

CURRICULUM VITAE



Dr. Yadunath Pathak,
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OBJECTIVE:

I am avid to work in cutting-edge research and teaching environment with a leading organization in the team of committed and dedicated people who can make a meaningful contribution to the organization and my carrier as well.

EDUCATIONAL QUALIFICATIONS:

Qualification	University/Board	Name of the college	Year of Passing
Ph.D. (Computer Science &Engineering)	Atal Bihari Vajpayee Indian Institute of Information Technology and Management	ABV-IIITM	21-06-2019
M.Tech (Computer Science &Engineering)	Atal Bihari Vajpayee Indian Institute of Information Technology and Management	ABV-IIITM	2014
B.E. (Information Technology)	RGPV-Bhopal, (MP)	LNCT-Bhopal	2009
Intermediate (P.C.M)	M.P. Board Bhopal	B.S.M.H.S Gwalior, (MP)	2004
10th	M.P. Board Bhopal	N.C.H.S Gwalior, (MP)	2001

WORK EXPERIENCE:

Organization	Post and Nature of experience	Duration		Experience		Permanent/ Temporary/ Contract/
		From	To	Y	M	
Maulana Azad National Institute of Technology, Bhopal (MANIT)	Ass.Prof	23/01/2024	Till date			Regular
VISVESVARAYA NATIONAL INSTITUTE OF TECHNOLOGY NAGPUR(VNIT)	Ass.Prof	24/06/2022	22/01/2024	1	7	Regular
Indian Institute of Information Technology, Bhopal(IIT)	Ass.Prof	10/07/2019	23/06/2022	2	5	Contract
Lecturer at B.V.M.College of technology and Management	Lecturer	10/07/2009	15/07/2012	3	0	Regular

RESEARCH PUBLICATIONS:**SCI/SCIE JOURNALS (12):**

- [1]. **Y. Pathak**, P. K. Shukla, K.V. Arya, “Deep bidirectional classification model for COVID-19 disease infected patients”, **IEEE/ACM Transactions on Computational Biology and Bioinformatics**, Vol. 18, no. 4, pp. 1234-1241, 1 July-Aug. 2021. **SCI Impact Factor 3.71**
- [2]. **Y. Pathak**, P. K. Shukla, A. Tiwari, S. Stalin, S. Singh, Piyush K. Shukla, “Deep Transfer Learning based Classification Model for COVID-19 Disease”, **IRBM-Elsevier**, **SCI Impact Factor 1.86**, Vol. 43, no. 2, pp. 87-92, 2022.
- [3]. S. Shekhar, D.K. Sharma, D.K. Agarwal, **Y. Pathak**, “Artificial Immune Systems-Based Classification Model for Code-Mixed Social Media Data”, **IRBM-Elsevier**, **SCI Impact Factor 1.86**, Vol. 43, no. 2, pp. 120-129, 2022.
- [4]. **Y. Pathak**, K.V. Arya and S.Tiwari, “Feature Selection for Image Steganalysis using Levy Flight-based Grey Wolf Optimization”, **Multimedia Tools and Applications –Springer**, **SCI Impact Factor 2.75**, Vol. 78, no. 2, pp. 1473-1494, 2019.
- [5]. **Y. Pathak**, K.V. Arya and S.Tiwari, “Efficient image reconstruction using Fourth order partial derivatives based guided image filter”, **Multimedia Tools and Applications –Springer**, **SCI. Impact Factor 2.75**, Vol. 78, no. 11, pp. 14733-14752, 2019.
- [6]. **Y. Pathak**, K.V. Arya and S.Tiwari, “Fourth Order Partial Differential Equations Based Anisotropic

- Diffusion Model for Low-Dose CT Images,” *Modern Physics Letter-B – World Scientific*, **SCI Impact Factor 1.66**, Vol. 32, no. 14, pp. 1850148-18, 2018.
- [7]. **Y. Pathak**, K.V. Arya and S. Tiwari, “Low-dose CT image reconstruction using gain intervention-based dictionary learning”, *Modern Physics Letter-B – World Scientific*, **SCI Impact Factor 1.66**, Vol.32, no. 25, pp. 1850300-26, 2018.
- [8]. S. Tiwari, K. Kaur, **Y. Pathak**, and S. Shivani, “Computed Tomography Reconstruction on Distributed Storage using Hybrid Regularization Approach,” *Modern Physics Letter-B – World Scientific*, **SCI Impact Factor 1.66**, Vol. 33, no. 06, pp. 1950063, 2019.
- [9]. V. P. Singh, R. Srivastava, **Y. Pathak**, S. Tiwari, K. Kaur, “Content-based image retrieval based on supervised learning and statistical-based moments”, *Modern Physics Letter-B – World Scientific*, **SCI Impact Factor 1.66**, Vol. 33, no. 19, pp. 1950213, 2019.
- [10]. **Y. Pathak**, P. S. Rana, P. K. Singh and M. Saraswat, “Protein structure prediction (RMSD ≤ 5) using machine learning models”, *International Journal of Data Mining and Bioinformatics (Int J Data Min Bioinformatics)*, **SCI Impact Factor 0.624**, Vol. 14, no. 1, 2016.
- [11]. Prashant Kuma Shukla, Piyush Kumar Shukla, Mukta Bhatele, Anoop Kumar Chaturvedi, Poonam Sharma, Murtaza Abbas Rizvi and **Yadunath Pathak**, “A Novel Machine Learning Model to Predict the Staying Time of International Migrants”, *International Journal on Artificial Intelligence Tools*, **SCI Impact Factor 1.66**, Vol.30, no. 2, pp. 2150002, 2021.
- [12]. Robin Singh Bhadoria, Sovan Samanta, **Yadunath Pathak**, Piyush Kumar Shukla, Ahmad Ali Zubi & Manjit Kaur, “Bunch graph based dimensionality reduction using auto-encoder for character recognition”, *Multimedia Tools and Applications –Springer*, **SCI Impact Factor 2.75**, 12 April 2022, DOI : <https://doi.org/10.1007/s11042-022-12907-y>

NON-SCI JOURNALS (1):

1. Sonal Mishra, **Yadunath Pathak**, Anamika Ahirwar, “Classification of Protein Structure (RMSD ≤ 6 Å) using physicochemical properties”, *International Journal of Bio-Science and Bio-Technology*, Vol. 7, no. 6, pp. 141-150, 2015. [Scopus]
2. **Y. Pathak**, K. Sharma, K. Singh, P. S. Rana, “Performance Study of Evolutionary Algorithms for Structure stability analysis of Al_n (n=2-22)”, *Journal of QUANTUM MATTER - American Scientific Publishers*, Vol. 5, no. 3, pp. 322-329.

CONFERENCES:

1. **Y. Pathak**, Dheeraj Agarwal, Shailendra Tiwari, Manju Khurana, “CT Image Reconstruction using Fourth-order PDE based AD Regularization,” 2019 **Fifth International Conference on Image Information Processing (ICIIP)**, pp.161-166, 2019.
2. **Y. Pathak**, K.V. Arya and S. Tiwari, “Regularization based Modified SART Iterative Method for CT Image Reconstruction”, 9th International Conference on the Developments on eSystems Engineering, (DeSE-2016), Liverpool and Leeds, U.K. (**Indexed in Scopus, DBLP**) **IEEE Computer Society Conference Publication Services (CPS)**.

PATENTS:

1. **Y. Pathak**, P. Lalwani, D. K. Agrawal, A. Aggarwal, S. Tiwari, “**IMAGE/VIDEO DEFOGGING METHOD**”, Indian, Application No.201921046007 A, Date of filing of Application :12/11/2019, Publication Date : 07/02/2020.
2. D. Singh, M. Kaur, **Y. Pathak**, B. Kumar, “**OBJECT RECOGNITION DEVICE FOR VISUAL IMPAIRED PERSONS**”, Indian, Application No.201911044737 A, Date of filing of Application :04/11/2019, Publication Date: 29/05/2020.

BOOKS:

Parag Chatterjee, Robin Singh Bhadoria and **Yadunath Pathak**, “**5G and Beyond The Future of IoT**,” **CRC-Press, 2021**, ISBN 9780367493295.

BOOK CHAPTERS:

1. Rachit Jain, Robin Singh Bhadoria, Neha Sharma, **Yadunath Pathak**, Varun Mishra, “Distributed MIMO Network for 5G Mobile Communication,” CRC-Press, 2020, eBook ISBN9781003096450.
2. Jasmininder Kaur Sandhu, Prateek Srivastava, **Yadunath Pathak**, Meena Pundir, “Intelligence and Security in 5G - Oriented Internet of Things,” CRC-Press, 2021, ISBN 9780367493295

Workshop/ Conference/Seminar Organized:

- [1] **Five Days Online Workshop** on Machine Learning and Its Significance, 5th -9th April 2021, Organized at Indian Institute Of Information Technology, Bhopal.

AREAS OF INTEREST:

- ✓ Database Management System (DBMS).
- ✓ Automata Theory.
- ✓ Computer Networks.
- ✓ Digital Image Processing.
- ✓ Machine Learning

ACHIEVEMENTS:

- Worked as GATE faculty and took classes at various Institute and Universities across the India. More than 150 hours video lecture content is available in YouTube.
https://www.youtube.com/watch?v=BnLDm4FRo54&list=PLir19lgiaVA0B5111KZP-R2PYM_8jF8By
https://www.youtube.com/results?search_query=computer+network+by+yadunath+pathak
- Qualified GATE 2012 with **98.8 percentile**.
- Delivered lecture on Database Management System (DBMS) in **BIT Raipur** 23rd Feb 2019.
- Delivered lecture on Database Management System (DBMS) in **LNCT Bhopal** 11th Feb 2019.
- Delivered lecture on Database Management System (DBMS) **Thapar University Patiala** 30th Oct 2018.
- Delivered lecture on Database Management System (DBMS) and Computer Network in **MITS Gwalior** September 2018.
- One day workshop on “Data mining and Machine Learning using R” for M-Tech Students at ABV-IIITM. [January 2014]

EXTRA CURRICULAR ACTIVITIES:

- N.C.C. ‘A’ & ‘B’ certificates.
- Associated with Student Gyan Movement (SGM), an initiative by ABV-IIITM students to teach Government school students of nearby location in Gwalior.

TECHNICAL SKILLS:

Languages	: C.
Platforms	: Windows, Linux, Mac.
Packages	: MSOffice, Open-Office
Tools	: MATLAB, NS2, etc.

Ph.D. Research Area: Medical Image Reconstruction,

Thesis Title : Efficient Methods For Low-Dose Computed Tomography Image Reconstruction.

Institute : Atal Bihari Vajpayee Indian Institute of Information Technology and Management (ABV-IIITM, Gwalior).

Supervisor : Dr. K. V. Arya (Professor)

PERSONAL DETAILS:

Father's Name	:	Late. Sh. Ashok Pathak.
Mother's Name	:	Smt. Mithesh Pathak
Date of Birth	:	24-01-1986
Marital Status	:	Married
Permanent Address	:	Meera Nagar Murar near Ram Janki Mandir, Gwalior.
Nationality	:	Indian
Hobbies	:	Learning new things, visiting new places.
Working language	:	English & Hindi.

DECLARATION

I hereby declare that the above-furnished information is true and correct to the best of my knowledge and belief.

Place: Bhopal

Date: -----



(Yadunath Pathak)