ਪ੍ਰੋਫਾਈਲ

1. ਨਿੱਜੀ ਜਾਣਕਾਰੀ

ਨਾਮ	: ਡਾ. ਗੁਰਜੀਤ ਸਿੰਘ ਭੱਠਲ
ਮਾਤਾ ਦਾ ਨਾਮ	: ਗੁਰਮੇਲ ਕੌਰ
ਪਿਤਾ ਦਾ ਨਾਮ	: ਜੀਤ ਸਿੰਘ ਭੱਠਲ
ਜਨਮ ਤਰੀਕ	: 30 ਅਪ੍ਰੈਲ 1975
ਪੱਕਾ ਪਤਾ	: # 208, ਫੇਜ਼ -1, ਅਰਬਨ ਅਸਟੇਟ, ਪਟਿਆਲਾ
ਦਫਤਰ ਦਾ ਪਤਾ	: ਕਮਰਾ F-317 ਤੀਜੀ ਮੰਜ਼ਲ UCOE, ਪੰਜਾਬੀ ਯੂਨੀਵਰਸਿਟੀ ਕੈਂਪਸ
ਸੰਪਰਕ	: +91-9814205475 (ਮੋਬਾਈਲ)
ਈਮੇਲ	: gurjit.bhathal@gmail.com (ਨਿੱਜੀ), gurjit.ce@pbi.ac.in (ਦਫਤਰੀ)

ਸੰਖੇਪ ਜੀਵਨੀ ਬਾਰੇ:

ਡਾ: ਗੁਰਜੀਤ ਸਿੰਘ ਭੱਠਲ ਇਸ ਸਮੇਂ ਪੰਜਾਬੀ ਯੂਨੀਵਰਸਿਟੀ, ਪਟਿਆਲਾ (ਭਾਰਤ) ਵਿੱਚ ਬਤੌਰ ਸਹਾਇਕ ਪ੍ਰੋਫੈਸਰ (ਸੀਨੀਅਰ ਸਕੇਲ) ਵਜੋਂ ਕੰਮ ਕਰ ਰਹੇ ਹਨ। ਯੂਨੀਵਰਸਿਟੀ ਜੁਆਇਨ ਕਰਨ ਤੋਂ ਪਹਿਲਾਂ, ਉਨ੍ਹਾਂ ਨੇ ਭਾਰਤ ਵਿੱਚ ਪੌਲੀਟੈਕਨਿਕ ਕਾਲਜ ਵਿੱਚ 3 ਸਾਲ ਪ੍ਰਿੰਸੀਪਲ ਵਜੋਂ ਅਤੇ ਟੇਰਾਂਟੋ (ਕੈਨੇਡਾ) ਵਿੱਚ ਸਿਸਟਮ ਇੰਜੀਨੀਅਰ ਵਜੋਂ ਸੇਵਾ ਨਿਭਾਈ। ਓਹਨਾ ਨੇ ਪੀ.ਐਚ.ਡੀ. ਦੀ ਡਿਗਰੀ, ਫੈਕਲਟੀ ਆਫ ਇੰਜੀਨੀਅਰਿੰਗ ਅਤੇ ਤਕਨਾਲੋਜੀ ਵਿੱਚ ਅਤੇ, ਐਮ.ਟੈਕ. (ਕੰਪਿਊਟਰ ਸਾਇੰਸ ਅਤੇ ਇੰਜੀਨੀਅਰਿੰਗ) ਪੰਜਾਬੀ ਯੂਨੀਵਰਸਿਟੀ ਤੋਂ ਅਤੇ ਬੀ.ਟੈਕ. (ਕੰਪਿਊਟਰ ਸਾਇੰਸ ਅਤੇ ਇੰਜੀਨੀਅਰਿੰਗ) SLIET, ਲੌਂਗੋਵਾਲ (ਭਾਰਤ) ਤੋਂ ਕੀਤੀ । ਉਨ੍ਹਾਂ ਕੋਲ ਭਾਰਤ ਅਤੇ ਵਿਦੇਸ਼ਾਂ ਵਿੱਚ ਅਧਿਆਪਨ ਅਤੇ ਉਦਯੋਗ ਵਿੱਚ 24 ਸਾਲਾਂ ਤੋਂ ਵੱਧ ਦਾ ਤਜਰਬਾ ਹੈ। ਉਨ੍ਹਾਂ ਨੇ ਵੱਖ-ਵੱਖ ਨਾਮਵਰ ਅੰਤਰਰਾਸ਼ਟਰੀ ਰਸਾਲਿਆਂ ਵਿੱਚ 98 ਤੋਂ ਵੱਧ ਪ੍ਰਕਾਸ਼ਨਾਂ ਵਿੱਚ ਯੋਗਦਾਨ ਪਾਉਣ ਅਤੇ ਕਈ ਅੰਤਰਰਾਸ਼ਟਰੀ ਕਾਨਫਰੰਸਾਂ ਵਿੱਚ ਹਿੱਸਾ ਲੈਣ ਤੋਂ ਇਲਾਵਾ 37 ਤੋਂ ਵੱਧ ਐਮ.ਟੈਕ. ਖੋਜ-ਨਿਗਰਾਨ ਦਾ ਕੰਮ ਕੀਤਾ ਹੈ। ਉਨ੍ਹਾਂ ਨੇ 4 ਕਿਤਾਬਾਂ ਵੀ ਲਿਖੀਆਂ ਹਨ। ਉਨ੍ਹਾਂ ਦੀਆਂ ਖੋਜ ਰੁਚੀਆਂ ਵਿੱਚ ਬਿਗ ਡੇਟਾ, ਕਲਾਉਡ ਕੰਪਿਊਟਿੰਗ, ਸੂਚਨਾ ਸੁਰੱਖਿਆ, ਸਾਈਬਰ ਸੁਰੱਖਿਆ, ਅਤੇ ਡੇਟਾ ਵਿਸ਼ਲੇਸ਼ਣ ਸ਼ਾਮਲ ਹਨ। ਉਹ IAENG, ICSES, ਅਤੇ CSI ਦਾ ਮੈਂਬਰ ਹਨ। ਉਹ ਵੱਖ-ਵੱਖ ਰਸਾਲਿਆਂ ਦੇ ਸੰਪਾਦਕੀ ਬੋਰਡ ਦੇ ਮੈਂਬਰ ਹਨ। ਉਨ੍ਹਾਂ ਆਪਣੇ ਵਿਦਿਆਰਥੀਆਂ ਦੀ ਟੀਮ ਨਾਲ ਪੰਜਾਬੀ ਯੂਨੀਵਰਸਿਟੀ ਲਈ ਦੋ ਪ੍ਰੋਜੈਕਟ ਪੂਰੇ ਕੀਤੇ ਹਨ। ਡਾ. ਭੱਠਲ ਨੂੰ 4ਵੀਂ ਸਲਾਨਾ ਰਿਸਰਚ ਮੀਟ - 2018 ਵਿੱਚ ਕੰਪਿਊਟਰ ਸਾਇੰਸ ਅਤੇ ਇੰਜਨੀਅਰਿੰਗ ਵਿੱਚ ਇੱਕ **ਉੱਤਮ ਵਿਗਿਆਨੀ ਨਾਲ ਸਨਮਾਨਿਤ** ਕੀਤਾ ਗਿਆ ਅਤੇ ਇੰਟਰਨੈਸ਼ਨਲ ਇੰਸਟੀਚਿਊਟ ਆਫ ਆਰਗੇਨਾਈਜ਼ਡ ਰਿਸਰਚ ਦੁਆਰਾ "2021 ਦੇ 100 ਉੱਘੇ ਅਕਾਦਮਿਕ ਵਿਗਿਆਨੀਆਂ" ਵਿੱਚ ਸੂਚੀਬੱਧ ਕੀਤਾ ਗਿਆ ਹੈ।
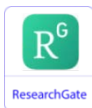
Profile

1. Personal Information:

Name	: Dr. Gurjit Singh Bhathal
Mother's Name	: Gurmail Kaur
Father's Name	: Jit Singh Bhathal
Date of Birth	: 30 April 1975
Residence Address	: #208, Phase-I, Urban Estate, Patiala
Office Address	: Room F-317 Third Floor UCOE, Punjabi University Campus
Contact	: +91-98142054745 (Mobile)
Email	: gurjit.bhathal@gmail.com (Personal), gurjit.ce@pbi.ac.in (Official)

2. Biography:

Dr. Gurjit Singh Bhathal is currently working as an Assistant Professor (Senior Scale) in Punjabi University, Patiala (Pb). Before joining the university, he served as Principal in polytechnic college for 3 years in India, and as System Engineer in Toronto (Canada). He has received a Ph.D. in Faculty of Engineering and Technology and, M.Tech. in Computer Science and Engineering from Punjabi University. He did his B.Tech. in Computer Science and Engineering from SLIET, Longowal, India. He has more than 24 years of experience in teaching and industry in India and abroad. He has supervised more than 37 M.Tech. dissertations. Besides contributing to more than 98 publications in various reputed international journals and participating in many international conferences. He has authored 4 books. His research interests include Big Data, Cloud Computing, Information Security, Cyber Security, and Data Analytics. He is a member of IAENG, ICSES, and CSI. He is on the editorial board of various journals. He, along with a team of his students, completed two projects for Punjabi University. Dr. Bhathal was also awarded an **Outstanding Scientist in Computer Science and Engineering** at 4th Annual Research Meet – **2018** and is listed in **"100 Eminent Academicians of 2021"** by **International Institute of Organized Research.**

3. Educational Qualifications:

Sr. No.	Degree / Diploma / Certificate	Year of Passing	University / College
1.	PhD (Faculty of Engg. and Technology)	2019	Punjabi University
2.	M. Tech (CSE)	2004	Punjabi. University
3.	B. Tech (CSE)	1999	SLIET, Longowal
4.	DIPLOMA(CSE)	1996	SLIET, Longowal
5.	CERTIFICATE COURSE	1994	SLIET, Longowal

4. Work Experience:

Designation	Organization	Date of Joining	Time Period	
			Years	Months
Assistant Professor	Computer Science and Engineering, Punjabi University	30.11.2011	12	0
Principal	Bhai Gurdas Polytechnic College, Sangrur	11.09.2008	3	2
Sr. Lecturer	RIMT Gobindgarh	15.07.2008	0	03
Production Engineer	CNB Computers Toronto (ON) Canada	20.07.2007	0	10
Lecturer	Thapar Polytechnic College, Patiala	01.08.2005	1	11
Lecturer	SGHCMT Patiala	20.07.2001	4	02
Lecturer	PCMT College Patiala	09.11.1999	1	11

5. Research contribution:

- PhD. Thesis Guided (Completed/Registered/Enrolled)   **06**
- M.Tech. Thesis Guided (Completed)   **37**
- Publications in National/ International Journals   **61**
- Publications in National/ International Conferences   **21**
- Books Published (National/ International)   **04**

6. Area of Specialization:

- Big Data and Relational Database
- Cloud Computing, Distributed Computing and Virtualization
- Information Security and Cyber security
- Java Programming and Python

7. Subjects Taught:

- Advance Database Concepts and Big Data, Relational Database Management System
- Cloud Computing, Network Security, Cyber Security and Cyber Laws
- Internet and Web Technologies, Java Programming

8. Administrative Positions Held

- Coordinator for Digitization of Central Library of Punjabi University (Digitization of old Thesis)
- Coordinator of MTech Part Time in CSE Dept. PUP, with more than 180 students and faculty.
- Principal of Bhai Gurdas Polytechnic College with total team of 80 teaching and non teaching staff.
- Production Engineer in CNB Computers Toronto (ON) Canada coordinated team of 10 workers.

9. Lectures Delivered in Conferences / Seminars / Workshops:

- Expert talk on "Cyber Awareness" In February 2023 (Govt. School, Patiala)
- Expert talk on "Cyber Awareness" In November 2022 (Govt. Polytechnic college for Womens, Patiala)
- Expert talk on "Network and Cyber Security" In September 2019 (Desh Bhagat, Dhuri)
- One Day National Workshop on "Network Security Issues" on 17-October 2018 (GNA University)
- UGC Sponsored National Workshop on "Hybrid Cloud Computing and IoT" on 7-20 September 2017 (Guru Nanak Khalsa College, Yamuna Nagar, Haryana)
- DST Sponsored One Day National Workshop on "Data Mining and Big Data tools" on 25-January 2017
- One Day National Workshop on "Big Data and Hadoop" on 06-October 2016

10. Workshops, FDPs and Webinars Participations:

- Webinar on "How to Write a Good Research Project Proposal" 31 May 2020 Punjabi University
- Webinar on "National Intellectual Property Rights and Patenting" "National Webinar on Intellectual Property Rights and Patenting" 23 May 2020 YCOE.
- FDP on "Cyber Security and Malware Analysis" 26-27 May CRM College Hyderabad
- STC on "Data Science using Python" 18-22 May 2020 (Online Mode) NITTTR Chandigarh
- STC on "Cyber Security" 9-13 December 2019 NITTTR Chandigarh
- STC on "Internet of Things" 23-27 September 2019 NITTTR Chandigarh
- Delegate of "International Global Conference on Cyber Space" , Organized by Ministry of Electronic and Information Technology India, 23-24 November 2017 (ID-81852 GCCS-2017)
- STC on "Wireless Communication" 2-6 May 2016 NITTTR Chandigarh
- STC on "Cyber Threat Detection and safety" 4-15 January 2016 NITTTR Chandigarh
- National Workshop on "Learning Data Mining: Tools and Techniques" 14-16 April 2012
- STC on E-Commerce and Computer Network from NITTTR Chandigarh 2007

11. Membership of Professional Societies

- Member of the **Computer Society of India**
- Life Time Member of the **International Association of Engineers** (IAENG)
- Life Time Member of the **International Computer Science and Engineering Society (ICSES)**

12. Contributed as Reviewer for Journals and Conferences:

- **Array Journal, (Elsevier).**
- **Decision Analytics Journal (Elsevier)**
- **Indonesian Journal of Electrical Engineering and Computer Science (Scopus)**
- **IEEE Access**: **The Multidisciplinary Open Access Journal, IEEE (SCI)**
- Many other papers for different National/ International conferences.

13. Professional Certifications:

- Machine Learning Foundations: A Case Study Approach

  Provided by Coursera offered by **University of Washington**-2020
- Applied Machine Learning in Python Provided by Coursera offered by **University of Michigan** -2020
- Cyber security and the Internet of Things

  Provided by Coursera Offered by **Kennesaw State University**-2020
- Network Security & Database Vulnerabilities Provided by Coursera offered by **IBM -**2020
- Applied Data Science with Python Provided by IBM- 2020
- Data Science Foundation's Provided by IBM- 2020
- Deep Learning With Tensor Flow by IBM- 2020
- Certificate of Cyber security Essentials by CISCO-2020
- Certificate of Introduction to Amazon Elastic Compute Cloud (EC2) by AWS-2020
- MCSA-Windows Server 2003 Messaging in 2007
- MCSD-Windows Certified Software Developer 1999

14. Books Published

[1]   Gurjit Singh Bhathal and Gaurav Gupta, *Sentiment Analysis of English Tweets using Data Mining: Data Mining, Sentiment Analysis*, 1st ed. online, India: BookRix, 2018.

[2]   Gurjit Singh Bhathal and Amardeep Singh, ""Big Data Computing with Distributed Computing Frameworks," in *Innovations in Electronics and Communication Engineering. Lecture Notes in Networks and Systems 65*, H. Saini et al., Eds. Hyderabad, India: Springer Nature Singapore Private Limited, 2018, ch. V, pp. 467-477.

[3]   Gurjit Singh Bhathal, *Database Management Systems*, 1st ed. Patiala, India: TwentyFirst Century Publication, 2014.

[4]   Gurjit Singh Bhathal, Williamjeet Singh, Harminder Singh, and Simranjit Singh, *Basics of Information Technology*, 1st ed. New Delhi, India: Syntax Publications, 2010.

15. Publications in National and International Conferences:

[1]   Juneja, S., Bhathal, G. S. and Sidhu, B. K. (2022). "Current Trends and Literature Review of Machine Learning Techniques for predicting software fault based on Textual and Numeric Data." First International Conference on Applied Data Science and Smart Systems (ADSSS), Department of Computer Applications, Chitkara University, India (PB).

[2]   Ghumann, A., Sidhu, B. S., Gupta, G. and Bhathal, G. S. (2022). "A Machine Learning Approach to Predict Critical Illness in Covid-19 Patients." First International Conference on Applied Data Science and Smart Systems (ADSSS), Department of Computer Applications, Chitkara University, India (PB).

[3] Gupta, S., Gupta, G. and Bhathal, G. S. (2022). "Potential Pre- Processing Techniques of Data Mining on Mutual Funds." First International Conference on Applied Data Science and Smart Systems (ADSSS), Department of Computer Applications, Chitkara University, India (PB).

[4] Gurjit Singh Bhathal, "Revamping Supermarkets With AI and RSSi ", in *International Conference on Artificial Intelligent and Smart Systems*, Coimbatore, India, 2021, pp. 35-38.

[5] Gurjit Singh Bhathal, "National Advances in Applied Sciences and Mathematics", Chitkara University, Rajpura (Pb.), India, 2020.

[6] Gurjit Singh Bhathal, "Big Data Solution:Improvised Distributions Framework of Hadoop," in *International Confrence on Intelligent Computing and Control Sysytems*, Madurai, India, 2018, pp. 35-38.

[7] Gurjit Singh Bhathal and Amardeep Singh, "Big Data Computing with Distributed Computing," in *International Confrence on Innonations inElectronic and Communication Engineering*, Hyderabad, 2018, pp. 467-477.

[8] Ravneet Kaur, Gurjit Singh Bhathal, and Gaurav Gupta, "Sentimental Analysis and its Challenges," in *International Conference on Computer Science and Engineering*, Chandigarh, 2017, pp. 97-102.

[9] Arsika and Gurjit Singh Bhathal, "Assessment of Sports in Academics and Determining the Effectiveness of Modenity of Medical Equipment using Data Mining Techniques," in *International Conference on Innovations in Computing*, Mohali, India, 2017.

[10] Davandeep Kaur and Gurjit Singh Bhathal, "Analysis on Causes and Prevention of DDoS Attacks in Cloud Copmuting," in *International Conference on Innovations in Computing*, Mohali, India, 2017.

[11] Jyoti Garg and Gurjit Singh Bhathal, "Overview of Workflow Scheduling Algorithms in Cloud Computing," in *Emerging Areas in Computer Sciences and Communication Engineering -2016*, Mohali, 2016, pp. 66-72.

[12] Kamalpreet Kaur and Gurjit Singh Bhathal, "Improving Store and Access performance in Heterogeneous Environment using MapReduce," in *International Conference On Recent Trends In Computing*, Patiala, 2016, pp. 357-361.

[13] Gagandeep Kaur, Gurjit Singh Bhathal, and Purneet Singh, "Evaluation of Efficiency and Security of Data using different Algorithms for Encryption and Key Management," in *International Conference On Recent Trends In Computing*, Patiala, 2016, pp. 155-160.

[14] Parneet Singh and Gurjit Singh Bhathal, "Comparitive Analysis of Fault Tolerence Techniques in Cloud Computing," in *International Confrence On Recent Trends in Computing*, Patiala, 2016, pp. 142-146.

[15] Kamalpreet Kaur and Gurjit Singh Bhathal, "Cloud Computing, Big Data Computing with HBase," in *Emerging Areas in Computer Sciences and Communication Engineering -2016*,

Mohali, 2016, pp. 45-48.

[16] Jasminderjit Kaur and Gurjit Singh Bhathal, "Cloud Computing and Energy Efficiency," in *Emerging Areas in Computer Sciences and Communication Engineering -2016*, Mohali, 2016, pp. 622-624.

[17] Preetinder Singh and Gurjit Singh Bhathal, "Authorization And Mutifactor Authentication Using Dynamic Security Feature On Cloud," in *International Conference On Recent Trends In Computing*, Patiala, 2016, pp. 215-223.

[18] G S Bhathal and G N Singh, "Application Virtulization: New way of Application Delivery as Service to end Application Development," in *Information Management in the Knowledge Economy*, Chandigarh, 2012, pp. 118-124.

[19] Gurjit Singh Bhathal and Yadwinder Singh, "Prevention of Passive Attacks Against Computer Network," in *Innovative Development in Engineering Application* , Sangrur, 2011, pp. 165-167.

[20] Gurjit Singh Bhathal, "Application Portability through Virtualization," in *Innovative Development in Engineering Application*, Sangrur, 2010, pp. 175-177.

[21] Gurjit Singh Bhathal and Ritu Walia, "Virtulization," in *National Conference on Trends in Computing*, Chandigarh, 2007, pp. 205-210.

16. Publications in International Reputed Journals:

[1] Kakker, K.K.,Gupta.,G., and Bhathal, G. S. (2022). "A Review and Comparison of Key Distributed Database Characterstics across several NoSQL Distributed Databases." Journal of Data Acquisition and Processing 37(5): 1513-1521.

[2] Juneja, S.,Bhathal, G. S. and Sidhu, B. K. (2022). "Programming Tool for Assembling Software Bugs through Open Source Repository." Journal of Data Acquisition and Processing 37(5): 1522-1530.

[3] Mumtaj and Gurjit Singh Bhathal, "Feature Selection and Categorization of Text using Decision Tree Classifier and Particle Swarm Optimization", *International Journal of Xidian University* , vol. 14, no. 8, pp. 1101-1110, Aug. 2020.

[4] Kewal Krishan, Gaurav Gupta, and Gurjit Singh Bhathal, "A Review and Analysis of Consistency Models in NoSQL Databases", *International Journal of Xidian University* , vol. 14, no. 10, pp. 624-630, Oct. 2020.

[5] Amrinder Singh and Gurjit Singh Bhathal, "Handling Small Files in Big Data File System – A Review", *International Journal of Xidian University* , vol. 14, no. 11, pp. 791-799, Nov. 2020.

[6] Sharanjeet Kaur and Gurjit Singh Bhathal, "IoT in Smart City – A Review", *International Journal of Scientific Research in Engineering and Management (IJSREM)* , vol. 4, no. 11, pp. 1-10, Nov. 2020.

[7] Amrinder Singh and Gurjit Singh Bhathal, "Handling Small Files in HDFC", *GIS Science Journal*, vol. 7, no. 12, pp. 46-49, Dec. 2020.

[8] Arshdeep Singh and Gurjit Singh Bhathal, "FQ-BF: An Efficient Forwarding and Query Optimization Framework based on Bloom Filters in NDN," *International Journal of Recent Technology and Engineering*, vol. 8, no. 4, pp. 1001-1006, Nov. 2019.

[9] Arshdeep Singh and Gurjit Singh Bhathal, "Bloom Filter Applications in Named Data Network: A Comprehensive Review," *Global Journal of Engineering Science and Researches*, vol. 6, no. 8, pp. 1-12, Aug. 2019.

[10] Gurjit Singh Bhathal and Amardeep Singh, "Big Data: Hadoop framework vulnerabilities, security issues and attacks," *Array Elsevier*, vol. 1, no. 2, pp. 1-8, July 2019.

[11] Gurjit Singh Bhathal and Amardeep Singh, "Big Data Security Challenges and Solution of Distributed Computing in Hadoop Environment: A Security Framework," *Recent Advances in Computer Science and Communications*, vol. 13, no. 1, pp. 1-8, June 2019.

[12] Mandeep Kaur and Gurjit Singh Bhathal, "Performance Evaluation of Various NoSQL Databases using YCSB on Basis of CRUD Operations using Parallel Virtual Machines," *Global Journal of Engineering Science and Researches*, vol. 5, no. 8, pp. 253-258, Aug. 2018.

[13] Gaganpreet Kaur, Gurjit Singh Bhathal, and Charanjiv Singh, "Load Balancing of Virtual Machines in Cloud Environment Using Dynamic Load Balancing Algorithm," *International Journal of Scientific Research in Computer Science Applications and Management Studies*, vol. 7, no. 4, pp. 1-5, July 2018.

[14] Roopkamal Kaur Dhindsa, Gurjit Singh Bhathal, and Navdeep Singh, "Hybrid Scheduling for Virtual Machine Systems in Cloud Computing," *International Journal for Multi Disciplinary Engineering and Business Management*, vol. 6, no. 2, pp. 17-20, June 2018.

[15] Roopkamal Kaur Dhindsa, Gurjit Singh Bhathal, and Navdeep Singh, "Hybrid Scheduling Algorithm for Performance Enhancement of VM in Cloud Computing Environment," *Global Journal of Engineering Science and Researches*, vol. 5, no. 8, pp. 200-211, Aug. 2018.

[16] Vanita Rani and Gurjit Singh Bhathal, "Detection and Classification of Cardiac Arrhythmias using ECG Big Data Analysis," *Global Journal of Engineering Science and Researches*, vol. 5, no. 7, pp. 72-82, July 2018.

[17] Vanita Rani and Gurjit Singh Bhathal, "A Review: Feature Extraction and Classification of Cardiac Arhythmias from ECG Signal," *International Journal for Multi Disciplinary Engineering and Business Management*, vol. 6, no. 2, pp. 12-16, June 2018.

[18] Mandeep Kaur and Gurjit Singh Bhathal, "A Comparative Study of Various NoSQL Databases," *International Journal for Multi Disciplinary Engineering and Business Management*, vol. 6, no. 2, pp. 8-11, June 2018.

[19] Gaganpreet Kaur, Gurjit Singh Bhathal, and Charanjiv Singh, "A Comparative Study of Load Balancing Algorithms in Cloud Computing," *Global Journal of Engineering Science and Researches*, vol. 5, no. 7, pp. 145-153, June 2018.

[20] Amarjot Singh Ghai, Gurjit Singh Bhathal, and Gaurav Gupta, "Survey on the Effects of Sports on Vocational Academics," *International Journal for Multi Disciplinary Engineering and Business Management*, vol. 5, no. 3, pp. 7-9, Sep. 2017.

[21] Ravneet Kaur, Gurjit Singh Bhathal, and Gaurav Gupta, "Sentiment Analysis of English Tweets on Badminton, Qismat Song and Ishqbaaz Serial Tweets," *International Journal for Multi Disciplinary Engineering and Business Management*, vol. 5, no. 3, pp. 21-29, Sep. 2017.

[22] Ravneet Kaur, Gurjit Singh Bhathal, and Gaurav Gupta, "Sentiment Analysis and its Challenges," *International Journal of Engineering Research in Computer Science and Engineering*, vol. 4, no. 2, pp. 97-102, Feb. 2017.

[23] Avneet Kaur, Gurjit Singh Bhathal, and Gaurav Gupta, "Role of Virtualization in Cloud Computing," *Global Journal of Engineering Science and Researches*, vol. 4, no. 7, pp. 142-149, July 2017.

[24] Arshika Sachdeva, Gurjit Singh Bhathal, and Gaurav Gupta, "Review of Data Mining in Contrast to Modern Medical Equipments," *International Journal for Multi Disciplinary Engineering and Business Management*, vol. 5, no. 3, pp. 18-20, Sep. 2017.

[25] Gurjit Singh Bhathal and Gaurav Gupta, "Research Paper on Sentimental Analysis of Online Customer Reviews and Rating," *International Journal of Advanced Research in Computer Science*, vol. 8, no. 7, pp. 393-397, 2017.

[26] Jyoti Garg and Gurjit Singh Bhathal, "Research Paper on Genetic Based Workflow Scheduling Algorithm in Cloud Computing," *International Journal of Advanced Research in Computer Science*, vol. 8, no. 5, pp. 2111-2116, June 2017.

[27] Ramandeep Kaur, Gurjit Singh Bhathal, and Gaurav Gupta, "Demographic Analysis of Dengue Fever Using Data Mining," *International Journal of Advanced Research in Computer Science*, vol. 8, no. 7, pp. 1233-1237, July 2017.

[28] Jasminderjit Kaur, Gurjit Singh Bhathal, and Gaurav Gupta, "Cloud Computing: Types, Topologies, Virtual Machine and VM Migration for Decrease in Power Consumption," *International Journal of Advanced Research in Computer Science*, vol. 8, no. 5, pp. 2357-2361, June 2017.

[29] Davandeep Kaur, Gurjit Singh Bhathal, and Gaurav Gupta, "Analysis on DDoS Attacks In Cloud Networks," *Asian Journal of Computer Science And Information Technology*, vol. 7, no. 2, pp. 9-14, June 2017.

[30] Kamalpreet Kaur, Gurjit Singh Bhathal, and Gaurav Gupta, "An Analytic and Comparative Study of MapReduce- A Systematic Review," *International Journal of Advanced Research in Computer Science*, vol. 8, no. 5, pp. 2453-2459, May 2017.

[31] Gagandeep Kaur Sandhu and Gurjit Singh Bhathal, "To Enhance The OTP Generation Process for Cloud Data Security Using Diffie Hellman and HMAC," *International Journal for Multi-Disciplinary Engineering and Business Management*, vol. 4, no. 3, pp. 1-5, Sep. 2016.

[32] Preetinder Singh and Gurjit Singh Bhathal, "Authorization And Mutifactor Authentication Using Dynamic Security Feature On Cloud," in *International Conference On Recent Trends In Computing*, Patiala, 2016, pp. 215-223.

[33] Priya Batta and Gurjit Singh Bhathal, "Review of Association Rule Mining using Ant Colony Optimization Algorithm," *International Journal for Multi-Disciplinary Engineering and Business Management* , vol. 2, no. 2, pp. 31-36, June 2015.

[34] Jagjit Singh and Gurjit Singh Bhathal, "Platform Independent Portable Application for Smartphones: A Review," *International Journal for Multi-Disciplinary Engineering and Business Management*, vol. 3, no. 1, pp. 7-10, Mar. 2015.

[35] Kawaljeet Kaur and Gurjit Singh Bhathal, "Major Security Issues and Challenges in MCC a Review," *International Journal for Multi-Disciplinary Engineering and Business Management*, vol. 3, no. 2, pp. 78-80, June 2015.

[36] Kanupriya and Gurjit Singh Bhathal, "Improvement in AES Encryption Algorithm to Increase the Security of Cloud Data," *International Journal for Multi-Disciplinary Engineering and Business Management*, vol. 3, no. 2, pp. 81-84, June 2015.

[37] Amanjot Kaur and Gurjit Singh Bhathal, "Improved Power Efficient VM Migration in Cloud Environment," *International Journal for Multi-Disciplinary Engineering and Business Management*, vol. 3, no. 3, pp. 125-128, Sep. 2015.

[38] Charanjit Kaur and Gurjit Singh Bhathal, "Hybrid Encryption Scheme for Hadoop based Cloud Data Security," *International Journal of Computer Science & Engineering*, vol. 5, no. 7, pp. 250-254, July 2015.

[39] Kawaljeet Kaur and Gurjit Singh Bhathal, "Enhancement of Mobile Cloud Computing by Secured Android Application," *International Journal for Multi-Disciplinary Engineering and Business*

Management, vol. 3, no. 3, pp. 107-110, Sep. 2015.

[40] Charanjit Kaur and Gurjit Singh Bhathal, "Data Security Algorithms in Cloud Computing: A Review," *International Journal For Technological Research In Engineering*, vol. 2, no. 5, pp. 372-375, Jan. 2015.

[41] Gagandeep Kaur Sandhu and Gurjit Singh Bhathal, "Comparative Study of fully Homomorphic Encryption and fully Disk Encryption Schemes in Cloud Computing," *IJACRN*, vol. 4, no. 1, Jan. 2015.

[42] Jagjit Singh and Gurjit Singh Bhathal, "A Review on Storage Security Challenges in Cloud Computing," *International Journal of Advanced Research in Computer Science and Software Engineering*, vol. 5, no. 6, pp. 225-228, June 2015.

[43] Jagjit Singh and Gurjit Singh Bhathal, "A Novel SSHE Architecture for Cloud with MAC Authentication," *Global Journal of Computers & Technology*, vol. 2, no. 2, pp. 108-116, July 2015.

[44] Hasrat Handa and Gurjit Singh Bhathal, "Weight Based Technique for Fault Tolerance in DCS," *International Journal for Multi-Disciplinary Engineering and Business Management*, vol. 3, no. 4, pp. 13-16, Dec. 2014.

[45] Dilpreet Kaur and Gurjit Singh Bhathal, "Thin Client Cloud Computing An Overview," *International Journal for Multi-Disciplinary Engineering and Business Management*, vol. 2, no. 1, pp. 8-10, Mar. 2014.

[46] Gurjot Singh and Gurjit Singh Bhathal, "Survey Paper on Various Security Concerns in cloud computing and approach to enhance security," *International Journal for Multi-Disciplinary Engineering and Business Management*, vol. 2, no. 2, pp. 37-40, June 2014.

[47] Priya Garg and Gurjit Singh Bhathal, "Performance Evaluation of MANET Routing Protocols with Scalability for FTP Delay Traffic Using OPNET Modeler," *International Journal for Multi-Disciplinary Engineering and Business Management*, vol. 2, no. 3, pp. 133-137, Sep. 2014.

[48] Parneet Singh and Gurjit Singh Bhathal, "Performance Comparison of Virtualized and Non Virtualized Guests Machines Based on Their Layer of Abstraction," *International Journal for Multi-Disciplinary Engineering and Business Management*, vol. 2, no. 3, pp. 72-76, Sep. 2014.

[49] Sarabjeet Kaur and Gurjit Singh Bhathal, "Overview of SaaS in Cloud Computing," *International Journal for Multi-Disciplinary Engineering and Business Management*, vol. 2, no. 1, pp. 28-32, Mar. 2014.

[50] Priya Batta and Gurjit Singh Bhathal, "Optimization of Association rules using Apriori and Ant colony algorithm," *International Journal for Multi-Disciplinary Engineering and Business Management* , vol. 2, no. 3, pp. 15-18, Sep. 2014.

[51] Dilpreet Kaur and Gurjit Singh Bhathal, "Improving Encryption Process by Making a Hybrid Encryption Scheme," *International Journal for Multi-Disciplinary Engineering and Business Management*, vol. 2, no. 3, pp. 97-100, Sep. 2014.

[52] Gurjot Singh and Gurjit Singh Bhathal, "Enhancing Data Security and Privacy on WebOS with Desktop as a Service," *International Journal for Multi-Disciplinary Engineering and Business Management* , vol. 2, no. 3, pp. 23-26, Sep. 2014.

[53] Sarabjeet Kaur and Gurjit Singh Bhathal, "Enhanced Energy Efficient VM Migration in Cloud Computing Environment.," *International Journal for Multi-Disciplinary Engineering and Business Management*, vol. 2, no. 3, pp. 93-96, Sep. 2014.

[54] Kirandeep Kaur and Gurjit Singh Bhathal, "Comparison of Applications Performance between PA and HA using Software Engineering Parameters," *International Journal for Multi-Disciplinary Engineering and Business Management*, vol. 2, no. 3, pp. 9-14, Sep. 2014.

[55] Gursimran Singh and Gurjit Singh Bhathal, "Virtualized Cloud Environment A survey," *International Journal of Computers & Technology*, vol. 8, no. 1, pp. 730-733, June 2013.

[56] Kirandeep Kaur and Gurjit Singh Bhathal, "Trend and Need of Application Virtualization in Cloud Computing," *Global Journal of Computer Science and Technology*, vol. 13, no. 4, pp. 13-18, Mar. 2013.

[57] Gursimran Singh and Gurjit Singh Bhathal, "An overview of Virtualization," *International Journal of Computers & Technology*, vol. 5, no. 3, pp. 167-171, June 2013.

[58] Randeep Kaur and Gurjit Singh Bhathal, "A Survey of Clustering Techniques," *International Journal of Advanced Research in Computer Science and Software Engineering*, vol. 3, no. 5, pp. 153-157, May 2013.

[59] G S Bhathal and G N Singh, "Application Virtulization: New way of Application Delivery as Service to end Application Development," in *Information Management in the Knowledge Economy*, Chandigarh, 2012, pp. 118-124.

[60] Gurjit Singh Bhathal and G N Singh, "Application and scope of virtualization for server consolidation in IT industry," *Global Journal of Computer Science and Technology*, vol. 10, no. 12, pp. 43-45, Oct. 2010.

[61] Gurjit Singh Bhathal and G. N. Singh, "A Comparative Study of Application Portability with Virtualization Software," *International Journal of Computer Science and Communication*, vol. 1, no. 2, pp. 363-365, Dec. 2010.

17. Details of Completed Dissertations:

Sr. No.	Roll No.	Name	Thesis Title	Submission Date
1	11191064	Gursimran Singh	Layered Architechtural Approach for Virtualized Cloud Computing	12/8/2013
2	11191019	Ramandeep Kaur	An Extraction of Tumor Region from MR Images Using Fuzzy C-Means Clustering	12/8/2013
3	11171002	Gurjot Singh Sodhi	Enhancing Data Security and Privacy on WebOS with Desktop-as-Service	7/7/2014
4	11171062	Kirandeep Kaur	TAXONOMY OF PORTABLE APPLICATIONS: USING UNIQUE CONCEPT OF VIRTUALIZATION	7/7/2014
5	11171041	Priya Batta	Association Rules Optimization using Apriori and Ant Colony Algorithm	7/7/2014
6	11171055	Priya Garg	Performance Comparison of Routing Protocols AODV DSR and OLSR Based on Scalability in MANET	27/08/2014
7	11171063	Parneet Singh	Performance Comparison of Virtualized and Non Virtualized Guests Machines Based on Their Layer of Abstraction	27/08/2014
8	11291017	Sarabjeet Kaur	Enhanced Energy Efficient Allocation of Virtual Machines using Minimum Utilization Policy in CloudSim	27/08/2014
9	11291016	Dilpreet Kaur	A Hybrid Encryption Scheme for Enhancing Data Security using Hashing and Whitening	27/08/2014
10	11391031	Jagjit Singh	A Novel SSHE Architecture for Cloud with MAC authentication	19/08/2015
11	11391032	Charanjit Kaur	Hybrid Encryption Scheme For Hadoop Based Cloud Data Seccurity	19/08/2015
12	11271038	Kawaljeet Kaur	"ENHANCEMENT OF MOBILE CLOUD COMPUTING"	19/08/2015

13	11171003	Kanupriya	Enhancement In Security of Cloud Computing Using KAMAN effect	19/08/2015
14	11271031	Hasrat Handa	Fault Tolrance in distributed Computing	6/10/2015
15	120457121	Amanjot Kaur	Power Efficient Allocation of Virtual Machines using Minimum Utilization Policy	6/12/2015
16	11491029	Ramninder Kaur	Campus Guide (Infosys Project)	6/6/2016
17	11491030	Komalpreet Kaur	Health Care Process using Informatics congos (Infosys Project)	6/6/2016
18	11371058	Gagandeep Kaur Sandhu	To Enhance the OTP generation process for cloud data security using Diffie-Hellman and HMAC	8/8/2016
19	11371049	PreetInder Singh	Authorization And Mutifactor Authentication Using Dynamic Security Feature On Cloud	8/29/2016
20	11371051	Gagan Marken	Key Generation Using Modified Advance Encryption standard for Data Security	8/29/2016
21	7141-15-803	Ramanpreet Kaur	Sentimental Analysis of Online Reviews of Products by Customer	12/7/2017
22	7141-15-801	Jyoti	Genetic Based Workflow Scheduling in Cloud Computing	12/7/2017
23	7141-15-798	Jasminderjit Kaur	Energy Efficency in Cloud Computing Using VM Migration	27/7/2017
24	7141-14-1182	Davandeep Kaur	To Detect The Causes and Mitigate The Effects of The DDoS Attacks	18/8/2017
25	7141-15-807	Kamalpreet Kaur	Evaluation of Various Sorting Algorithm in Cloud Computing using MapReduce	18/8/2017

26	7141-14-1155	Ramandeep Kaur	Prediction of Dengue Disease using Data Mining	18/8/2017
27	7141-14-1161	Ravneet Kaur	Sentimental Analysis of English Tweets using Data Mining	22/8/2017
28	7141-14-1208	Arshika	Determining The Effectiveness of Modernity Medical Equipments Through Data Mining	22/8/2017
29	7141-14-1187	Amarjot Singh Gha	Data Mining and Envision Effects of Sports on Vocational academics	22/8/2017
30	7141-15-879	Vanita Rani	Detection and Classification of Cardiac Arrhythmias using ECG Big Data Analysis	07/9/2018
31	7141-15-871	Roopkamal Kaur Dhindsa	Hybrid Scheduling Algorithm for Performance enhancement of VM in Cloud Computing Environment	07/9/2018
32	7141-15-881	Gaganpreet Kaur	Load Balancing of Virtual Machines in Cloud Environment using Dynamic Load Balancing Algorithm	07/9/2018
33	7141-16-913	Mandeep Kaur	Performance Evaluation of Various Big Databases on The Bases of CRUD Operations	07/9/2018
34	7141-16-943	Arshdeep Singh	Content Search Optimisation in Named Data Networking using Bloom Filters	18/2/2020
35	7141-16-944	Mumtaj	Feature Selection and Categorization of Text Using Decision Tree Classifier and Particle Swarm Optimization	16/01/2021
36	YCE(TS) -476	Amarinder Singh	A Framework to Handel Small Files in Big Data Distributed Environment	16/01/2021
37	7141-18-660	Sharanjit Kaur	Securing IoT Communication Between Controller and Application Using AES- 128	16/01/2021

18. Extra Curricular Activities Organized:

Participation	Position Held
• National Conference on Technical Vocational Education Training and skills Development: A Roadmap for Empowerment on 17-18 December 2008	Delegate
• State level Basketball(Girls) tournament, • Fresher party two times, one Annual college function	Coordinator
• Organized two day work shop on Latest Trends in cloud computing	Organizing Secretary
• Convener Cultural Committee in Crispolatieia- 2012 • Member of arrangement committee of Crispolatieia- 2012	Convener
• Member of Transport Committee of International Conference in Economics Department- 2013	Member
• Discipline committee Crispolatieia- 2013 • Fresher party -2013 • Akhand Path Organizing Committee-2013	Convener
• Convener of Cultural Committee in Crispolatieia- 2014 • Arrangement committee of Akhand Path Sahib 2014	Convener
• Member of Accommodation Committee of International Conference in Economics Department -2014	Member
• Member of Transport Committee of International Conference in Economics Department- 2015	Member
• National One Seminar on "Higher Education for Development and Role of Teachers" 17-July 2017	Participant
• Member of Accommodation Committee of International Conference in Economics Department- 2019	Member
• Member of Discipline Committee in Crispolatieia- 2019	Member
• Member of Accommodation Committee of International Conference in Economics Department- 2020	Member
• Coordinator to Digitize Main Library and Research Branch of Punjabi University- 2020	Coordinator
• Coordinator Document Verification Committee Other States Quota in Counseling for admission of Punjabi University- 2021	Coordinator