN 2185-3118, Vol 9, No. 3, August 2016**(Scopus index- Q3 Journal**)
4. Dr.Vanajaroselin Chirchi, Ms.Mayuri Kulkarni,"Data Storage on cloud using key-Aggregate

Cryptography Elliptic Curves", **Strad Research**, Vol-9 Issue 4 2022 https://doi.org/10.37896/sr9.4/017.

5. Dr.Vanajaroselin E.C., Dheeraj D. Umardand,"Wireless sensor technology is used for Mobile Sink-Based self adaptive and Energy Efficient Proactive Data Collection Protocol for Network", International Journal of Engineering Research and applications(IJERA),ISSN:2248-9622,Vol.12,Issue 9,Semptember 2022,pp.51-60 DOI: 10.9790/9622-12095160

6. Dr.Vanajaroselin E.C,"Scanning Method for Segmentation in Iris Biometric Authentication for security systems", **GIS Science Journal –UGC-CARE-Group-II Journal**, Vol.9 Issue 2,Impact factor 6.1, Feb 2022.

7. Dr.Vanajaroselin E. Chirchi "An approach for iris biometric system for the person identification" published in STRAD Research **UGC CARE Group-2 and Web of Science Indexed** Journal Volume 8 Issue 9 https://doi.org/10.37896/sr8.9/062September 2021.

8. Dr.Vanajaroselin E.Chirchi "Authentication and recognition using iris biometric systems", Published in IJMER Scopus Index Journal with Scopus Review ID: A2B96D3ACF3FEA2A volume 10, issue8 (5), August 2021 **DOI:** http://ijmer.in.doi./2021/10.08.98

9. Dalwale Najmin V., Dr. V.E. Chirchi, "Recommendation system for potential users with Depression using Sentiment Analysis", IJRAR, (E-ISSN 2348-1269, P- ISSN 2349-5138) , Volume 7, Issue 3 , August 2020.

10. Kokate Manisha and Dr.V.R.Chirchi "Fraud Detection And Frequent Pattern Matching Pattern Matching in Insurance Claims Using Data Mining Techniques" IJRAR International Journal Of Research And Analytical Review, July 2020

11. Anjali Kamble and Dr. V. E. Chirchi "Rating Prediction based on Social Sentiment from Textual Reviews", IJRAR (E-ISSN 2348- 1269, P- ISSN 2349-5138), Volume 7, Issue 3 , July 2020.

12. Anjali Kamble and Dr. V. E. Chirchi , "Rating Prediction System From Textual Review", IJCRT, ISSN: 2320-2882,Volume 8,Issue 7 July 2020

13. Sujatha V.Randad, V.R.Chirchi,"Application aware Local-Global Source Deduplication for Cloud backup services of personal storage using ALG-Dedup Algorithm", International Journal of Emerging Technologies and Innovative Research(JETIR) 2019.

14. Aarti Ramdas Aakulwad, Dr.V.E.Chirchi" Facial Emotion Recognition in Video using CNN", International Journal of Emerging Technologies and Innovative Research (JETIR) Vol.6, 2019.

15. Vidhya S. Jadhav, Dr.V.E.Chirchi," Continuous visual authentication using secure keystrokes-based password protocol system", Volume 7, Impact factor 5.75, 2019.

16. Vanaja Roselin.E.Chirchi, Dr.L.M.Waghmare, "Enhanced isocentric and wavelet rectangular coder to iris segmentation and recognition", Publication in International Journal of Intelligent Engineering and Systems(INASS) Scopus Index, ISSN 2185-3118, Vol 9, No. 3, August 2016.

17. Vanaja Roselin.E.Chirchi, Dr.L.M.Waghmare," Wavelength Rectangular Coder(WRC) Algorithm used for feature Extraction for iris person identification", Publication in International Journal of science and advance research and technology(IJSART), Volume 2,Issue 12, December 2016.

18. Vanaja Roselin.E.chirchi, Dr.L.M.Waghmare," Wavelength Rectangular Coder algorithm used for feature Extraction for iris person identification", Accepted for publication in International Journal of Modern Engineering Research (IJMER), December 2016.

19. Vanaja Roselin.E.C, Dr.L.M.Waghmare, "Iris Biometric authentication for security systems", IJIGSP-ID No.: Paper 320, Publication in International Journal of Image, Graphics and signal Processing(IJIGSP) Mecs Publishers, ISSN 2074-9074(Print), ISSN: 2074-9082 (Online) DOI: 10.5815/ijigsp.2014.09.07, Volume 6, Number 9,pp.54-60, Aug 2014.

20. Vanaja Roselin Chirchi, Dr.L.M.Waghmare, "Enhancing Iris Texture Analysis for biometric Security Systems", Paper reference id-480, publication proceeding of Elsevier-" International Conference on Recent Trends in Engineering and Technology", 28-30 March,2014.

21. Vanaja Roselin.E.C, Dr. L.M.Waghmare,"Iris Texture Analysis for Iris biometric Security Systems" (Article ID: 27703101), Accepted for publication in Recent Science- International Journal of Advanced Computing (IJCA), Jan 2014.

22. Vanaja Roselin.E.C, Dr.L.M.Waghmare, "Enhanced Pupil detection and Feature extraction algorithm for fast and accurate person identification using Iris pattern", Accepted for publication in CSC journals- International Journal of Biometrics and Bioinformatics (IJBB) ISSN-1985-2347(Online), Volume 7, Issue 2, Manuscript code-IJBB-219, 24 Oct 2013.

23. Vanaja Roselin.E.C, Dr.L.M.Waghmare, "Matrix co-efficient cA, cD, cH, cV decomposed up to five levels for feature extraction to achieve accuracy", Accepted for publication in CSC journals- International journal of Image Processing (IJIP), ISSN(Online):1985-2304, Manuscript code-IJIP-811, volume-7, issue-4, 23 Oct 2013.

24. Vanaja Roselin.E.C, Dr.L.M.Waghmare,"Feature Extraction and Pupil Detection Algorithm used for Iris Biometric Authentication System", publication in SERSC-International Journal of Signal Processing and Pattern Recognition(IJSIP),ISSN2005-4254,Vol.6,No.6(2013), pp.141-160,doi:http://dx.doi.org/10.14257/ijsip.2013.6.6.14, Oct 2013.

25. Vanaja Roselin.E.C, Dr.L.M. Waghmare, "Iris biometric used for security systems", EJSR I A 8368, Accepted for publication in European Journal of Scientific Research (EJSR), ISSN 1450-216X/1450-202X, Vol 105, No 1, July 2013.

26. Vanaja Roselin.E.C, Dr.L.M.Waghmare," Pupil detection and feature extraction algorithm for Iris recognition", AMO-Advanced Modeling and Optimization, ISSN: 1841-4311, Volume 15, Number 2, pp. 409-420, 2013.

27. Vanaja Roselin.E.C, Dr.L.M.Waghmare, "Efficient algorithm for Pupil detection and feature extraction using Iris pattern", Paper id- IWCDM#266, Accepted for publication in International Workshop on Cloud Data Mining (IWCDM-2013) in Cooperation with IEEE TrustCom 2013, Melbourne, Australia, 16-18 July 2013.

28. VanajaRoselin.E.C, Dr.L.M.Waghmare," Iris textural analysis for security systems", paper reference ID pxc3885507, International Journal of Computer Application (IJCA), volume 64, No. 22, ISSN: 0975- 8887,doi>10.5120/10779-5507, 37-44, February 2013.

29. VanajaRoselin.E.C, Dr.L.M.Waghmare, "Statistical textural analysis for iris pattern", Accepted for publication in International Journal of Emerging Technology and Advanced Engineering (IJETAE), ISSN: 2250-2459, Volume2, Issue11, November 2012.

30. Vanaja Roselin.E.C, Dr. L.M.Waghmare, "Iris recognition using enhanced method for pupil detection and feature extraction for security system", publication in International Journal of Computer science and Network security (IJCSNS), ISSN: 1738-7906, Vol.13, Issue 11, November 2012 , p55-62. 8p.

31. Vanaja Roselin.E.C, Dr.L.M.Waghmare, "Biometric Iris pattern recognition for security system", Accepted for publication in International Journal of Computer Science Issues (IJCSI), ISSN: 1694-0814, Volume 9, Issue 6, November 2012.

32. Vanaja Roselin.E.C, Dr.L.M.Waghmare, "Iris Biometric Recognition for person identification in security system",publication in International Journal for Computer Application (IJCA), paper reference id pxc3874002,VOL.24, No.9, and ISSN: 0975-8887,DOI: 10.5120/2986-4002, 1-6, June 2011.

33. VanajaRoselin.E.C, Dr.L.M.Waghmare, "Enhancement of Person Identification Using Iris Pattern", Publication inInternational Journal of Scientific & Engineering Research (IJSER), Volume 2, Issue 4, ISSN 2229-5518, April- 2011.

34. Vanaja Roselin.E.C, Dr.L.M.Waghmare," Enhancing Person identification using Iris pattern", Accepted for publication in International Journal of Emerging Technologies and Applications in Engineering, Technology and Sciences (IJETA ETS) ISSN: 0974-3588, April 2010

35. Vanaja Roselin.E.C, Dr.L.M.Waghmare, "Enhancing person identification using Iris Patterns",IEEE International conference on Science, Engineering& Spirituality(ICSES),S.E.S.College of engineering, Navalnagar, Dhule,(MS),April 2010.

36. Vanajaroselin E.C, Dr.L.M.Waghmare, "Efficient methodology for person identification using Iris Patterns", IEEE International conference on Electronics Design and Signal

Processing(ICEDSP), paper ID 237, MIT Manipal, India, Dec 2009.

Awards/Recognitions

- **VTU Research Supervisor**
- Post Graduate Teacher Approval in the subject of Computer Science and Engg. Under Faculty of Engg. & Technology as per ordinance 167(A), BAM, University, Aurangabad, October 2014, Order copy **Ref.No. PG/Ph.D/2014/9705-06**
- UGC Approval as Assistant Professor in Computer Science and Engineering, March 2010, with **Ref.No. ACAD/AFFIL/PGT/2010/450-75.**
- UGC Approval as Lecturer in Computer Science and Engineering, February 2003, with **Ref.No. ACAD/COLL- CHANGE/PGT/2002-2003/24797-99.**

Academic Activity

- Working **as Reviewer** for Elsevier- Journal of Network Computer Application(JNCA)-Completed 14 paper review and 01 is under process,2024
- Working as **Reviewer** for VTU IJESM
- Working as Book Chapter **Reviewer** for IGI Global
- Completed review assignments (**As Reviewer**) for First IEEE International conference on confluence of Advancements in Robotics, Vision and Interdisciplinary Technology Management, organized by RVITM, Bengaluru-28 & 29 November 2023.
- Completed review assignments (**As Reviewer**) for 3rd International Conference on Advanced Computing Technologies and Applications -2023(ICACTA) organized by SVKM's Dwarkadas J. Shanghvi College of Engineering, Mumbai-6th & 7th October 2023.
- Appointment as Question paper setter in subject UCSL401, UAIL419A, UISL428, UITL305, UCSL202, CSE, G.H. Raisoni Institute of Engineering and Business Management, An Autonomous Institute affiliated to KBCNM University, Jalgaon(MS)-30/3/2024.
- Appointment as Question paper setter in subject UCSL304 Software Testing, CSE, G.H. Raisoni Institute of Engineering and Business Management, An Autonomous Institute affiliated to KBCNM University, Jalgaon(MS) 24/04/2023
- NBA Department Coordinator for Criteria -5(Faculty Information and Contribution)
- NAAC Coordinator for Criteria 1.4.1 & 1.4.2 (Feedback system analysis and action taken)
- Branch Counselor for Professional body CSI Chapter, The Oxford College of Engineering, Bangalore.
- Delivered Expert Talk on the topic "Swarm Intelligence" for the Department of CSE, IT, DS and AI at G.H. Raisoni Institute of Engineering and Business Management, An Autonomous Institute affiliated to KBCNM University, Jalgaon(MS), 29/01/2022.
- Worked as In-Charge Dean for Post-Graduation Department
- Worked as In-Charge HOD of CSE Department
- Chairman, ME (CNE), BAM, University, Aurangabad, Maharashtra(State).
- Branch Counselor for Professional body IEEE Student Chapter, MBES College of Engineering, Ambajogai, Dist. BEED, Maharashtra state
- Panelist in Panel Discussion on "Role of Teachers in Holistic Development of students"
- CSI Chapter Coordinator and Student Branch Counselor(SBC)
- **CSI Member**(F8004434)
- **IEEE member** (90823870)
- **Life Member of ISTE**.
- Question Paper Setter for M.E.(CNE and CS&IT) BAM, University, Aurangabad.
- Developed and Maintaining College Of Engineering Website http://coea.ac.in
- Website Incharge(https://coea.ac.in)
- Chairman, ME (CNE), BAM, University, Aurangabad.
- Branch Counselor for IEEE Student Chapter
- Appointed as Member of Seating Squad for Dr. B. A. M. University, Aurangabad May/June Exam 2018.

- Appointed as Member of Seating Squad for Dr. B. A. M. University, Aurangabad May/June Exam 2017.
- Appointed as Member of Vigilance Squad for Dr. B. A. M. University, Aurangabad Oct/Nov Exam 2016.
- Invited as Subject Expert for MS Bidve Engineering College Latur for post of Lecturer appointment, 2012 and 2013.
- Invited Judge for National Level Technical Symposium – SHASTRATRTH-2013, at M.S.Bidve Engineering College, Latur
- Appointed as Member of Vigilance Squad for Dr. B. A. M. University, Aurangabad May/June Exam 2011.
- Appointed as Subject expert for UGC Approval Interview at Naganathappa Halge College of Engineering Parali Dist: Beed, Oct/Nov 2008.
- Worked as Co-Ordinator of ISTE Student Chapter

Faculty Development Activity/Workshops

FDP/Workshop Organized:

- Organized Faculty Development program (FDP) on Advancements in Artificial Intelligence and Machine Learning(ML) scheduled from 12 July 21 to 17 July 21
- Organized TEQIP-3 Sponsored FDP on Software Architecture in association with DBATU, Lonere, 13 April-17 April 2018.
- Conducted Seminar on Basics of Computer Network at T.B.Girwalkar Polytechnic, Ambajogai, March 2015
- Conducted Seminar on Computer Security at T.B. Girwalkar Polytechnic, Ambajogai, Feb 2015
- Organized NS2 workshop for Post-Graduation Students, 8th and 9th April 2014
- Coordinator, State Level Technical Symposium Arghya2009, conducted in Mar 2009.

FDP/Workshop Attended:

- ATAL FDP on "Quantum Computing for Real World Applications" from 17/01/2022 to 21/01/2022 Vishwakarma Ite of Technology Pune.
- ATAL FDP on "Machine Learning Applications for Autonomous Driving" from 24/01/22 to 28/01/2022 at KLE Technology University.
- AICTE UHV-1 on" Inculcating Universal Human Values in Technical Education" from 11-April-22 to 15th April 2022.
- Webinar on Sustainable development through values and ethics integrated technical education" on 3rd August 2021, organized by Department of Electronics and Communication Engineering, MIT Mysore, Karnataka.
- Faculty Development Program on "Advancements in Artificial Intelligence and Machine Learning", organized by Department of Information Science and Engineering, The Oxford college of Engineering Bangalore, from 12th July to 17th July 2021.
- Faculty Development Program on "Recent trends on PHOTONICS", organized by Department of Electronics and Communication Engineering, The Oxford college of Engineering Bangalore, from 14th June to 19th June 2021.
- Webinar on "NAAC Accreditation "organized by Department of Civil engineering, Shreeyash College of Engineering and Technology, Aurangabad, Maharashtra on 10th June 2021.
- Webinar on "An Insight to Blockchain Technology "organized by Department of Civil engineering, Shreeyash College of Engineering and Technology, Aurangabad, Maharashtra on 2nd June 2021.
- AICTE-MARGDARSHAN, One Week Virtual Faculty Development Program on "Outcome Based Education andNBA Accreditation for TIER-II Colleges", organized by SRKR Engineering College from 29th March to 3rd April 2021.
- AICTE sponsored one week STTP on Artificial Intelligence and Machine Learning from 22nd march to 27th March, AMC Engineering College, Bangalore.
- Webinar on "Cloud Development Practices" organized by CSE Department, Bangalore Technological Institute. On 25th July 2020

- IEEE & ACM FDP on Recent Trends and innovations in Digital forensic at AISSMS Institute of Information Technology Pune from 25th May to 30th May 2020.
- ISTE Workshop on MatLab/Simulink Programming and its Real Time Applications at MBES College ofEngineering, Ambajogai.13-17 July 2015
- ISTE approved STTP on Advances in Digital Signal Processing at College of Engineering Ambajogai conducted in July 2006.
- In-charge for creating and designing college of Engineering Website: http://coea.ac.in

Contact Details

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