Short Bio:

Ravindara Bhatt is currently an **Associate Professor** in the Department of Computer Science and Engineering and Information Technology at Jaypee University of Information Technology (**JUIT**) India. He joined Department of Computer Science and Engineering and Information Technology, JUIT in 2006. He has completed his **Ph.D.** degree from **Indian Institute of Technology, Kharagpur, India**. He received his **Master of Technology** in **Information Technology** from **University School of Information Technology**, Guru Gobind Singh Indraprastha University, **Delhi** in 2005. His Master of Technology thesis is in *Multimedia and Data Compression*. He received his **Bachelor of Engineering** in **Electronics and Communication Engineering** from **Gobind Ballab Pant Engineering College**, Pauri (An Autonomous State Govt. Engineering College, Uttrakhand) in 1996. Ravindara completed his 10th and 12th from St. Gabriels Academy (Now Army School, Roorkee) in 1988 and 1990 respectively.

Ravindara has over 25 years of extensive experience in Academics and Industry. His academic experience is more than 15 years at JUIT. He has industry experience in the initial stage of his career, which provides him with a broad view and is useful in assisting students. He has **supervised** one **PhD** student, six **Master of Technology** and several **Bachelor of Technology** students in the Department of Computer Science and Engineering and Information Technology at JUIT. He is currently supervising four PhD students in the areas of cyber physical system security, privacy preservation, big data, and machine learning. Ravindara enjoy to teach assigned classes and to develop new courses. Recently, he taught data science, From graph to knowledge graph, programming for problem solving, data structures, software engineering, computer networks and graph algorithms and applications.

Ravindara current area of research is in the fields of cyber physical system security, privacy preservation and machine learning algorithms. Ravindara was invited to serve as Session Chair for IEEE ICIIP-2021, IEEE PDGC-2016, and ICIIP-2015. He has also served as Publicity Chair for ICIIP. He has enthusiastically participated and acted as organizing committee member of numerous IEEE and other conferences.

He is **Departmental coordinator** for **summer trainings and placement** for CSE and IT students. Ravindara is **PhD coordinator** in the CSE and IT department at JUIT. He is appointed as **Nodal Incharge** for **student exchange program** with University of Florida, USA. He is a **member** of New Education Policy Committee (**NEP-2020**) in JUIT. Ravindara has served as external examiner, evaluator, and observer for various universities. He is also a reviewer for various renowned International journals and conferences. He is currently serving as Member of Computer Society of India (CSI), ACM and IEEE.

I. General information

1. Name   :   RAVINDARA BHATT

2. Citizenship   :   INDIAN

3. Contact information: telephone, e-mail: ravindara.bhatt@juit.ac.in

4. Education (educational institution, level of education, specialization, date of graduation)

Academic record starting with school leaving exam:

Specialization / Discipline	College/University/Institute	Year	Division
AISSE (10th)	St. Gabriel's Academy, Roorkee / CBSE	1988	I (75%)
AISSCE (12TH)	St. Gabriel's Academy, Roorkee / CBSE	1990	I (61%)
B.E. (Electronics & Communication Engineering)	G.B.Pant Engineering College, Pauri (An Autonomous State Govt. Engineering College, Uttrakhand) Final Year Project: Design & Implementation of FSK Modulation System Advisor: Dr. Y. Singh, Professor, Department of Electrical & Electronics Engineering, An Autonomous State Govt. Engineering College, Uttrakhand.	1996	I (74%)
Master of Technology (Information Technology)	University School of Information Technology, Guru Gobind Singh Indraprastha University, Delhi Dissertation: "Study, Comparisons, and Evaluation of Data Compression Toolkit". Advisor: Dr. Navin Rajpal, Professor & Dean, Computer Sc. & Engg, USIT, G.G.S. Indraprastha University, New Delhi	2005	I (75%)
Doctor of Philosophy (Deployment Issues of Wireless	Indian Institute of Technology, Kharagpur, 721302	2015	

Multimedia Sensor Networks for Surveillance Applications)				

5. **Language skills**
   - o **ENGLISH**
   - o **HINDI**

6. **Employment history:**

Sl. No.	Position	Organization/Institution	Date of joining	Date of leaving	Duration
1.	Associate Professor	Department of CSE &IT Jaypee University of Information Technology Waknaghat, P.O. Waknaghat, TehKandaghat, Distt. Solan PIN-173 234 (H.P.), India	03/07/2006	Till Date	15 years 7 month
2.	Assistant Professor	Department of CSE Raj Kumar Goel Institute of Technology 5th K.M Stone, Delhi-Meerut Road, Ghaziabad-201 003	30/12/2005	02/07/2006	6 months
3	Senior Lecturer	Department of CSE Raj Kumar Goel Institute of Technology 5th K.M Stone, Delhi-Meerut Road, Ghaziabad-201 003	04/12/2004	29/12/2005	1 year 8 months
4	Lecturer	Department of CSE Indraprastha Engineering College, 63 Site IV, Sahibabad Industrial Area, Ghaziabad, UP -201010	15/04/2002	03/12/2004	2 years 8 months
5	Lecturer	Department of CSE NC College of Engineering	21/08/2001	14/04/2002	8 months

		ISRANA, Panipat (Haryana) India 132107			
6	Senior Engineer Customer Support	Sartorius India Private Ltd.Bangalore - 562 123	01/07/1998	31/01/2001	2 year 4 months
7	Service Engineer	The Scientific Instrument Co. Limited , Delhi	22/10/1996	30/06/1998	1 year 8 months

II. Teaching and activities related to the administration and development of teaching

Undergraduate and Post-Graduate Teaching

Recent Teaching

- Programming for Problem Solving

- Computer Networks

- Data Science

- Data Structure and Algorithms

- From Graph to Knowledge Graph

- Graph Theory and Applications

- Software Engineering

- **Supervision of Doctoral / Masters Students**

Doctoral research supervision

S.No.	Name of Student	Title of Thesis	Status	University
1.	Vandana Mohindru	Prevention of Node Clone Attack: Secure and Energy Efficient Algorithms in WSN	Awarded (July 2019)	Jaypee University of Information Technology, Solan, India

Post Graduate Thesis (M.Tech.) Supervision:

Name of student	Title of Thesis	Year of Completion
Pankaj Kumar Sharma	Study, evaluation, and Comparison of deployment Strategies and Techniques for WSN	2012
Shweta Singh	Energy Efficient Scheduling Schemes for WSN	2012
Navjot Singh Parande	Remote mirroring as a Disaster Technique in Cloud Computing	2012
Neha Tyagi	Energy Preserving Mobility Model in Wireless Sensor Networks	2012
Nitin Gautam	A Scheduling Method for Event Driven Environment	2012
Ishani Sharma	Inter Vehicle Communication (IVC) for next generation Intelligent Transport System	2016

- **Administrative & Academic Activities**

Administrative activities

a) **Coordinator,** Training and Placement Coordinator for CSE & IT, 2014 - Till

b) **Coordinator, PhD** Coordinator for CSE & IT, 2021 - Till

c) **Member,** University Level Committee, NEP2020 January 2022 – Till

d) **Member,** Department Level Committee, since October 2021 – Till

e) **Nodal In-charge, JUIT, Student** Exchange Program, 2019 – Till

f) **Chairman,** University Time Table Committee at Jaypee University of Information Technology, Solan, India, since August 2007 – December 2008.

g) **Member,** University Time Table Committee at Jaypee University of Information Technology, Solan, India, since August 2006 – July 2007.

h) **Coordinator,** Detailed course structure and course curriculum design M.Tech in Data Science" for academic session 2021-22.

i) **Coordinator**, Student interaction meeting with NBA officials. National Board of Accreditation (NBA) team visited, Jaypee University of Information Technology, Waknaghat, Solan, India

(31Oct to 02 Nov 2014).

j) **Group member** in 2 weeks Induction orientation programme for 2018 Batch (16th July – 31st July, 2018) and 2019 Batch (17th July – 31st July, 2019).

k) **Member,** IQAC, JUIT, 2018 - 2019

Academic activities

a) **Mentor**, students of B.Tech CSE & IT for various Minor and Major projects, at Jaypee University of Information Technology, Solan, India, since July 2006 – Till.

b) **Mentor,** of M.Tech CSE students at Jaypee University of Information Technology, Solan, India, since July 2010 – 2016.

c) **Supervisor,** of PhD students at Jaypee University of Information Technology, Solan, India, since July 2016 – Till.

d) **Counsellor**, of students of B.Tech CSE & IT at Jaypee University of Information Technology, Solan, India, since July 2006 – Till.

e) DPMC member for PhD students across various departments including CSE&IT

f) Developed the syllabi of various courses for B.Tech CSE&IT programme at Jaypee University of Information Technology, Solan, India

g) **Mentoring** a **group of first year students**. The group consists of six students. As a mentor we help the students to develop a healthy & positive attitude to life. In addition, as a mentor we counsel the mentee on all academic, professional and personal matters that she/he may seek help for, from time to time.

Other activities in support of teaching.

- Organizing Placement classes and Quiz competitions.

- Encouraging students for research activities.

- Writing Letter of Recommending for students for their Post graduation from various foreign universities.

- Attending workshops and faculty development programs to improve the skills.

- Faculty Incharge Coding committee Department of CSE & IT 2018-2019

III. Research and development and creative activities

Research Interest

Cyber physical system, privacy preservation, big data, Machine learning, and Deep Learning

Funded Projects Submitted:

a) Submitted one research proposal in Himachal Pradesh State Council, India for Science and Environment (HIMCOSTE) on Smart Agriculture on October, 2021

b) Submitted one research proposal to TiH-Anubhuti, IIIT Delhi Designing Cognitive Computing and Social Sensing Enabled Maternal Child Public Health Solutions on February 2021

c) Submitted one research proposal in Himachal Pradesh State Council, India for Science and Environment (HIMCOSTE) on WSN based Monitoring System on September, 2016

PhD Thesis Evaluator and Examiner

PhD thesis examiner of, Ms Nassirah Laloo, at the University of Technology, Mauritius (UTM). Her thesis is entitled "Energy Optimisation in Wireless Sensor Networks", 2021.

Conferences/Workshops/Seminars Organized

Member, Organizing Committee PDGC, ICIIP

Keynote Speaker

Webinar on New Education Policy 2020, 28 August 2020 (3 days) 2020

FDP on Privacy Preservation, 03 September 2019 (7 days FDP), FDP-CITML Organized by JUIT, Department of CSE&IT

FDP on machine learning, 01 Apr 2019 (7 days FDP), at greater Noida, conducted by APJK University, UP.

FDP on machine learning, 15 Jan 2018 (7 days FDP), at Meerut Institute of Technology, conducted by APJK University, UP.

Workshop on Power Point, Senior JAL Employees, 2007, 6 days.

Reviewer of International Journals

Reviewer for Journals. IEEE transactions on green computing, Wireless Networks, International Journal of

Communication Systems Wiley, Connection Science, Inderscience, Taylor and Francis

TPC member/ Reviewer at International Conferences

Program committee member ICRIC-2020

Reviewer for NETAPPS2017,

Reviewer for PDGC 2010 – Till

Reviewer for ICIIP 2022 - Till

Professional Training Received

Sl. No.	Name of Training	Organization where training was received	Year	Duration
1	Diploma in Advance Computing (Six Month Certificate Course)	Bytes Infosys India Pvt. Ltd. New Delhi (Conducted by C-DAC, Pune)	2001	6 Months (Feburary 2001 – July 2001)
2	Excellence in Teaching, Research & Education – by Design	JUIT, Wakanaghat, Solan	2014	6 Days (14/07/14 – 19/07/14)

3	Teaching Engineering using MATLAB AND Simulink by Todd Atkins	JUIT, Wakanaghat, Solan	2010	3 Days (12/07/10 – 14/07/10)

Attended Conferences, Workshops and FDPs

S. No.	Title	Dates/ Duration	Sponsoring Agency and Organisation & Place held
1	Faculty Development Program Data Science for ALL	27 July-08 Aug 2020 (2 Weeks)	E&CT Academics NT Warangal, IIITDM Jabalpur, NIT Patna
2	Faculty Development Program on Python	5th April 2021 to 10th April 2021 (1 week)	E & ICT Academy, IIT Kanpur
3	Faculty Development Program on Data Science	15th Feb 2021 to 27th Feb 2021 (2 weeks)	E & ICT Academy, IIT Kanpur
4	DP on Advance Excel with Data Analytics	10-May-2021 to 15-May-2021 (1 Week)	EICT Academy-IIT, Kanpur
5	Software Engineering NPTEL Virtual mode	14Sept – 04 Dec 2020	SWAYAM Virtual mode
6	Online	Webinar on Robotic Automation and its Significance	8th August 2020

7	Online FDP for G Suite is scheduled from Monday	JUIT	10th Aug 2020) to Friday (14th Aug 2020)
8	Introduction to programming in C SWAYAM Virtual mode	Jul– Dec 2020	SWAYAM Virtual mode
9	Programming, Data Structures And Algorithms Using Python SWAYAM Virtual mode	Jan– Jun 2021	SWAYAM Virtual mode
10	NEP 2020 conducted on 28, 29 & 31 August 2020	Aug 2020	JUIT
11	Faculty development Program CITML_JUIT FDP (31 Aug 2020 to 5 Sept 2020) One Week One Week Faculty development Program on "Computational Intelligence Techniques for Machine Learning"	CITML JUIT 28 Aug 2020	CITML_JUIT FDP
12	2020 Sixth International Conference on Parallel, Distributed and Grid Computing(PDGC)	06-08 November, 2020	Department of Computer Science and Engineering, JUIT, Waknaghat, Solan, Himachal Pradesh

- **FDPs Attended**

Dates	**Subject**	**Venue**
27th July to 08 Aug 2020	FDP Data Science for All From 27th July to 08 Aug 2020 (40 Hours)	Virtual Mode

Monday (10th Aug 2020) to Friday (14th Aug 2020)	Online FDP for G Suite is scheduled from Monday (10th Aug 2020) to Friday (14th Aug 2020)	Virtual Mode
31st August to 5th September 2020	FDP-CITML Privacy Preservation in Machine Learning Organized by JUIT, Department of CSE&IT, 31st August to 5th September 2020	Virtual Mode
15th Feb 2021 to 27th Feb 2021	Faculty Development Program on Data Science from 15th Feb 2021 to 27th Feb 2021 (2 weeks)	Virtual Mode
5th April 2021 to 10th April 2021	Faculty Development Program on Python from 5th April 2021 to 10th April 2021 (1 week)	Virtual Mode

Sl. No.	Conference/Seminar	Title of paper read (if any)	Year
1	*INDIACOM*	Cost Efficient Placement of Electric Vehicle Charging Station for Smart Cities	March 1-3, 2017
2	*TENCON, Singapore, 2016*	Cost models for 3-D deployment of Wireless Multimedia Sensor Networks	22nd-24nd November 2016 (3 days)
3	NCC 2014 (IIT Kanpur)	Utilizing Graph Sampling and Connected Dominating Set for Backbone Construction in Wireless Multimedia Sensor Networks.	28th February 2014 – 02nd March 2014 (3 days)
4	Excellence in Teaching, Research & Education – by Design	JUIT, Wakanaghat, Solan	14th June 2014 – 19th July 2014 (6 days)

5	AINA 2013 (Barcelona, Spain)	A Stochastic Process Based Framework of Redeployment Model for Wireless Sensor Network	25th March 2013 – 28th March 2013 (4 days)
6	PDGC 2012 (JUIT, Waknaghat, India)	Redeployment Strategies for Wireless Sensor Networks Under Random Node Failures and Budget Constraints	06th December 2012 – 08th December 2012 (3 days)
7	FLI (Faculty Leadership Institute) - 2010	Venkateswara college of Engineering and Technology, Chitoor, Andra Pradesh, India	28th June 2010 – 2nd July 2010 (5 days)
8	Fibre Optics Seminar	IIT Kharagpur	14th November 2009 (1 day)
9	Short Term Course on "Wireless Communication and Networks" conducted by G.S. Sanyal School of Telecommunications, I.I.T., Kharagpur	Jaypee University of Information Technology, India	26th May 2008 – 31st May 2008 (6 days)
10	Tutorial: Applications of Data Mining Techniques for Computer security	ICISS 2007,North campus, University of Delhi by Prof. Jaydeep Srivastava	17thDecember (1 day) 2007

Research Profiles

Google Scholar	https://scholar.google.co.in/citations?user=EaCpfOwAAAAJ&hl=en
Scopus	https://www.scopus.com/authid/detail.uri?authorId=57201190822
DBLP	https://dblp.org/pid/92/7303.html
ORCID	https://orcid.org/0000-0003-4063-7893

Membership of Professional bodies

- Member of ACM
- Member of Computer Society of India
- Member of IEEE

LIST OF PUBLICATIONS

Books Published (Authored/Edited)

Hari Singh, **Ravindara Bhatt**, PrateekThakral, Dinesh ChanderVerma (2022). Data Science for Effective Healthcare Systems (1). *Chapman and Hall/CRC*. [ISBN 9781032105680]

VandanaMohindru, Yashwant Singh, **Ravindara Bhatt**, Anuj Kumar Gupta (2021). Unmanned Aerial Vehicles for Internet of Things (IoT): Concepts, Techniques, and Applications. *Wiley*. [ISBN: 978-1-119-76882-1]

VandanaMohindru, Anuj Kumar Gupta, Yashwant Singh, **Ravindara Bhatt** (2019)**.** Guest Editorial Preface," *International Journal of Agricultural and Environmental Information Systems (IJAEIS),*"

Peer Reviewed International Journals

Mohindru, V., Singh, Y. and Bhatt, R., 2020. Hybrid cryptography algorithm for securing wireless sensor networks from Node Clone Attack. *Recent Advances in Electrical & Electronic Engineering (Formerly Recent Patents on Electrical & Electronic Engineering)*, *13*(2), pp.251-259.

Mohindru, V., Singh, Y. and Bhatt, R., 2020. Securing wireless sensor networks from node clone attack: a lightweight message authentication algorithm. *International Journal of Information and Computer Security*, Inderscience Publishers, 12 (2-3), pp. 217-233

Mohindru, V., Bhatt, R. and Singh, Y., 2019. Reauthentication scheme for mobile wireless sensor networks. *Sustainable Computing: Informatics and Systems*, *23*, pp.158-166.

Rao, T.R., Mitra, P., Bhatt, R. et al. The big data system, components, tools, and technologies: a survey. KnowlInfSyst 60, 1165–1245 (2019). https://doi.org/10.1007/s10115-018-1248-0.

SINGH, H., CHANDER, D. and BHATT, R., 2019. Parallel Computation of Matrix Multiplication in OpenMP Supported Codeblocks. *Advances and Applications in Mathematical Sciences*. 18(8), pp. 775-787

Bhatt, R. and Sharma, I., 2019. Prediction-based next-hop forwarding strategy in vehicular ad-hoc networks. *International Journal of Vehicle Information and Communication Systems*, Inderscience Publishers, 4(1), pp.1-19.

Sharma, N. and Bhatt, R., 2018. Privacy preservation in WSN for healthcare application. *Procedia computer science*, *132*, pp.1243-1252.

Bhatt, R., Arvind, A. and Bhatt, P., 2016. An integration framework of three-dimensional wireless multimedia sensor network with cloud computing for surveillance applications. *Indian Journal of Science and Technology*, *9*(32).

Bhatt, R. and Datta, R., 2016. A two-tier strategy for priority based critical event surveillance with wireless multimedia sensors. *Wireless Networks*, 22(1), pp.267-284.

Bhatt, R. and Datta, R., 2014. Cost modelling and studies with different deployment strategies for wireless multimedia sensor network over flat and elevated terrains. *International journal of wireless information networks, springer*, 21(1), pp.15-31.

Singh, S. and Bhatt, R., 2012. Adjacency Matrix Based Energy Efficient Scheduling using S-MAC Protocol in Wireless Sensor Networks. *International Journal of Computer Networks & Communications*, 4 (2), 149-168

Sharma, K.K., Bajaj, R.K. and Bhatt, R., 2010. On Study, Comparison and Implementation of Fuzzy Algorithm on Iris Data Set. *Journal of Combinatorics, Information & System Sciences*, *35*(3/4), p.439.

Ravindara Bhatt, Rakesh Kumar Bajaj, T. S. Lamba (2010). Utilizing Fuzzy Clustering for Intrusion Detection on DARPA Data Set. *International Journal of Computer Mathematical Science and Applications*, 4 (1-2), 1-13.

Peer Reviewed Conferences (National/International):

G. Pandey and R. Bhatt, "The Impact of Chronic Kidney Disease (CKD) Around the Globe: A Novel ML Solution," *2021 10th International Conference on System Modeling & Advancement in Research Trends (SMART)*, 2021, pp. 685-690, doi: 10.1109/SMART52563.2021.9676251.

N. Sharma and R. Bhatt, "FoG Computing based IoT in Healthcare Application," *2020 Sixth International Conference on Parallel, Distributed and Grid Computing (PDGC)*, 2020, pp. 442-446, doi: 10.1109/PDGC50313.2020.9315745.

V. Mohindru, U. Chitranshi, R. Bhatt and Y. Singh, "Possibilities of Block Chain in Indian Market and Notably In Advertising Industry," 2019 5th International Conference on Signal Processing, Computing and Control (ISPCC), 2019, pp. 84-89, doi: 10.1109/ISPCC48220.2019.8988349.

Mohindru, V., Singh, Y. and Bhatt, R., 2018, December. A Review on Lightweight Node Authentication Algorithms in Wireless Sensor Networks. In *2018 Fifth International Conference on Parallel, Distributed and Grid Computing (PDGC)* (pp. 517-521). IEEE.

Bhatt, R. and Datta, R., 2016, November. Cost models for 3-D deployment of Wireless Multimedia Sensor Networks. In *2016 IEEE Region 10 Conference (TENCON)* (pp. 3485-3489). IEEE.

Bhatt, R. and Datta, R., 2014, February. Utilizing graph sampling and connected dominating set for backbone construction in wireless multimedia sensor networks. *In 2014 Twentieth National Conference on Communications (NCC),* IIT Kanpur, India : 28 Feb.- 2 March, 2014, pp.1-6. IEEE.

Bhatt, R. and Datta, R., 2013, March. A stochastic process based framework of redeployment model for wireless sensor network. *In 2013 27th international conference on advanced information networking and applications workshops* (pp. 443-449). IEEE.

Bhatt, R. and Datta, R., 2012, December. Redeployment strategies for Wireless Sensor Networks under random node failures and budget constraints. In *2012 2nd IEEE International Conference on Parallel, Distributed and Grid Computing* (pp. 767-772). IEEE.

Misra, S., Obaidat, M.S., Bagchi, A., Bhatt, R. and Ghosh, S., 2009, July. Attack Graph Generation with Infused Fuzzy Clustering. In *SECRYPT* (pp. 92-98).

Bhatt, R., Lamba, T.S. (2008). Network Intrusion Detection for Solving Distributed Denial-of-Service Attacks in Gnutella Networks. *Proceedings of the National Conference on Communication Systems and Networking* ,JIET, India, 15-16 March.