


CONTACT INFORMATION	Department of Computer Science and Engineering Indian Institute of Information Technology Bhagalpur Sabour, Bhagalpur - 813210 Bihar, India	Research Coordinates:      Homepage: <a href="https://pvb1304.github.io">pvb1304.github.io</a>  Email: <a href="mailto:pvishnu1304[at]gmail.com">pvishnu1304[at]gmail.com</a> <a href="mailto:bayari.1[at]iitj.ac.in">bayari.1[at]iitj.ac.in</a>
RESEARCH INTERESTS	Multimedia Security Multimedia Forensics AI Security Image and Video Processing Medical Informatics	
PROFESSIONAL EXPERIENCE	<b>Guest Faculty</b> , Department of Computer Science and Engineering Indian Institute of Information Technology Bhagalpur	Apr 2026 – till date Bhagalpur
EDUCATION	<b>M.Tech. – Ph.D.</b> in Data and Computational Sciences Indian Institute of Technology Jodhpur Advisor(s): <a href="#">Dr. Gaurav Bhatnagar</a> and <a href="#">Dr. Chiranjoy Chattopadhyay</a> Thesis Title: Secure Odyssey: Advancing the Frontiers of Data Security in Smart Healthcare <b>Thesis Submitted:</b> Jan 2026	Jul 2019 – till date CGPA : 8.21
	<b>B.Tech.</b> in Computer Engineering Indian Institute of Information Technology, Design and Manufacturing, Kancheepuram Advisor: <a href="#">Dr. Sivaselvan Balasubramanian</a> Project Title: A Novel Frequent Pattern based Outlier Mining Algorithm	Aug 2014 – May 2018 CGPA : 7.94
RESEARCH VISITS & INTERNSHIPS	<b>Visit @ Anveshan Setu Fellowship</b> Indian Institute of Technology Bombay Mentor: <a href="#">Dr. Pushpak Bhattacharyya</a> – Worked on Safeguarding Intellectual Property Rights of Deep Learning Models	Jun 2023 – Jul 2023 Mumbai
	<b>Summer Intern</b> Interface Design Associates Pvt. Ltd. Mentor: <a href="#">Dr. Balakrishnan Vaidyanathan</a> – Developed Image processing based programming for lathe machine (Industry 4.0) – Created and integrated OpenGL graphics for PC based CNC machine software	May 2017 – Oct 2017 Navi Mumbai

## Publications

PATENTS	[P01] Yashmita Sangwan, <b>Parkala Vishnu Bharadwaj Bayari</b> , Gaurav Bhatnagar, and Vishakha Pareek. SecQR: A Visual Secret Sharing Scheme for QR Codes. (Under Preparation)
JOURNALS	[J05] <b>Parkala Vishnu Bharadwaj Bayari</b> , Nishtha Tomar, Gaurav Bhatnagar, and Chiranjoy Chattopadhyay. Watermarking Protocol Inspired Kidney Stone Segmentation in IoMT. <i>IEEE Journal of Biomedical and Health Informatics</i> , vol. 30, no. 2, pp. 828-838, 2026. 
	[J04] Nishtha Tomar, <b>Parkala Vishnu Bharadwaj Bayari</b> , and Gaurav Bhatnagar. SBTd: Secured Brain Tumor Detection in IoMT Enabled Smart Healthcare. <i>IEEE Journal of Biomedical and Health Informatics</i> , vol. 30, no. 1, pp. 39-50, 2026. 
	[J03] <b>Parkala Vishnu Bharadwaj Bayari</b> , Gaurav Bhatnagar, and Chiranjoy Chattopadhyay. SecureNet: A deep learning inspired security framework for healthcare data. <i>Computers and Electrical Engineering</i> , 128:110723, 2025. 
	[J02] <b>Parkala Vishnu Bharadwaj Bayari</b> , Yashmita Sangwan, Gaurav Bhatnagar, and Chiranjoy Chattopadhyay. A Novel Chaotic Map and Its Application to Secure Transmission of Multimodal Images. <i>IEEE Transactions on Computational Social Systems</i> , vol. 12, no. 5, pp. 3765-3777, 2025. 
	[J01] <b>Parkala Vishnu Bharadwaj Bayari</b> , Apoorva Lakshman, Gaurav Bhatnagar and Chiranjoy Chattopadhyay. A Novel Security Framework for Medical Data in IoT Ecosystems. <i>IEEE MultiMedia</i> , vol. 29, no. 2, pp. 34-44, 2022. 
CONFERENCES	[C03] Harimohan Sharma, <b>Parkala Vishnu Bharadwaj Bayari</b> , and Gaurav Bhatnagar. A Chaotic Image

Encryption Algorithm for Industrial IoT Environments. (Under Preparation)

- [C02] Yashmita Sangwan, **Parkala Vishnu Bharadwaj Bayari**, and Gaurav Bhatnagar. A Modified Logistic Map Inspired Image Encryption Scheme. *2023 IEEE 6th International Conference on Multimedia Information Processing and Retrieval (MIPR)*, Singapore, 2023, pp. 1-6. [doi](#)
- [C01] Apoorva Lakshman, **Parkala Vishnu Bharadwaj Bayari**, and Gaurav Bhatnagar. A Novel Logo-Inspired Chaotic Random Number Generator. *Proceedings of the Academia-Industry Consortium for Data Science*. Springer Nature Singapore, pp. 297–306, 2022. [doi](#)

BOOK CHAPTERS [B01] **Parkala Vishnu Bharadwaj Bayari**, Gaurav Bhatnagar, and Chiranjoy Chattopadhyay. A comprehensive study on the security of medical information using encryption. *Medical Information Processing and Security: Techniques and applications*, IET, pp. 229-260, 2022. [doi](#)

## Awards, Grants, Achievements & Memberships

AWARDS, GRANTS, & ACHIEVEMENTS	ACM India Travel Grant (INR 6000) for ACM ARCS 2026, IIT Hyderabad	2026
	Selected for AI @ Walmart (in-person), Walmart Global Tech, Bengaluru	2023
	<b>Chairperson</b> , ACM Student Chapter IIT Jodhpur	2022 – 2023
	<b>ACM India Anveshan Setu Fellowship</b> Recipient	2021
	Received Ministry of Education (MoE) Scholarship for Postgraduate Education	2019 – 2024
	Qualified Graduate Aptitude Test in Engineering (CS)	2019
	IKDD CODS Travel Grant (INR 4000) for CODS 2017 (co-located with COMAD 2017), IIT Madras	2017
	Secured First position in Algorithm Design Competition at Clustervents, IIITDM Kancheepuram	2017
	Qualified Joint Entrance Examination Advanced	2014
	Qualified Joint Entrance Examination Main	2014
MEMBERSHIPS	IEEE Graduate Student Member	2026 – till date
	ACM Student Member	2022 – 2024

## Professional Services

JOURNAL	Reviewer, Journal of Big Data	
REFEREE SERVICE	Reviewer, Scientific Reports	
	Reviewer, Journal of Supercomputing	
	Sub Reviewer, IEEE Transactions on Industrial Informatics	
	Sub Reviewer, IEEE Transactions on Dependable and Secure Computing	
	Sub Reviewer, ACM Transactions on Multimedia Computing, Communications, and Applications	
	Sub Reviewer, Transactions on Emerging Telecommunications Technologies	
CONFERENCE	Reviewer, IEEE International Conference on Multimedia Information Processing and Retrieval (MIPR)	2026
REFEREE SERVICE	Reviewer, International Conference on Pattern Recognition and Machine Intelligence (PreMI)	2025
	Reviewer, International Conference on Computer Vision and Image Processing (CVIP)	2025
	Reviewer, IEEE International Conference on Multimedia Information Processing and Retrieval (MIPR)	2025
	Sub Reviewer, IEEE International Conference on Multimedia and Expo (ICME)	2026
	Sub Reviewer, IEEE India Council International Conference (INDICON)	2023
	Sub Reviewer, IEEE International Conference on Systems, Man, and Cybernetics (SMC)	2023
OTHERS	Volunteer, Symposium on Advanced Mathematical Modelling and Computing (SAMMC)	2023
	Volunteer, National Conference on Technology and Innovation in Mathematics Education (TIME)	2023

## Outreach Services

TALKS DELIVERED	Delivered a talk on ‘Fun With Cryptography’ at Hour of Code organized by ACM Student Chapter, IIT Jodhpur for Kendriya Vidyalaya students	2022
MISCELLANEOUS	<b>Chairperson</b> , ACM Student Chapter IIT Jodhpur	2022 – 2023
	Led chapter operations, overseeing activities and execution in alignment with ACM policies and bylaws. Coordinated committees, budgets, and events, ensuring smooth functioning and active member participation.	
	– Organized <a href="#">Hour of Code</a> outreach event for students of Kendriya Vidyalaya, IIT Jodhpur	2022
	– Organized ICPC-style programming competitions at JIET, MAU, and MBM University, Jodhpur	2023

- Organized a webinar on ‘Getting started with ML Research’ 2023
- Organized **Mahalanobis Talk Series** featuring expert talks on emerging computing domains. 2023

## Mentorship & Teaching

MENTORSHIP EXPERIENCE	Collaborated with students on multiple Master’s thesis projects, IIT Jodhpur	2020 – 2025
TEACHING ASSISTANT EXPERIENCE	Helped teach various graduate and undergraduate level courses by designing and evaluating exams, assignments, and projects; conducted tutorial and lab sessions.	
	Matrix Computation Offered To: M.Tech., Ph.D.	MAL7022 Fall 2020
	Optimization Offered To: M.Tech., Ph.D.	MAL7023 Fall 2020
	Real Analysis (M1) Offered To: B.Tech.	MAL1010 Spring 2021
	Data Structures and Algorithms Offered To: M.Sc.	MAP5010 Spring 2021
	Probability, Statistics and Stochastic Processes Offered To: B.Tech.	MAL2010 Fall 2022, 2021
	Statistics for Data Science Offered To: Executive M.Tech. DCS	MAL7060 Fall 2022, 2021
	Machine Learning Offered To: Executive M.Tech. DCS	CSL7020 Spring 2022
	Linear Algebra and Differential Equations (M2) Offered To: B.Tech.	MAL1020 Spring 2022
	Numerical Analysis Offered To: M.Sc., Ph.D.	MAL7360 Spring 2023
	Graph Theory and Applications Offered To: Executive M.Tech. DCS	CSL7410 Summer 2024, 2023
	Introduction to Data Science Offered To: M.Tech., B.Tech.	MAL7011 Fall 2023
	Introduction to Data Science Offered To: Executive M.Tech. DCS	MAL7011 Fall 2023
	Data Analytics Lab Offered To: Executive M.Tech. DCS	MAP7010 Spring 2025, 2024
	Fundamentals of Data Science Offered To: PG Diploma in Data Engineering	AIL7480 Summer 2025, Fall 2024, Spring 2024

## Miscellaneous

TECHNICAL SKILLS	Programming	Python, C/C++, Matlab, R
	ML Tools	PyTorch, Keras, Tensorflow
	Software Tools	Visual Studio, Eclipse, SmartDraw, L <sup>A</sup> T <sub>E</sub> X
	Frameworks	MySQL, OpenGL, Git

RELEVANT COURSES & CERTIFICATIONS	Artificial Intelligence
	Machine Learning
	Deep Learning
	Cryptography and Network Security (NPTEL)
	Information Security (NPTEL)
	Cloud Computing (NPTEL)

REFERENCES

**Dr. Gaurav Bhatnagar** (Email: [goravb@iitj.ac.in](mailto:goravb@iitj.ac.in))  
Professor, Department of Mathematics, IIT Jodhpur

**Dr. Chiranjoy Chattopadhyay** (Email: [chiranjoy.chattopadhyay@flame.edu.in](mailto:chiranjoy.chattopadhyay@flame.edu.in))  
Associate Professor, School of Computing and Data Sciences, FLAME University

**Dr. Anil Kumar Tiwari** (Email: [akt@iitj.ac.in](mailto:akt@iitj.ac.in))  
Professor, School of Artificial Intelligence & Data Science, IIT Jodhpur