PROFORMA FOR BIO-DATA

1.	Name, Designation, and full correspondence address	Dr. Surendra Singh, *Assistant Professor, Grade-I*, Dept. of CSE, MANIT Bhopal, (MP)-462051
2.	Email(s) and contact number(s)	surendra@manit.ac.in
3.	Institution	Maulana Azad National Institute of Technology Bhopal (MP)
4.	Gender (M/F/T)	Male
5.	Category Gen/SC/ST/OBC	UR
6.	Whether differently abled (Yes/No)	No

7. Academic Qualification (Undergraduate Onwards)

S. No.	Degree	Year	Subject	University/Institution	% of marks
1.	Ph.D.	2020	Design of security-aware packet scheduling techniques	IIT(ISM) Dhanbad	07.50 CGPA
2.	M.Tech.	2014	Software Engineering	MNNIT Allahabad	08.17 CGPA
3.	B.E.	2008	Information Technology	JEC Jabalpur	71.78 %

8. Ph.D. thesis title: **Design of Security Aware Packet Scheduling Techniques**
   Guide's Name: **Prof. Sachin Tripathi**,
   Institute/Organization/University: **Indian Institute of Technology (ISM) Dhanbad, Jharkhand**
   Year of Award: **29th September 2020**.

9. Work experience (in chronological order)

S. No.	Positions held	Name of the Institute	From	To	Pay Scale
01.	Assistant Professor, Gr-I	MANIT Bhopal	22/01/2025	Till Date	1,01,500/- Level 12(1)
02.	Assistant Professor, Gr-II, (on-lien)	NIT Uttarakhand	30/07/2014	21/01/2025	79,800/-, Level 10(12)

10. Professional Recognition/ Award/ Prize/ Certificate, Fellowship received by the applicant.

S. No	Name of Award	Awarding Agency	Year
01.	Visveswaraya PhD Fellowship	Ministry of Electronics and Information Technology	2020

11. PhD supervised/Ongoing:

S. No	Name of Candidate	Thesis Title	Year	Status	Supervisors
01.	Manvi Sharma	The "Anthropocene" In Indian Popular Culture: Exploring Ecological Perspectives and Responses	2024	Awarded	Dr. A. K. Choubey, JCU Ballia (UP) (Co-Supervisor)
02.	Kavi Bhushan	Design And Implementation of Finger Vein(S) Based Biometric Authentication System	2025	Awarded	Dr. Kamal Kumar, IGDTUW Delhi, (Co-Supervisor) and Dr. Parveen Kumar, NIT Kurukshetra, (Co-Supervisor)
03.	Ajeet K Bhartee	Design And Development of Intelligent Traffic Light Scheduling for Future Cities	2021	Ongoing	Dr. Maroti Deshmukh, NIT Uttarakhand, (Co-Supervisor)
04.	Rahul K Govind	Energy Optimization and Task Scheduling in Multiprocessor Real Time System	2022	Ongoing	Dr. Maroti Deshmukh, NIT Uttarakhand, (Co-Supervisor)
05.	Priyanka Belwal	Multiple Sclerosis Disease Diagnosis Using Machine Learning Techniques In MRI Dataset	2022	Ongoing	Dr. Maroti Deshmukh, NIT Uttarakhand, (Co-Supervisor)
06.	Vinay Prasad Tamta	Improvising The Drug Design Process Based on Deep Neural Networks	2022	Ongoing	Dr. Sneha Chauhan, NIT Uttarakhand, (Supervisor)
07.	Rajesh Singh	Skin cancer disease detection using AI and ML techniques	2025	Ongoing	Prof. R. K. Pateriya, MANIT Bhopal, (Supervisor)
08.	Umesh Nayak	Cyberattack Attribution Using Digital Forensic Techniques and Machine Learning	2025	Ongoing	Prof. Deepak Singh Tomar, MANIT Bhopal, (Supervisor)
09.	Mrs. Harshita Shukla	Blockchain based secure group decision making for healthcare applications	2025	Ongoing	Dr. Manisha Singh, MANIT Bhopal (Supervisor)
10.	Mrs. Jagrati	Secure group decision making involving heterogeneous decision makers	2025	Ongoing	Dr. Manisha Singh, MANIT Bhopal (Supervisor)

12. Publications *(List of papers published in SCI Journals, in year-wise descending order).*

S. No.	Author(s)	Title	Journal	Volume	Page	Year	IF/SCI
01.	D. Agrawal, M. Deshmukh **and S. Singh**	A dual-modality deep learning approach for fine-grained sentiment analysis using speech and text	Knowledge-Based Systems	334	1151 41	2025	7.60, SCIE
02.	K. Bhushan, **S. Singh**	Deep Learning Based Automated Vein Recognition Using Swin Transformer and Super Graph Glue Model	Knowledge-Based Systems	310	1129 29	2025	7.60, SCIE
03.	Priyanka Belwal and **S. Singh**	Deep Learning Techniques for Multiple Sclerosis Detection through MRI: **A Systematic Literature Review**	Computers in Biology and Medicine	185	1095 30	2024	7.0, SCIE
04.	**S. Singh (Single Author)**	Energy efficient Security Driven Scheduling of Real-Time Tasks using DVS-enabled Fog Networks	Simulation Modelling Practice and Theory	134	1029 41	2024	4.92, SCIE
05.	**S. Singh (Single Author)**	**A systematic review** on security aware real-time task scheduling	Sustainable Computing: Informatics and Systems	38	1008 72	2023	5.70, SCIE
06.	**S. Singh,** Sheetal Pal	SDTS: Security Driven Task Scheduling algorithm for Real-Time Applications using Fog Computing	IETE Journal of Research	69	6977-6996	2021	2.33, SCIE
07.	**S. Singh, et al.**	Security aware dynamic scheduling algorithm for real-time applications on grid (SADSA)	Cluster Computing	23	989-1005	2019	4.40, SCIE
08.	**S. Singh,** and Sachin Tripathi	SLOPE: Secure and Load Optimized Packet scheduling model in a grid Environment	Journal of System Architecture	91	41-52	2018	4.50, SCI
09.	**S. Singh,** and Sachin Tripathi	An enhanced security aware dynamic packet scheduling scheme for wireless networks using intelligence time slice krill herd algorithm	Journal of Electromagnetic Waves and Applications	32	2135-2156	2018	1.43, SCIE
10.	Nitin Kumar, **S. Singh**, et al.	Random permutation principal component analysis for cancelable biometric recognition	Applied Intelligence	48	2824-2836	2018	5.30, SCIE

13. Detail of Projects

S. No.	Title	Sponsored Agency	Amount	Year of Section	Year of Complete	Role
01.	Development and analysis of cancellable biometric template generation for identification	UCOST, Dehradun	02.09 Lakhs	2018	2020	Co-PI
02.	Real-Time Traffic Management & Control Systems using Cutting-Edge Technologies	MANIT Bhopal, Seed Grant	05.00 Lakhs	2025	Ongoing	PI

14. International Conferences, Scopus/IEEE Indexed etc.

S. No	Title	Author's Name	Publisher	Year of Publication
01.	An Optimized CNN Model for Accurate and Fast Apple Leaf Disease Classification	Tejas Raj, Surendra Singh, Sneha Chauhan,	IC2E3	2025
02.	Depression Detection through Sentiment Analysis using Multi-layer BiLSTM Networks	Divya Agrawal, Maroti Deshmukh, and Surendra Singh	ICCCNT	2025
03.	Optimizing Random Forest for Alzheimer's Disease Classification: A Transparent AI Approach	Arnav Dana, Maroti Deshmukh and Surendra Singh	CISCON	2025
04.	Real-Time Vehicle Traffic Density Estimation for Traffic Scheduling in Intelligent Transportation System	Ajeet K. Bhartee, Surendra Singh and Maroti Deshmukh	ICETTS	2025
05.	De Novo Drug Molecule Generation Using Fine-Tuned Generative Models on FDA-Approved Drugs	Vinay P. Tamta, Surendra Singh, et. al.	AIST	2025

S. No	Title	Author's Name	Publisher	Year
06.	An Adaptive Multi-Agent System for Real-Time, Priority-Based Traffic Regulation	Ajeet K. Bhartee, Surendra Singh and Maroti Deshmukh	RCSM Scopus Indexed	2025
07.	Dense Encoder and Attention-Enhanced U-Net for Multiple Sclerosis Lesion Segmentation in MRI	Priyanka Belwal, Surendra Singh and Maroti Deshmukh	RCSM Scopus Indexed	2025
08.	Multiple Sclerosis Lesion Segmentation using MRI: U-Net Approach	Priyanka Belwal and Surendra Singh	Elsevier (RTI2PR) Scopus Journal	2025
09.	U-Net Approach to MRI-Based Segmentation of Multiple Sclerosis Lesions	Priyanka Belwal and Surendra Singh	Elsevier (FTNCT) Scopus Journal	2025
10.	Finger vein recognition with channel spatial enhanced multiscale feature fusion deep convolutional neural network	K. Bhushan, **S. Singh**	RAIT 2025 IEEE	2024
11.	Smart Traffic Scheduling: A Real-time Adaptive Approach for Unified Intersections	Ajeet K. Bhartee, **S. Singh**	IC2E3 2024 IEEEE	2024
12.	A Review of Disease Detection in Sugarcane Using Machine Learning and Deep Learning Techniques	Undavalli Chandra Pavan; R.K Pateriya, Deepak Singh Tomar, and **S. Singh**	ICCNT 2024 IEEE	2024
13.	Utilization Based Secured Dynamic Scheduling Algorithm for Real-Time Applications on Grid (U-SDSA)	**S. Singh**, et al.	IEEE AINA-17	2017
14.	A study of training free salient object detection methods in the presence of noise	N. Kumar, **S. Singh**, et al.	IEEE	2017
15.	Improve real-time packet scheduling algorithm with security constraints.	**S. Singh**, et al.	IEEE	2014

15. Books/Reports/Chapters/General articles etc.

S. No	Title	Author's Name	Publisher	Year of Publication
01.	The Anthropocene in South Asian Popular Music: A Critical Examination of Papon's Waise Hi Rehna, Waise Hi Behna through an Ecomusicological Lens	Manvi, S., **Singh, S.**, A. K. Chaubey	Springer (Book Chapter)	2024
02.	Fog Intelligence for Energy Optimized Computation in Industry 4.0	A. Hazra, **S. Singh**, et al.	Springer (Book Chapter)	2023
03.	A Security-Driven Scheduling Model for Delay-Sensitive Tasks in Fog Networks	**S. Singh**, et al.	Springer Nature (Book Chapter)	2022
04.	Secured Dynamic Scheduling Algorithm for Real-Time Applications on Grid (SDSA)	**S. Singh**, et al.	LNCS, Springer (Book Chapter)	2016

16. Any other Information

   a) **Membership of Professional Societies:**
   - Life Member of Indian Science Congress Association (ISCA)
   - Life Member of Computer Society of India (CSI)
   - Senior Member IEEE
   - Fellow IETE
   - Member ACM

   b) **Expert Lectures Delivered:**
   - Delivered an Expert Talk on **IoT for Cloud and Grid Computing: Applications and Challenges** in **STC on Next Generation Cloud Computing (NGCC- 2025),** organized by NIT Kurukshetra, Haryana, 2025.
   - Delivered an Expert Talk on **Artificial intelligence in healthcare** in **five days online Short-Term Course (STC) on "Machine Learning for Cognitive Science and Medical Imaging (ML-CSMI 2025)"** organized by NIT Kurukshetra, Haryana, 2025.
   - Delivered an Expert Talk on (Internet browsing. ChatGPT., Meta Al, Cyber security and Cyber safety) dated 01st December 2025 in **"Samskara-PG Induction Programme on Transitional Curriculum",** organized by **Pt. Khushilal Sharma Govt. (Auto.) Ayurveda College & Institute** Bhopal, **2025.**
   - Delivered an Expert Talk on (Multimedia and Internet uses) dated 27th November 2025 in **"Technology in Prison"** organized by **Jail Mukhyaalay Bhopal (MP), 2025.**

- Delivered an Expert Talk in the online FDP on **"Malware Analysis with Data Science", Jointly organized** by Electronics & ICT Academy and **NIT Patna, 2025.**
- Session Chair in **1st IEEE International Conference** on **Recent Trends in Computing and Smart Mobility (RCSM-2025)** from 05th December to 06th December 2025 **Organized by** MANIT Bhopal (MP).
- Session Chair in **10th International Conference on Internet of Things and Connected Technologies (ICIoTCT) 2025** from 18th December to 19th December 2025 **Organized by** MANIT Bhopal (MP).
- Recruitment Panellist at MPSeDc, State IT Centre, Bhopal for **Senior Software Developer – MERN** recruitment on **19th December 2025.**
- Recruitment Panellist at MPSeDc, State IT Centre, Bhopal for **Sr. Software Developer Python & Tech Lead Python** recruitment on **02nd December 2025.**
- Visiting faculty at ABV-IIITM Gwalior for academic session Odd Semester 2020 to Even Semester 2022.
- Key speaker and session chair in 4th IEEE International Conference on Advances in Computing, Communication Control, and Networking, 2022 (ICAC3N-22), organized by Galgotias Educational Institutes, Noida, UP, India.
- Session Chair in 2nd International Conference on Innovative Sustainable Computational Technologies (CIST-2022), organized by Graphic Era (Deemed to be University), Dehradun, India.
- An expert lecture on "Flipped and blended classroom learning methods" in a two-week AICTE-ISTE sponsored online induction programme, 2021, organized by MSIT, Delhi, India.
- An expert lecture on Science and Maths for faculty members at the Department of Education, Pauri, Garhwal on 12th March 2019.
- Department of Computer Science and Engineering, Institute of Technology, Gopeshwar, Chamoli**, *Uttarakhand,* October 15-16**, **2019**.
- An expert lecture on IoT applications in Industry 4.0 in 05 days STTP organized by Dept. of CSE, NIT Uttarakhand.

c) **Administrative Experiences:**
- Member, DPGC of Department of CSE, **MANIT Bhopal from 23/01/2025 till date.**
- Head, Central Computer Centre, NIT Uttarakhand **[02/03/2022 to 15/01/2025]**
- Coordinator Video Conferencing & E-Classrooms, NIT Uttarakhand **[12/07/2018-22/04/2024]**
- Coordinator Central Computer Centre and E-Governance, NIT Uttarakhand **[03/06/2019-21/01/2025]**
- Lab In-Charge, Software, NIT Uttarakhand **[31/07/2014-21/01/2025]**
- Coordinator website and IT services, NIT Uttarakhand **[03/06/2019- 21/01/2025]**
- Convener DUGC and Member SUGB, NIT Uttarakhand **[07/08/2019 - 21/01/2025]**
- Chairman Grade Moderation Committee, NIT Uttarakhand **[07/08/2019 - 21/01/2025]**
- Coordinator NBA & NIRF, NIT Uttarakhand **[07/08/2019 to 11/11/2020]**
- Coordinator R&C Activities, NIT Uttarakhand **[07/08/2019 to 11/11/2020]**
- Coordinator UG Scholarship, NIT Uttarakhand **[12/07/2018 to 02/06/2019]**
- Faculty I/c, E-Classrooms, NIT Uttarakhand **[18/07/2016 to 23/07/2017]**
- Faculty I/c, E-Classrooms/Classrooms, NIT Uttarakhand **[24/07/2017 to 11/07/2018]**

d) **FDP/STTP/Workshops/Conferences Organized:**
- **International Conference** on **Recent Trends in Computing and Smart Mobility (RCSM-2025)** from 05th December to 06th December 2025 as **Organizing Finance Chair** sponsored by IEEE MP Section, SBI MANIT Bhopal and other at MANIT Bhopal (MP).
- **International Conference** on **Computer, Electronics and Electrical Engineering and Their Applications (IC2E3-2025)** from 15th May 2025 to 16th May 2025 as **Organizing General Chair** sponsored by IEEE UP Chapter, SBI, and others at NIT Uttarakhand.
- **International Conference** on **Computer, Electronics and Electrical Engineering and Their Applications (IC2E3-2024)** from 06th Jun 2024 to 07th Jun 2024 as **Organizing Secretary** sponsored by IEEE UP Chapter, SBI, and others at NIT Uttarakhand.
- **International Conference** on **Computer, Electronics and Electrical Engineering and Their Applications (IC2E3-2023)** from 08th Jun 2023 to 09th Jun 2023 as **Organizing Secretary** sponsored by IEEE UP Chapter, SBI, and others at NIT Uttarakhand.

- **International Conference** on **Advances in Computing Applications (ICACA-18)** from 26th Feb 2018 to 27th Feb 2018 as **Organizing Chairman** *sponsored by IFERP, UCOST Dehradun, and NIT Uttarakhand.*
- Online FDP On **Next Generation Computing and Networking** from 08/03/2021 to 12/03/2021 as a **Coordinator** *sponsored by TEQIP-III and Organized by NIT Uttarakhand, Srinagar, Uttarakhand.*
- Online STTP on **Recent Advances in Artificial Intelligence** from 27/07/2020 to 31/07/2020 as a **Coordinator** *sponsored by TEQIP-III and Organized by NIT Uttarakhand, Srinagar, Uttarakhand.*
- STTP on **Artificial Intelligence and Sustainable Applications** from 18/03/2019 to 22/03/2019 as a **Coordinator** *sponsored by TEQIP-III and Organized by NIT Uttarakhand, Srinagar, Uttarakhand.*
- Workshop on **Antenna design, fabrication, and analysis** from 14/10/2019 to 18/10/2019 as a **Convenor** *sponsored by TEQIP-III and Organized by IT Gopeshwar, Srinagar, Uttarakhand.*
- Workshop on **Article and Thesis writing using LaTeX** from 25/01/2018 to 29/01/2018 as a **Coordinator** *sponsored and Organized by NIT **Uttarakhand.***

e) Reviewer Experience:
- Active reviewer of **Journal of Super Computing (SCIE)**
- Active reviewer of **Wireless and Personal Communication Journal (SCIE)**
- Active reviewer of **Multimedia Tools and Applications (SCIE)**
- Active reviewer of **IETE Journal of Research (SCIE)**
- Technical Program Committee member of more than 20+ International Conferences

Dr. Surendra Singh,
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