

Curriculum Vitae

Dr. D. K. Shakya

Assistant Professor,
Department of Electronics Engineering,
Samrat Ashok Technological Institute, Vidisha (MP)-464001.
Mobile No. +91-9406522481
E-mail : dkshakya.ec@satiengg.in, [dks_sati@rediffmail.com](mailto:dkshakya.ec@satiengg.in)



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1. **Full Name** : **Devendra Kumar Shakya**
 2. **Father's Name** : Shri N.S.Shakya
 3. **Date of Birth** : October 01, 1974. (01-10-1974)
 4. **Nationality** : Indian
 5. **Address for Communication** : Dr. Devendra Kumar Shakya
C-50, Arihant Vihar Colony (Phase-III),
Vidisha (M.P.) - 464001
 6. **Telephone/mobile** : 94065-22481
 7. **E-Mail** : dkshakya.ec@satiengg.in,
dks_sati@rediffmail.com

8. **Educational Qualification** :

S.No.	Degree/ Certificate	University/ Board	Year	Specialization/ Discipline/Subject
1.	Ph.D.	R.G.P.V. Bhopal	2013	Signal Processing
2.	M.E.	S.G.S.I.T.S, Indore	2002	Digital Techniques & Instrumentation
3.	B.E.	BarkatUllah University, Bhopal	1999	Electronics & Instrumentation
4.	H.S.S.C. Examination	M.P. Board of Secondary Education, Bhopal	1993	Higher Maths, Physics, Chemistry
5.	H.S.C Examination	M.P. Board of Secondary Education, Bhopal	1991	Hindi, English, Maths. Science, Social Sci.

9. **Work Experience** :

S.No.	Designation	Employer	From	To	Nature of Job
1.	Assistant Professor	Samrat Ashok Technological Institute, Vidisha	March, 2002	Till Date	Teaching & Research

10. **Ph. D. Thesis Title** "Analysis of Genomic and Proteomic Sequences using Weight Function and Discrete Transform through Simulation Studies"

11. **Ph. D. Supervisors** Dr. Rajiv Saxena, Rtd. Vice Chancellor, Jaypee University Anoopshahare, U.P., India.
Dr. S. N. Sharma, Professor, Indian Institute of Information Technology Design and Manufacturing, Jabalpur, M.P., India
12. **Teaching Experience** 21+ Years
13. **Research/Guidance** **PG Thesis** : 09 (*PG Course was not running in the departments*)
Ph.D. : 04 Research scholars registered
Ph.D. Submitted : 01 (viva left)
Ph.D. Reviewed : 01, Accepted : 01
14. **Administrative Responsibilities**
1. Assistant Exam. Supdt. for in year 2022- (07.03.2022)
 2. NBA Coordinator, EC Programme (27.08.2019 - 26.11.2020)
 3. Course Coordinator of Biomedical Programme (10.7.2017 - 19.8.2019)
 4. Assistant Exam. Supdt. for in year 2015-17 (4.11.15 - 04.11.16)
 5. Assistant Exam Supdt. for R.G.P.V. & B.U. in session 2009-10
 6. PIC Student Scholarship in duration 2008-10
15. **Academic Responsibilities**
1. Member of Board Study in R.G.P.V. Bhopal.
 2. Member of Board of Study in S.A.T.I. Autonomous Body
 3. Member in Examination Committee in S.A.T.I. (Engg. college), Vidisha.
 4. Member of Academic affairs committee 2017, 2022
16. **Short Term Courses/Conference Organized**
1. Member of Organiser - **IET & TEQIP-II Sponsored** International Conference on Signal Processing, 7-9 November 2016.
 2. As a **Convenor** – MPCST and TEQIP Sponsored **Two Days Workshop** on Biomedical Engineering and Its Applications, 29-30 March 2016.
 3. As a **Coordinator** – **Two Week Self Sponsored Workshop** on LabVIEW and Its Applications, 22 June-04July, 2015.
 4. As a **Convenor** –TEQIP Sponsored **Three Days Workshop** on Signal Processing and Its Applications, 4-6 November 2014.
 5. As a **Coordinator** – National Mission on Education through ICT (MHRD) **Two Week Workshop** on Signal and System, 02-12 January, 2014
 6. As a **Co-Convenor** – AICTE Sponsored **Two Week Staff Development Program** on Current Trends in Signal Processing, 16-28 September 2011.
17. **Short Term courses attended** **IIT – 04, NIT – 01, AICTE/DST/TEQIP Sponsored – 16, Online – 03**
1. AICTE Training And Learning (**ATAL**) Academy online FDP on IoT and It's Applications, Organized by UIT, RGPV Bhopal, **01 week**, 23-27 November, 2021.
 2. **Swayam / NPTEL** Online FDP Course on MATLAB Programming and Computation, Jan-March 2021.
 3. TEQIP-III Online Short-Term Course on Artificial Intelligence Driven Biomedical Data Analysis for Disease Diagnosis, **01 Week, IIT Indore**, 5-10 Nov 2020.

4. TEQIP-III Short Term Online course on Current Trends in Biomedical Signal and Image Processing, **IIT Indore**, 20-22 Oct 2020.
 5. AICTE Sponsored one-week Online STTP on Post Covid Challenges in Teaching Learning at SIRT, Bhopal, **01 Week**, 14-19 September 2020.
 6. **Swayam / NPTEL** Online FDP Course on Biomedical Signal Processing, Jan-April 2020.
 7. TEQIP-III **Online** Certificate on Digital Transformation in Teaching Learning Process, 02 Weeks, 14 Feb- 06 March 2020
 8. TEQIP-III Sponsored FDP on Personal Effectiveness at SATI Vidisha, 15-16 November 2019.
 9. TEQIP-III STTP on LabVIEW Programming at SATI Vidisha, **01 Week**, 01-05 July 2019.
 10. TEQIP-III Workshop on Outcome Based Educations at SATI Vidisha, 11-12 January 2019.
 11. TEQIP-III Summer Training Programme on Active Learning Workshop on Pedagogy and Research, **IIT Bombay**, **01 Week**, 11-15 June, 2018.
 12. TEQIP-III Sponsored Pedagogy and Management Capacity Enhancement Program for Teaching Staff, S.A.T.I., Vidisha, , **01 Weeks, 05-09** March, 2018.
 13. Symposium on Accelerating Biology 2016 decoding and Deludge, at **C-DAC Pune**, **03 Days**, 19-21 January, 2016.
 14. Short-term Course under Continuous Education Programme on Bioinformatics and Computational Biology at **IIT Delhi**, **03 Days**, 28-30 September, 2015.
 15. Workshop on Scientific Writing at **IIT Indore**, **02 Days**, 11-12 July, 2014.
 16. Coordinator workshop on Signals and Systems at **IIT Kharagpur**, **01 week** ,30 Sept-04Oct, 2013
 17. AICTE Sponsored SDP on Application of Numerical Methods and Software in Science and Engineering at UIT RGPV, Bhopal, **02 Weeks**, 10-22 Dec.,2012
 18. AICTE Sponsored SDP on Wavelet Transform and Its Application at SIRT, Bhopal, **02 Weeks**, 4-16 June, 2012
 19. AICTE Sponsored SDP on Current Trends in Signal Processing at S.A.T.I Vidisha, **02 Weeks**, 16-28 September 2011.
 20. Fundamental & Application of Plasmas at S.A.T.I Vidisha, **01 Week**, 19-24 Feb, 2007.
 21. AICTE Sponsored SDP on Wireless & Mobile Network at S.A.T.I Vidisha, **02 Weeks**, 03-14 July, 2006.
 22. Mathematical Models & Methods in Engineering at MANIT Bhopal, **01 Week**, 05-09 June, 2006.
 23. Mobil Communication and Future Trends at IEI Jabalpur, **02 Days**, 19-20 November, 2005.
 24. Signal Processing and Its Applications at S.A.T.I Vidisha, **03 Days**, 15-17 March, 2003.
18. **Foreign Country Tour** Jiaotong University, **Beijing, China**, 24-28 October 2010
19. **Membership of Professional Society**
1. **Life Membership** of Indian Society for Technical Education (ISTE).
 2. **Life Membership** of Instrumentation Society of India (ISOI).
 3. **Life Membership** of Biomedical Engineering Society of India (BMESI).

4. **Membership** of Institution of Engineering and Technology (**IET**)
 5. **Senior Member** of International Association of Computer Science and Information Technology (**IACSIT**).
 6. Membership of Force Biomedical.
- 20. Invited talks / Expert Lecture**
1. Session Chair at Springer 3rd International Conference on Machine Intelligence and Smart Systems (MISS-2023) at ShriRam Institute of Information Technology, Bammore, Morena, M.P. and RGPV Bhopal, 24-25 February, 2023.
 2. Invited Speaker at Online Faculty Development Programme on Computational Genomics and Proteomics on MATLAB Bioinformatics Toolbox (Under the E&ICT Academy) at **IIITDM Jabalpur** on 01-02 September 2022.
 3. Invited talk on Accessing Genomic and Proteomic databases and Bioinformatics Toolbox, at SERB-DST Sponsored a High-End Workshop on Computational Genomics & Proteomics at **IIITDM Jabalpur**, on 26-27 July, 2022
 4. Simulation Software for Engineer's, Expert Lecturer in SAGE talk Series at **Sagar Group of Institutions**, Bhopal on 24 September, 2020.
 5. Deep Learning through Neural Network, TEQIP-III sponsored FDP on Machine Intelligence and Deep Learning Techniques at **UIT, RGPV Bhopal** on 20 November, 2019.
 6. Role of Signal Processing in the Area of Genomics, Keynote Lecture at 17th International Conference on Sustainable Research in Engineering Technology, Pharmacy & Management (ICSRETPM-2019) at **BTIRT, Sagar**, MP, India, 25-26 May 2019.
 7. MATLAB for Engineers, Workshop on MATLAB at Babulal Tarabai Institute of Research and Technology (BTIRT) **Sagar**, M.P., 03-04 October, 2018.
 8. MATLAB Overview, MATLAB Workshop under TECHFEST 2018 STYARTH-I at Samrat Ashok Technological Institute, Vidisha (M.P.) on 20 March, 2018.
 9. Simulation Tool for Engineering and Research, MPCST sponsored workshop on Innovative MATLAB Application in Engineering at Trinity Institute of Technology and Research Bhopal (M.P.) on 2nd December, 2015.
 10. Basics of MATLAB, Workshop on MATLAB and It's Applications, Patel Group of Institution, Bhopal (M.P.) on 03 November, 2011.
- 21. Paper Reviewed**
1. Transactions on Computational Biology and Bioinformatics (**SCIE IEEE/ACM Journal**)
 2. Circuit System and Signal Processing (**SCIE Springer Journal**)
 3. Biomedical Signal Processing and Control (**SCIE Elsevier Journal**)
 4. Network Modeling Analysis in Health Informatics and Bioinformatics (**Springer Scopus**)
 5. International Journal of Biomathematics (**World Scientific**)
 6. Advances in Biomedical Science and Engineering (**Scientific Online Publication**)

7. Advanced Science, Engineering and Medicine (ASEM)
(**American Scientific Publisher**)
 8. Journal of Engineering Science and Technology (**Taylor's University, Malaysia**)
 9. Gene Reports (*Elsevier Journal*)
22. **Member Technical Committee**
1. **4th International Conference** on Data, Engineering and Applications, December 23-24, 2022. (**Springer/Scopus Indexed**)
 2. **1st IEEE International Conference** on Innovations in High-Speed Communication and Signal Processing (IHCSF 2023)
 3. **3rd International Conference** on Emergent Converging Technologies and Biomedical Systems (ETBS 2023)
23. **Topic of Interest** Signal Processing, Genomic and Proteomic Signal Processing, Bio signal Acquisition, Processing and Analysis, Bioinformatics Data Analysis, Instrumentation
24. **GATE Qualification** Percentile/Marks: 518 & 449, AIR: 622 & 527 Year: 2000 & 2001 Discipline: Instrumentation Engineering.
25. **LIST OF PUBLICATIONS :**
(*International Journals – 12 International Conferences – 09 National Conferences – 03*)

Journal Papers

1. Yaspal Yadav, S. N. Sharma and **D. K. Shakya**, "Detection of Tandem Repeats in DNA Sequence Using Short-Time Ramanujan Fourier Transform," *IEEE/ACM Transactions on Computational Biology and Bioinformatics*, vol.19, no.3, pp. 1583-1591, May/June 2022, **ISSN: 1545-5963, SCIE Indexed Journal, Impact Factor: 3.015. DOI:10.1109/TCBB.2021.3053656**
2. Yaspal Yadav, S.N.Sharma, **D. K. Shakya** and Abhishek Panchal, "Hot Spots Localization in Proteins by Optimized Short Time Ramanujan Fourier Transform," *Journal of Bioinformatics and Computational Biology*, vol.19, no.2, 2150004, pp.1-17, April 2021, **ISSN: 0219-7200, SCIE Indexed Journal, Impact Factor: 1.122. DOI:10.1142/S0219720021500049**
3. Akanksha Gandhi and **D. K. Shakya**, "An Application of EMD and Adaptive Mean Filter for Denoising of ECG Signals," *International Journal of Modern Electronics and Communication Engineering (IJMECE) (UGC Approved Journal)*, vol.7, no.1, pp.107-113, Jan 2019, **ISSN : 2321-2152, Impact Factor :0.876**
4. Sonu Gupta and **D. K. Shakya**, "Analysis of Genomic Sequences of Mycobacterium Tuberculosis using Short time Fourier Transform," *International Journal of Modern Electronics and Communication Engineering (IJMECE) (UGC Approved Journal)*, vol.6, no.4, pp.28-34, July 2018, **ISSN : 2321-2152, Impact Factor :0.876**
5. Rahul Sharma and **D. K. Shakya**, "Comparison of Area Measured by Second Order Difference Plot and Circular Tendency Measured of EEG Signal of Epileptic Seizure," *International Journal of Innovative Research in Science, Engineering and Technology (IJIRSET) (UGC Approved Journal)*, vol. 6, no.7, pp.12932-12939, July 2017, **ISSN : 2347-6710.**
6. Sanjay Verma and **D. K. Shakya**, "Detection of Protein Coding Regions using Goertzel Algorithm," *International Journal of Computer Applications(IJCA)*, vol.124, no.2, pp.1-4, August 2015, **ISSN : 0975-8887.**

7. Navi Jain and D. K. Shakya, "Denoising Baseline Wander Noise from Electrocardiogram Signal using Fast ICA with Multiple Adjustments," *International Journal of Computer Applications (IJCA)*, vol.99, no.2, pp.34-39, August 2014, ISSN : 0975-8887.
8. D. K. Shakya, Rajiv Saxena and S. N. Sharma, "Identification of Hot Spots in Proteins Using Modified Gabor Wavelet Transform," *Pertanika Journal of Science and Technology (Scopus Index Journal)*, vol.22, no.2, pp.79-92, July 2014, ISSN: 0128-7680, **Impact Factor: 0.27**.
9. D. K. Shakya, Rajiv Saxena and S. N. Sharma, "An Adaptive Window Length Strategy for Eukaryotic CDS Prediction," *IEEE/ACM Transactions on Computational Biology and Bioinformatics*, vol.10, no.5, pp. 1241-1252, July 2013, ISSN: 1545-5963, **SCIE Indexed Journal, Impact Factor: 3.015**.
10. D. K. Shakya, Rajiv Saxena and S. N. Sharma, "Improved Exon Prediction with Transforms by De-Noising Period-3 Measure," *Digital Signal Processing (Elsevier)*, vol. 23, no. 2, pp. 499-505, March 2013, ISSN: 1051-2004, **SCI Indexed Journal, Impact Factor: 2.871**.
11. D. K. Shakya, Rajiv Saxena and S. N. Sharma, "A DSP-Based Approach for Gene Prediction in Eukaryotic Genes," *International Journal on Electrical Engineering and Informatics (Scopus Index Journal)*, vol.3, no. 4, pp. 480-487, December, 2011, ISSN: 2085-6830, **Impact Factor: 0.48**.
12. D. K. Shakya, Rajiv Saxena and S. N. Sharma, "Identification of Eukaryotic Genes with Improved Noise Suppression," *International Journal of Signal Processing, Image Processing and Pattern Recognition (Scopus Index Journal)*, vol. 4, no. 2, pp. 1-6, June, 2011, ISSN: 2005-4254.

Conference Papers

4. Yaspal Yadav, S. N. Sharma and **D. K. Shakya**, "Evaluation of Different Mapping Schemes for Detection of Tandem Repeats in DNA Sequences," *International Conference on Machine Intelligence and Smart Systems (MISS2023)*, SRIIT, Gwalior, India, pp., February 24-25, 2023. (**Springer/Scopus Indexed**)
5. Yaspal Yadav, S. N. Sharma and **D. K. Shakya**, "Detection of Protein Coding Regions Using Fast Short Time Ramanujan Periodicity Transform," *2022 IEEE 6th Conference on Information and Communication Technology (CICT)*, IIITM, Gwalior, India, pp.1-6, November 17-18, 2022. **ISBN: 978-1-6654-7312-5. doi: 10.1109/CICT56698.2022.9997899.**
6. Sumeet Dhillon, Nischol Mishra and **D.K.Shakya**, "Application of IoT and Various attacks on IoT," 7th International Conference on Soft Computing: Theories and Applications (SoCTA), Himachal Pradesh University, Shimla, India, pp.699-713, December 16-18, 2022. (**Springer/Scopus Indexed**) **ISBN: 8-981-19-9858-4 (eBook)** <https://doi.org/10.1007/978-981-19-9858-4>
7. Sumeet Dhillon, Nischol Mishra and **D.K.Shakya**, "Deep Learning Model to Detect HTTP Based Attack on Internet of Things," 4th International Conference on Data, Engineering and Applications, RGPV, Bhopal, India, pp. , December 23-24, 2022. (**Springer/Scopus Indexed**)
8. Asmita Yadav and **D. K. Shakya**, "Digital Filtering Approach for Prediction of Hotspot Location Using Nucleotide Sequences of Protein," *IET Technical Supported International Conference on Signal Processing*, Samrat Ashok Technological Institute, Vidisha, India, pp. 108-113, November 7-9, 2016. **ISBN: 978-1-78561-783-6**

9. Swati Soni and **D. K. Shakya**, "Identification of Protein coding regions and CpG Island in DNA sequence using LabVIEW," *IET Technical Supported International Conference on Signal Processing*, Samrat Ashok Technological Institute, Vidisha, India, pp. 75-81, November 7-9, 2016. **ISBN** : 978-1-78561-783-6
10. Vishal Kumar Shivhare, S .N. Sharma and **D. K. Shakya**, "Detection of Heart Sound S1 and S2 Using Optimized S-Transform and Back-Propagation Algorithm," *IEEE Bombay Section Symposium*, Usha Mittal Institute of Technology, Mumbai, India, pp.1-6, September 10-11, 2015. **ISBN**: 978-1-4673-9542-7. **SCOPUS**
11. Sourabh Yadav, S. N. Sharma and **D. K. Shakya**, "Classification of Exons and Introns by Time-Frequency Analysis using Neural Network," *Proc. of National Conference on Advances in Mathematics and its Applications*, **NIT, Hamirpur**, India, pp.276-281, June 25-27, 2013. **ISBN**: 978-93-83083-22-0.
12. S. D. Sharma, **D. K. Shakya** and S. N. Sharma, "Evaluation of DNA Mapping Schemes for Exon Detection," *IEEE International Conference on Computer, Communication and Electrical Technology*, Tirunelveli, India, pp.71-74, March 18-19, 2011. **ISBN**: 978-1-4244-9394-4. **SCOPUS**
13. **D. K. Shakya**, Rajiv Saxena and S. N. Sharma, "A Simple Algorithm for Gene Prediction with Improved Noise Suppression," *Proceedings of the 10th IEEE International Conference on Signal Processing*, Beijing, China, pp.1765-1768, October 24-28, 2010. **ISBN**: 978-1-4244-5898-1. **SCOPUS**
14. **D. K. Shakya**, Rajiv Saxena and S. N. Sharma, "A DFT-Based Algorithm for Gene Prediction with Better 1/f Noise Suppression," *1st IFIP International Conference on Bioinformatics*, Surat, India, March 25-28, 2010.
15. **D. K. Shakya** and Ajeet Jain, "The Right UNIX Shell-A User Perspective", *11th Annual Conference of Vijnana Parishad of India*, Agra, March 2005.

Date:

Dr. Devendra Kumar Shakya