Curriculum vitae

1. Name   : **Rajiv Ranjan**

2. Educational Qualification   :

Degree	Field of Specialization	Year of Passing
Ph.D. (CSE) NIT Patna	Image Processing, Cryptography and Security	Thesis Submitted
M. Tech (CSE) NSUT East Campus, Delhi	Information Security	2010
B. Tech (IT)	Information Technology	2006

3. Employment record (Starting from present position)

Institute	Designation	Period
BIT Sindri, Dhanbad	Assistant Professor	31.01.2012 to till date
Ideal Institute of Technology, Ghaziabad, Delhi NCR (NBA Accredited College)	Assistant Professor	18.01.2011 to 30.01.2012
Subharti Institute of Technology & Engineering, Delhi NCR	Lecturer	01.08.2010 to 17.01.2011
R.P Sharma Institute of Technology, Patna	Lecturer	02.04.2007 to 31.07.2008

4. List of Publications:

International Journals (SCI Indexed)

1. **Rajiv Ranjan** (2020), Canonical Huffman Coding Based Image Compression using Wavelet, Wireless Personal Communications, 117(3):2193-2206 Springer.
2. **Rajiv Ranjan**, Prabhat Kumar (2022), An Efficient Compression of Gray Scale Images Using Wavelet Transform, Wireless Personal Communications, 26:3195-3210 Springer.
3. **Rajiv Ranjan**, Prabhat Kumar (2023), An Improved Image Compression Algorithm Using 2D DWT and PCA with Canonical Huffman Encoding, Entropy 25, no. 10: 1382. https://doi.org/10.3390/e25101382

International Conferences (SCOPUS Indexed)

4 **Rajiv Ranjan**, Prabhat Kumar (2022). Absolute Moment Block Truncation Coding and Singular Value Decomposition-Based Image Compression Scheme Using Wavelet. In: Sharma, H., Shrivastava, V., Kumari Bharti, K., Wang, L. (eds) Communication and Intelligent Systems. Lecture Notes in Networks and Systems, vol 461, pp. 919-931, Springer, Singapore. https://doi.org/10.1007/978-981-19-2130-8_72 (First Online 19 Aug, 2022)

5 **Rajiv Ranjan**, Prabhat Kumar, Kshiramani Naik, & Vikash Kumar Singh (2022). The HAAR- the JPEG based image compression technique using singular values decomposition, 2022 2nd International Conference on Emerging Frontiers in Electrical and Electronic Technologies (ICEFEET), 2022, pp. 1-6, IEEE. https://doi.org/10.1109/ICEFEET51821.2022.9848400.(First Online 18 Aug, 2022)

Book Chapter (SCOPUS Indexed)

6 **Rajiv Ranjan**, Abir Mukherjee, Khaleel Ahmad and Pankaj Rai (2019). **Asymmetric Cryptography,** Emerging Security Algorithms and Techniques, CRC Press, Taylor & Francis Group, pp. 119-137, 2019.

International Journals (UGC Care)

7 **Rajiv Ranjan**, Sumit Thakur and Pankaj Rai, "**Implementing the concept of software Defined Networking in cloud computing**", International Journal of Computer Engineering and Applications, volume XI, Issue IX,September 17,www.ijcea.com ISSN 2321-3469.

NON SCI Journal

8 **Rajiv Ranjan**, Khaleel Ahmad, Jayant Shekhar and K.P Yadav,**"IP Spoof Prevented Technique to Prevent IP Spoofed Attack"** in International journal VSRD-TNTJ, Vol.1 (3), pp. 173-177, 2010 (ISSN No:0976-7967).

9 **Rajiv Ranjan**, Naresh Trivedi and Anoop Srivastava, "**Mitigating of Black Hole Attack in Manets**", in International Journal, VSRD- IJCSIT, and Vol. 1 (2), pp. 53-57, 2011(ISSN No: 2231-2471).

10 **Rajiv Ranjan** and Arup Kumar Pal**, "Logistic Map Based Encryption Algorithm for Image Encryption",** International Journal of Information Technology and Systems (IJITS), Vol. 1; No.2, pp. 162-165 2012(ISSN 2277–9825).

11 **Rajiv Ranjan**, Pankaj Rai and K.P Yadav, **"Modified Asymmetric Cryptographic Algorithm**", International Journal of Research in Engineering, Technology and Science (IJRETS), Vol.6, Special Issue, 2016 (ISSN 2454-1915).

12 **Rajiv Ranjan**, Abir Mukherjee, "**Entropy Coding Based Image Compression**", International Journal of Engineering Science Invention Research & Development (IJESIRD); Vol. III, Issue. V, pp. 1-4, 2016 (ISSN 2349-6185).

International Conference

13 **"Combinational Approach to Mitigate SQL Injection Attacks"**
International conference on Graphics & multimedia SymposiumGMS'10, Malaysia (2010), page: 09-11, ISBN 978-967-5770-09-8 (Selected in best 5 papers).

14 **"Encryption of Image using Chaotic Map"** International Conference On Recent Trends in Engineering & Technology, 28th November, 2012 (ICRTET -2012) Proceeding ISBN: 978-81-925922-0-6.

15 "**Modified Asymmetric Cryptographic Algorithm**", International Conference on Recent Trends in Computer Science & Technology, Apr-16, RVSCET, Jamshedpur, P-49.

National Conferences

16 **"Preventing & Detecting IP Spoofed Attack by RSA Cryptosystem**" National Conference INDIACOM-2010 at BVICAM, New Delhi (India)**.**Feb 25-26, 2010, Paper no: 331, page no: 1-5, ISSN 0973-7529, ISBN 978-93-80544-78-6

17 **"A Potential Solution to Mitigate IP Spoofed Attack"** National Conference NCEECS-2010 at Devi Ahilya University, Indore, 2nd -3rd Apr 2010, page no: 65-69.

National Seminars

18 **"A Solution to the Mitigate the Buffer Overflow Vulnerabilities"**
National Seminar on Challenges and Issues in Information Technology & Networks-IIMT Meerut (India) held on 23-24 April 2010.

19 "**Cryptographic Approach for Preventing SQL Injection Attacks**" National Seminar on Challenges and Issues in Information Technology & Networks-IIMT Meerut (India).

20 "**A Path Based Solution to Mitigate IP Spoofing Attack in Nuclear Power Plants**", National Seminar on INCO, Apr-12, BIT Sindri, P-46.

 21 "**Climate Change Adaptation and Mitigation**", National Seminar on EIPCM, Feb-16, BIT Sindri, P-67.

 22 "**The Effects of Environmental Air Pollution**", All India Seminars on RAMM, Feb-14, BIT Sindri, P-49.

 23 "**Knowledge based Energy and Environmental Sustainability**", National Seminar on EES-13, BIT Sindri, P-74.

5. **Members of Reviewer Panel of Journals/Conferences:**

1. Member of Review panel of "Imaging Science Journal", Taylor & Francis, a Scholarly journal indexed in **SCI** (Thomson Reuters) and Scopus (Elsevier).
2. Member of Review panel of "Wireless Personal Communications", Springer, a Scholarly journal indexed in **SCIE** (Thomson Reuters) and Scopus (Elsevier).
3. Member of Review panel of "Suranaree Journal of Science and Technology", a Scholarly journal indexed in **Scopus** (Elsevier).
4. Member of Review panel of "Concurrency and Computation: Practice and Experience", Wiley, a scholarly journal indexed in **Scopus** (Elsevier).
5. Member of Review panel of "KSII Transactions on Internet and Information Systems", an online scholarly journal indexed in **SCIE** (Thomson Reuters) and Scopus (Elsevier).
6. Serving on technical programme committees and serving as a reviewer at IEEE and Springer conferences, Organized by **NIT**s.

6. **Members of Scientific and Professional Societies:**

  i. The Institute of Electrical and Electronics Engineers (**IEEE**), Member 96843051
  ii. Association of Computing Machinery (**ACM**), Membership Number-6308460.
  iii. Indian Society for Technical Education (ISTE), Life Member, Membership Number- LM-108927.
  iv. Science and Engineering Institute (SCIEI), Hong Kong, Membership Number- 201611090001
  v. The International Research Association of Engineers (IAENG), Hong Kong, Membership Number-180320
  vi. The i-Explore International Research Journal Consortium (IIRJC), Membership Id- 14002.
  vii. Soft Computing Research Society (SCRS), Life Member, Membership Number- 2021-12-10-2174

7. **Administrative Responsibilities:**

a) Member, Career Development Centre and Training & Placement Cell, BIT Sindri from 29th March 2022 to till date.
b) Training & Placement Officer (TPO-3) from 24th Jan 2017 to 28th March, 2022.
c) Departmental coordinator, TPO from 3rd July 2013 to 23rd Jan. 2017.
d) Hostel Superintendent from 1st Oct 2020 to 13th April, 2022.
e) Asst. Hostel Superintendent from 15th Feb 2017 to 30th Sep 2020.

f) Acts as a Head of Department (HOD) for CSE & IT Branch from 1st June 2019 to 31st July 2019.

g) Acts as a Head of Department (HOD) for IT Branch from 17th Jan 2017 to 23rd Jan 2017.

h) Works as a Member Secretary, Industry Institute Interaction Cell (IIIC), BIT, Sindri, from 22nd March 2019 to till date.

i) Nodal Officer, e-journal from 8th Apr, 2017.

j) Asst. Prof-In-Charge, Gardening from 2nd July 2013 to till date.

k) Prof-In-Charge, Leo Club from 12th Dec. 2012 to 11th Dec 2013.

l) Worked as a coordinator at Faculty Development Program (FDP) on Topic "ICT Skills for Teachers" during 19th June 2017 to 24th June 2017 at BIT Sindri, Dhanbad, Organized by NIT Patna.

m) Worked as a coordinator at Faculty Development Program (FDP) on Topic "IOT" during 18th June 2018 to 22th June 2018 at BIT, Sindri, Dhanbad.

n) Worked as a Convener at Faculty Development Program (FDP) on Topic "The Era of Digital Transformation" during 8th July 2019 to 12th July 2019 at BIT, Sindri, Dhanbad.

o) Worked as a coordinator at Faculty Development Program (FDP) on Topic "AI & Machine Learning" during 23th Dec 2019 to 27th Dec 2019 at BIT, Sindri, Dhanbad.

p) Worked as a Convener at Faculty Development Program (FDP) on Topic "JAVA Programming" during 2nd Feb 2021 to 4th Feb 2021 at BIT, Sindri, Dhanbad.

q) Worked as a Co-Convener at Faculty Development Program (FDP) on Topic "Data Structure and Algorithm using C++ Programming" during 22nd Aug 2022 to 4th Sep 2022 at BIT, Sindri, Dhanbad.

r) Member of affiliation committee towards JUT Ranchi for physical verification of colleges, dated 10th Jun 2022.

s) Member of affiliation committee towards JUT Ranchi for physical verification of colleges, dated 31st Mar 2023.

t) Coordinators, Panel Discussion with Industry Experts, 8th Jul 2021.

u) Coordinators, M. Tech Question setting, JUT Ranchi, dated 3rd Dec 2022.

v) Result comparer of VBU for 2nd Year from 15th March, 2018.

w) Member & I.O of purchase committee, IEEE journals, 14th Mar 2019.

x) Member, purchase committee, Data Centre Items, 13th Jul 2019.

y) Member, purchase committee, Data Centre Items, 22nd Jul 2019.

z) Member, purchase committee, Computer Items, 19th Oct 2020.

aa) Member of Finance Committee, Tech-Fest 2019, 8th Mar 2019.

bb) Election Training as a sector magistrate on dated 7th May 2022 & 12th May 2022.

cc) Election duty as a sector magistrate on dated 19th May 2022.

dd) Member, 1st Year students counselling committee, 7th Jan 2022.

ee) Member of teams of faculties for patrolling around 1st year students, 23rd Apr 2022.

ff) Member of anti-ragging committee, dated 9th Nov to 23rd Nov 2022.

gg) Member of anti-ragging committee, session 2018-19 from dated 6th Aug 2018.

hh) Member of Induction Program committee, dated 4th Aug 2018.

ii) Member, NPIU student learning assessment (SLA) survey, 13th Mar 2019.

jj) Member, Incubation Centre Inauguration Committee, 12th Jun 2019.

kk) Member, Conference Convener Committee on Neta Ji Subash Jayanti, 12th Jun 2019.

ll) Member, Welcome Committed for Itihas sankalp, 12th Jun 2019.

mm)   Member, Invigilation Committee for electric works by EPIL, 14th Jun 2019.

nn) Expert, verification of language lab under RUSA scheme, 17th Jul 2019.

oo) Member, Tuning Program, BIT Sindri & IIT(ISM) Dhanbad, 16th Aug 2019.

pp) Member of Committee, Sarjana, dated 2nd Feb 2023.

qq) Member of committee, stock verification, central library, 11th Jun 2018.
rr) Member of IT Building/SIEMEN LAB1) on the occasion of Honorable Chief Minister's arrival at BIT Sindri on 05th Sep. 2017.
ss) Expert, Renewal of Contract Staffs, under chairmanship of DC, Dhanbad, 8th Feb 2021.
tt) Expert, Faculty selection committee, Government Polytechnic Dhanbad, 11th Jul 2019.
uu) Coordinator, Biology Classes, 14th Sep 2019.
vv) Member of scrutiny committee for selection of Assistant Professor on Contract Basis at IIT (ISM) Dhanbad on 29th Aug. 2017.
ww)   Member of Committee for selection of Internet Service Provider Agency at Government Polytechnic, Bhaga on 22nd Jul. 2017.
xx) Expert Committee Member for Scrap items at polytechnic colleges on 12th July, 2017.
yy) Participated as a Member of a committee at Higher & the Technical Education for specification final of machine to use in Engineering and Polytechnics colleges for smart classroom on 17th Jan.2014.
zz) Interview Board member of BIT for selection of PTL in CSE & IT Branch.
aaa)   Interview Board member of Bhaga Polytechnic for selection of PTL.
bbb)   Member of Disciplinary Committee at karma-mahotsava-13, BIT Sindri.
ccc)   Acts as Judges at District Level, Science Exhibition organized by the DEO, Dhanbad.
ddd)   Questions Paper Setter of B. Tech Program for different universities.
eee)   External Examiner of viva-voce Examination for B. Tech Programs of different engineering colleges in Jharkhand.
fff) Member of the Disciplinary committee for first year student to prevent them from ranging, (from seniors).