Curriculum Vitae

1. **Name: BINOD KUMAR SINGH**
2. **Designation:** Associate Professor,
   Dept. of Computer Science& Engineering

3. **E-mail:** bksingh.cse@nitjsr.ac.in, sbinod05@gmail.com
4. **Phone:** 0657-2374097

5. **Address for Communication:** Dept. of Computer Sc. & Engineering,
   NIT Jamshedpur

6. **Date of Birth:** 13th April 1971
7. **Areas of Interest:** Image Processing, Computerized Tomography(CT), Computer Networks, Network Security

8. **Educational Qualifications:**

Examination/Degree	Year	Subjects/Discipline	Institution/Board
Ph.D.	2016	Title – Comparative Study of Some Algorithms for Image Reconstruction	IIT ROORKEE
M. Tech.	2007	Computer Science & Engineering	IIT ROORKEE
B.E.	1995	Computer Science & Engineering	BIT Sindri (Vinoba Bhave University, Hazaribag) Jharkhand
12th/Intermediate	1989	Phy, Chem, Math	BIEC, Patna, Bihar

9. **Master's Thesis: "**Bandwidth Adaptive Streaming of Medical Videos for Telemedicine**"**

10. **Employment Details (recent first):**

Sl. No.	Designation	Employer	Period
1.	Associate Professor (CSE dept)	NIT Jamshedpur	25-03-2010 to till date continuing
2.	Lecturer (Selection grade)	NIT Jamshedpur	25-03-2007 to 24-03-2009
3.	Sr Lecturer (CSE dept)	NIT Jamshedpur	25-03-2002 to 24-03-2007
4.	Lecturer (CSE dept)	NIT Jamshedpur	25-03-1996 to 24-03-2002
5.	Ad hoc Lecturer (CSE dept)	NIT Jamshedpur	08-01-1996 to 24-03-1996

11. **Courses Lectured:**
    (d) *UG Level:* Microprocessor and Interfacing, Operating Systems, Database Management Systems, Computer organization and Architecture, Advanced Computer Architecture, Software Engineering, Computer Networks, Management Information Systems, Real Time Systems, Wireless Communication, Network Security.
    (e) *PG Level:* Distributed Systems

12. **Details of new courses developed/ existing courses revised**

Sl. No.	Undergraduate	Postgraduate
1.	Revised syllabus of almost all the courses taught	Revised syllabus of Algorithms, Software Engineering
2.	Prepared course structure and syllabus of new M. Tech program in Computer Sc & engineering in CSE dept	

3.	Organized Board of Studies for B. Tech. and M.Tech. Computer Science and Engg. courses.
4.	Prepared and Submitted the detailed Project Report (DPR) for B.Tech. in Information Technology course. (To AICTE)

13. **Administrative Experience:**
    (a) *Institute Level:*
        (i) **Prof-in-charge (same as HOD), CSE dept:** 25th July 2007 to 18th January 2009
        (ii) **HOD, CSE dept:** 13th May 2015 to till date
        (iii) **Warden Hostel – C during 2015-16**

    (b) *Department Level:*

Sl No.	Name of the activity/responsibility		Period
1.	Lab-in-charge, Network Lab Room No. SA-008		July 2007 to July 2011
2.	Faculty Advisor	M. Tech. and Ph.D. all semester	July 2015 to Dec 2017
3.	Chairman, Departmental Academic Committee		July 2017 to June 2011 July 2015 to till date

14. Short Term/Refresher Courses Organized / Attended:
    (a) *Attended:* About 15 weeks at various engineering institutions and Industries in the country

15. **Internship Organized: 05 (Two months duration each):**
Organized Summer Internship for B. Tech students (batches of 15 to 20 participants with stipend paid to each of them, Rs 10000 first years 2013 and 2014 and Rs 20000/- for next three years 2015 to 2017) of the Institute as Chairman **three** times **"**Summer Internship on Development and Maintenance of Institute Website" in 2015, 2016, and 2017 from mid-May to mid-July in the respective years.

16. List of Publications:

(i) Arpita Sarkar, **Binod Kumar Singh**, Ujjayanta Bhaumik, "Cryptographic Key Generation Scheme From Cancellable Fingerprint Biometrics" International Journal of Innovations & Advancement in Computer Science, IJIACS, ISSN 2347 – 8616 Volume 6, Issue 2 February 2017

(ii) Arpita Sarkar, **Binod Kr Singh**, "Cancellable Biometric Based Key Generation for Symmetric Cryptography", IEEE International Conference on Inventive Communication and Computational Technologies (ICICCT 2017), REC Coimbatore, ISBN 978-1-5090-5296 Vol. 7, pages 404-09, 2017, DOI 978-1-5090-5297-4/17/$31.00 ©2017 IEEE.

(iii) Mahatim Singh , Rabi Shaw , Arpita Sarkar, **Binod Kumar Singh**, "Authentication scheme using novel chaff generation method in fuzzy vault" Proceedings of the Second International Conference on Research in Intelligent and Computing in Engineering pp. 89–92 DOI: 10.15439/2017R55 ACSIS, Vol. 10 ISSN 2300-5963,

(iv) Arpita Sarkar, **Binod Kumar Singh**, Ujjayanta Bhaumik, "RSA Key Generation From Cancelable Fingerprint Biometrics " IEEE 3rd International Conference On Computing, Communication, Control And Automation(indexed by Scopus), 17th - 18th Aug 2017- Accepted and presented

(v) Arpita Sarkar, **Binod Kumar Singh**, Ujjayanta Bhaumik, "Cryptographic Key Generation Scheme From Cancelable Biometrics", ICCCAN-2017 15-16 December 2017 (indexed by Scopus)-Accepted

(vi)   Arpita Sarkar, **Binod Kumar Singh**, "Cryptographic Key Generation From Cancelable Fingerprint Templates", 4th IEEE International Conference on Recent Advances In Information Technology 15th - 17th March'18 Dhanbad, INDIA – Submitted.

(vii)   Koushlendra Kumar Singh, Manish Kumar Bajpai, **B.K.Singh**, Prabhat Munshi, "A non-invasive method to study the strength of rosewood for different wood applications" 8th World Congress on Industrial Tomography, 26-29, September 2016, Brazil.

(viii)   Koushlendra K. Singh, A. Dang, V. Kumar, M.K.Bajpai, **B.K.Singh** "Fractional Order Differentiator based Edge Detection in Remote Sensing Images" TENCON 2017, IEEE R10, Pengen, 2017 (Accepted for publication)

(ix)   Koushlendra K. Singh, M. K. Bajpai, **B.K.Singh**, "Fractional Order Savitzky–Golay Differentiator based Approach for Mammogram Enhancement " IST 2017, Beijing, China, (Accepted for publication)

(x)   Koushlendra Kumar Singh, A. K. Srivastava, H Sneha, Diksha, **B.K.Singh**, "Pose Invariant Face Recognition using Principal Component Analysis" Soft computing (Under review)

17. Master's Theses Supervised
        (a) **Completed :**04
        (b) **Under Progress:** 04

18. B. Tech Theses Supervised: More than 30 theses