



## **CURRICULUM VITAE**

### **Prof. (Dr.) SANJAY BHARGAVA**

**Date of Birth:** 01-07-1972      **email:** sanjaybhargava78@gmail.com

**Marital Status:** Married

**Mobile:** 9079752366, 9521618370

**Languages:** English, Hindi

**Address for Correspondence:** A-103, Mahima Panache Apartments,  
Jagatpura, Jaipur-302033.



**Career Objective:** To reach to the highest academic cum administrative position in the field of academics. Also to transform the institution(*wherever I'm or I'll be*) in to a centre of excellence, by converting it in to the best amalgamation of *100% quality admissions, well versed faculty, 100% placements and significant research.*

**Area of specialization:** Big Data Analytics, Internet of Things, Theory of Computation, Discrete Mathematics, Modelling & Simulation, Numerical Analysis, Compiler Design, Foundation of Computing.

**Area of interest:** Big Data Analytics, Theory of Computation, Numerical Analysis, Graph Theory & Operations Research, Artificial Intelligence, Software Engineering, Modelling & Simulation, Computer Graphics, Cloud Computing, Data Science, Machine Learning.

### **EDUCATIONAL PROFILE**

- **Ph. D. in Computer Science** from **Banasthali Vidyapith, Banasthali, India** in **2011**.  
Title – *Parsing with Neural and Finite Automata Networks using Graph Grammar.*
- **M.C.A.** from Gurukul Kangri University in **1996** with **72%** marks.
- **B. Sc. (Computer Science)** from Gurukul Kangri University in **1993** with **75%** marks.



## PROFESSIONAL PROFILE

**Total Experience: 24.75 years**

**A. Teaching & Academic Administration Experience: 22.5 years**

**B. Industry Experience: 2.25 years**

### A. Teaching & Academic Administration Experience:

January 2020 – Present	Professor (Computer Science Engineering) in Poornima College of Engineering, Jaipur.
January 2017 – December 2019	Professor (Computer Science) & Dean – Computer Sciences, LKC Group of Colleges, Jalandhar, Punjab, India.
	<p><b>Key Responsibilities:</b></p> <ul style="list-style-type: none"> <li>➤ To make the <b>Computer Science Departments</b> at four colleges of group (LKC Engg. College, KCL IMT College, LKC women's College &amp; Lyallpur Khalsa College), centres of excellence.</li> <li>➤ To chair and participate in various committees.</li> <li>➤ To assist and help the management in various decisions like quality admissions, quality placements, hiring quality faculty etc.</li> <li>➤ To inspire all the concerned faculty for doing quality research work and also to inspire them towards getting funded projects.</li> </ul>
April 2016 – September 2016	Professor (Computer Science) & Dean – Faculty of Computational Science, GNA University, Phagwara, Punjab, India.
	<p><b>Key Responsibilities:</b></p> <ul style="list-style-type: none"> <li>➤ To make the Faculty of Computational Sciences, a centre of excellence.</li> <li>➤ To chair and participate in various university committees.</li> <li>➤ To assist and help the management in various decisions like quality admissions, quality placements, <b>hiring quality faculty</b> etc.</li> <li>➤ To inspire all the concerned faculty for doing quality research work and also to inspire them towards getting funded projects.</li> <li>➤ <b>Chaired the BOS meeting.</b></li> </ul>
August 2015 – March 2016	Professor (Computer Science) & Principal – School of Engineering & Technology, Raffles University, Neemrana, Rajasthan, India.
	<p><b>Key Responsibilities:</b></p>



	<ul style="list-style-type: none"> <li>➤ To make the school of engineering&amp; technology, a centre of excellence.</li> <li>➤ To chair and participate in various university committees.</li> <li>➤ To assist and help the management in various decisions like quality admissions, quality placements, hiring quality faculty etc.</li> <li>➤ To inspire all the concerned faculty for doing quality research work and also to inspire them towards getting funded projects.</li> </ul>
<p><b>July 2012</b></p> <p>–</p> <p><b>July 2015</b></p>	<p><b>Professor (IT) &amp; Head (CSE &amp; IT), DIT University, Dehradun, Uttarakhand, India.</b></p> <p><b>Key Responsibilities:</b></p> <ul style="list-style-type: none"> <li>➤ Designed the entire curricula and syllabi for the programmes running in CSE &amp; IT departments of DIT University.</li> <li>➤ <b>Chaired the BOS meeting of the departments of CSE &amp; IT &amp; got the approval of SIX programmes viz. B Tech in CSE, ITE, CSE-Cloud; Int. M Tech – CSE; M Tech in CSE &amp; ISM.</b></li> <li>➤ Participated / chaired a large number of university committees.</li> <li>➤ Coordinated the funded NIESBUD program (State government sponsored program) of cost Rs 2,00,000/-.</li> <li>➤ Lectures of B Tech, M Tech, &amp; Ph. D students on: <ul style="list-style-type: none"> <li>★ Modelling &amp; Simulation</li> <li>★ Theory of Computation</li> <li>★ Numerical Analysis</li> <li>★ Graph Theory &amp; Operations Research</li> <li>★ Compiler Design</li> <li>★ Computer Graphics</li> <li>★ Discrete Mathematics</li> <li>★ Cloud Computing</li> </ul> </li> </ul>
<p><b>December 2001</b></p> <p>–</p> <p><b>July 2012</b></p>	<p><b>Assistant Professor (Computer Science), Banasthali Vidyapith, India.</b></p> <p><b>Key Responsibilities:</b></p> <ul style="list-style-type: none"> <li>➤ Participated / chaired a large number of university committees.</li> <li>➤ Providing guidance to the students in their project work / seminars.</li> <li>➤ Taking active participation in the whole examination process.</li> <li>➤ Evaluation of new technologies / trends for incorporating into curriculum.</li> <li>➤ Lectures of MCA, B Tech &amp; M Tech students on: <ul style="list-style-type: none"> <li>★ Modelling &amp; Simulation</li> <li>★ Theory of Computation</li> <li>★ Numerical Analysis</li> <li>★ Compiler Design</li> </ul> </li> </ul>



	<ul style="list-style-type: none"> <li>★ Computer Graphics</li> <li>★ Discrete Mathematics</li> <li>★ Artificial Intelligence</li> <li>★ Cloud Computing</li> </ul>
<b>July 2001</b> – <b>November 2001</b> & <b>July 2000</b> – <b>March 2001</b>	<b>Lecturer (Computer Science), Deptt. of Computer Science, Gurukul Kangri University, Harwar, India.</b>  <b>Key Responsibilities:</b> <ul style="list-style-type: none"> <li>➤ Providing guidance to the students in their project work / seminars.</li> <li>➤ Taking active participation in the whole examination process including setting of various papers &amp; their checking.</li> <li>➤ Evaluation of new technologies / trends for incorporating into curriculum.</li> <li>➤ Prepare and setup Time Table.</li> <li>➤ Lectures of MCA &amp; B Tech students on:                             <ul style="list-style-type: none"> <li>★ Modelling &amp; Simulation</li> <li>★ Numerical Analysis</li> <li>★ Graph Theory &amp; Operations Research</li> <li>★ Computer Networking</li> <li>★ Discrete Mathematics</li> </ul> </li> </ul>
<b>October 1999</b> – <b>June 2000</b>	<b>Senior Faculty (Computer Science), SCMT, Harwar, India.</b>  <b>Key Responsibilities:</b> <ul style="list-style-type: none"> <li>➤ Providing guidance to the students in their project work / seminars.</li> <li>➤ Lectures of BCA, PGDCA &amp; MCA students on:                             <ul style="list-style-type: none"> <li>★ Information Technology</li> <li>★ Data Structures &amp; Algorithms</li> <li>★ Graph Theory &amp; Operations Research</li> <li>★ System Analysis and Design</li> </ul> </li> </ul>

## B. Industry Experience:

<b>September 1998</b> – <b>March 1999</b>	<b>Computer Programmer, Weavetex Overseas, Bagpat, U.P., India.</b>  <b>Key Responsibilities:</b> <ul style="list-style-type: none"> <li>➤ Developed Payroll System.</li> <li>➤ Developed Production Management System.</li> <li>➤ Overall Head of the organization's network and to ensure an uninterruptible setup.</li> </ul>
<b>August 1997</b> –	<b>Computer Programmer, Modern Threads (I) Ltd., Bhilwara, Rajasthan, India.</b>  <b>Key Responsibilities:</b>



February 1998	<ul style="list-style-type: none"> <li>➤ To develop &amp; modify several applications.</li> <li>➤ To generate the required MIS reports.</li> <li>➤ Overall Head of the organization's network and to ensure an uninterrupted setup.</li> </ul>
July 1996 — August 1997	<p><b>Computer Programmer, Suzuki Processors, Bhilwara, Rajasthan, India.</b></p> <p><b>Key Responsibilities:</b></p> <ul style="list-style-type: none"> <li>➤ To develop &amp; modify several applications.</li> <li>➤ To generate the required MIS reports.</li> <li>➤ Overall Head of the organization's network and to ensure an uninterrupted setup.</li> </ul>

## RESEARCH PROFILE

### Total Research Outcomes: 26

**A. Publications in International / National Journals: 18**

**B. Research Papers Presented in International Conferences: 03**

**C. Indian Patent: 01**

**D. Chapter accepted to be published by Springer: 01**

**E. Papers accepted for publication in Scopus/SCI: 03**

### A. Publications in International / National Journals:

- [i] Bhargava, S. and G. N. Purohit [2011]. "An Experimental Survey on Parsing with Neural and Finite Automata Networks". *International Journal of Computer Science Issues (IJCSI)*. vol. 8, no. 4 (2), pp. 279-288. **IMPACT FACTOR -> 0.242.**  
<http://ijcsi.org/papers/IJCSI-8-4-2-279-288.pdf>
- [ii] Bhargava, S. and G. N. Purohit [2011]. "Parsing with Neural and Finite Automata Networks using Graph Grammar". *International Journal of Computer Applications (IJCA)*. vol. 23, no. 4, pp. 13-20. **IMPACT FACTOR -> 0.821.**  
<http://www.ijcaonline.org/volume23/number4/pxc3873747.pdf>
- [iii] Bhargava, S. and G. N. Purohit [2011]. "Construction of a minimal deterministic finite automaton from a regular expression". *International Journal of Computer Applications (IJCA)*. vol. 15, no. 4, pp. 16-27. **IMPACT FACTOR -> 0.821.**  
<http://www.ijcaonline.org/volume15/number4/pxc3872589.pdf>
- [iv] Bhargava, S. and G. N. Purohit [2011]. "Parsing a Natural Language: A Non-Statistical Approach". *National Journal of Computer Science & Technology (NJCST)*. vol. 3, no. 1, pp. 23-33.  
<http://www.svics.ac.in/njcst/v3i1.pdf>
- [v] Jangir, M., Bhargava, S. and O. S. Lamba [2013]: "Performance Comparison of UMTS and LTE on The Basis of Data Rates". *International journal of Electronics and*



- Communication Engineering & Technology (IJECE)*. vol. 4, no. 7, pp. 89-94. **IMPACT FACTOR -> 3.7215.**  
<http://www.iaeme.com/MasterAdmin/UploadFolder/40120130407013%5C40120130407013.pdf>
- [vi] Sajwan, M., Acharya, K. and **S. Bhargava** [2014]: "Swarm Intelligence Based Optimization for Web Usage Mining in Recommender System". *International Journal of Computer Applications Technology and Research (IJCATR)*. vol. 3, no. 2, pp. 119-124.  
<http://www.ijcat.com/archives/volume3/issue2/ijcatr03021007.pdf>
- [vii] Acharya, K., Sajwan, M. and **S. Bhargava** [2014]: "Analysis of Cryptographic Algorithms for Network Security". *International Journal of Computer Applications Technology and Research (IJCATR)*. vol. 3, no. 2, pp. 130-135.  
<http://www.ijcat.com/archives/volume3/issue2/ijcatr03021009.pdf>
- [viii] Singh, M., Kumar, A. and **S. Bhargava** [2014]: "Energy Efficiency in Cloud Computing". *HCTL Open International Journal of Technology Innovations and Research (IJTIR)*. vol. 7, January 2014, ISSN: 2321-1814, ISBN: 978-1-62951-250-1.  
[http://www.hctl.org/ijtir/vol7/IJTIR\\_Article\\_201401005.pdf](http://www.hctl.org/ijtir/vol7/IJTIR_Article_201401005.pdf)
- [ix] Singh, M., Singh, G. M., Kumar, A. and **S. Bhargava** [2014]: "Security in Cloud Computing". *HCTL Open International Journal of Technology Innovations and Research (IJTIR)*. vol. 7, January 2014, ISSN: 2321-1814, ISBN: 978-1-62951-250-1.  
[http://www.hctl.org/ijtir/vol7/IJTIR\\_Article\\_201401007.pdf](http://www.hctl.org/ijtir/vol7/IJTIR_Article_201401007.pdf)
- [x] Singh, G. M., Kumar, A. & **S. Bhargava** [2014]: "A Database Management System for Cloud Computing". *HCTL Open International Journal of Technology Innovations and Research (IJTIR)*. vol. 7, January 2014, ISSN: 2321-1814, ISBN: 978-1-62951-250-1.  
[http://www.hctl.org/ijtir/vol7/IJTIR\\_Article\\_201401008.pdf](http://www.hctl.org/ijtir/vol7/IJTIR_Article_201401008.pdf)
- [xi] Arora, K., **Bhargava, S.** & A. Srivastava [2014]: "GMT (Graph Mining Techniques) for Crime Detection and Comparison with the proposed algorithm". *International Journal of Advanced Research in Computer Science and Electronics Engineering (IJARCSEE)*. North America. vol. 3, no. 2, pp. 108-112. **IMPACT FACTOR -> 2.080.**  
<http://ijarcsee.org/index.php/IJARCSEE/article/view/451/418>
- [xii] Deepshikha & **S. Bhargava** [2014]: "Improving Multi-path AODV by utilizing all available paths for a small Tactical Network". *International Journal of Engineering & Technical Research (IJETR)*. vol. 2, no. 1, pp. 101-104. ISSN: 2321-0869. **IMPACT FACTOR -> 1.315.**  
[http://erpublication.org/admin/vol\\_issue1/upload%20Image/IJETR021145.pdf](http://erpublication.org/admin/vol_issue1/upload%20Image/IJETR021145.pdf)
- [xiii] Panwar, M., Kumar, M. & **S. Bhargava** [2014]: "GPU Matrix Sort (An Efficient Implementation of Merge Sort)". *International Journal of Computer Applications (IJCA)*. vol. 89, no. 18, pp. 9-11. **IMPACT FACTOR -> 0.821.**  
<http://research.ijcaonline.org/volume89/number18/pxc3894450.pdf>
- [xiv] Manchanda, A., Sarkar, A. & **S. Bhargava** [2014]: "Minimizing Noise on Dual GSM Channels Using Adaptive Filters". *International Journal of Research in Information Technology (IJRIT)*. vol. 2, no. 4, pp. 122-126. **IMPACT FACTOR -> 1.738.** ISSN: 2001-5569.





- [xv] Kumar, S., Kumar, A. & **S. Bhargava** [2014]: “Lung Nodule Detection & Segmentation Techniques Review”. *International Journal of Advanced Research in Computer Science and Software Engineering (IJARCSSE)*. vol. 4, no. 4, pp. 102-104. **IMPACT FACTOR -> 2.080**. ISSN: 2277-128X.  
[http://ijarcsse.com/docs/papers/Volume\\_4/4\\_April2014/V4I4-0150.pdf](http://ijarcsse.com/docs/papers/Volume_4/4_April2014/V4I4-0150.pdf)
- [xvi] Kandwal, R., Kumar, A. & **S. Bhargava** [2014]: “Review: Existing Image Segmentation Techniques”. *International Journal of Advanced Research in Computer Science and Software Engineering (IJARCSSE)*. vol. 4, no. 4, pp. 153-156. **IMPACT FACTOR -> 2.080**. ISSN: 2277-128X.  
[http://ijarcsse.com/docs/papers/Volume\\_4/4\\_April2014/V4I4-0130.pdf](http://ijarcsse.com/docs/papers/Volume_4/4_April2014/V4I4-0130.pdf)
- [xvii] Kumar, A., Sarkar, A. & **S. Bhargava** [2014]: “Proposal for Modified Routing Algorithms for Multipath on Demand MANET Topology”. *The International Journal of Science & Technoledge (THEIJST)*. vol. 2, no. 4, pp. 106-109. **IMPACT FACTOR -> 0.675**. ISSN: 2321-919X.  
<http://theijst.com/april2014/20.ST1404-075.pdf>
- [xviii] Kumar, M., Panwar, M. & **S. Bhargava** [2014]: “Simple Sequence Oriented Disk (SSOD) Scheduling Algorithm”. *International Journal of Computer Applications (IJCA)*. vol. 100, no. 2, pp. 20-24. **IMPACT FACTOR -> 0.821**.  
<http://research.ijcaonline.org/volume100/number2/pxc3898029.pdf>

## **B. Research Papers Presented in International Conferences:**

- [i] **Bhargava, S.** and G. N. Purohit [2009]. “Construction of a minimal deterministic finite automaton from a regular expression”. *Jubilee Conference on Discrete Mathematics (JCDM)*. Organized by Banasthali University in January 2009.
- [ii] Jangir, M., **Bhargava, S.** and O. S. Lamba [2013]: “Performance Comparison of UMTS and LTE on The Basis of Data Rates”. *International Conference on Communication Systems (ICCS-2013)*. Organized by B. K. Birla Institute of Engineering & Technology, Pilani, India in October 2013.
- [iii] Deepshikha., **Bhargava, S.**, Thapliyal, S. and L. C. Mangal [2014]: “Quantitative Evaluation of MANET Routing Protocols for Tactical Radios”. *International Conference on Communication and Computer Networks of the future (COMNET 2014)*. Organized by P.S.G. College of Technology, Coimbatore, India in March 2014.

## **C. Indian Patent:**

- [i] **Bhargava, S.** et al. [2021]. “Mobile Application Based IOT system for integrated Farm”. *Official Journal of the Patent Office, India*. No. 47/2021, dt. 19/11/2021, pp. 196.



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**D. Chapter accepted for Publication by Springer:**

- [i] **Bhargava, S.** et al. [2021]. “Optimal Stacked Sparse Autoencoder based Traffic Flow Prediction in Intelligent Transportation Systems”. *Virtual and augmented Reality for Automobile industry: Innovation, Vision and Applications*. To be Published by Springer.

**E. Papers accepted for publication in Scopus/SCI:**

- [i] **Bhargava, S.** et al. [2021]. “Controlling Energy-Aware Clustering and Multihop Routing Protocol for IOT Assisted Wireless Sensor Networks”. *Concurrency and Computation: Practice and Experience*. **IMPACT FACTOR -> 1.536. Indexed in Scopus / SCIE**
- [ii] **Bhargava, S.** et al. [2021]. “Modeling of Hyperparameter Tuned CNN and LSTM for prediction model”. *Tech Science* **IMPACT FACTOR -> 1.64. Indexed in Scopus / SCIE**
- [iii] **Bhargava, S.** et al. [2021]. “Multihop Staggering Protocol for IOT Sensor Networks”. *Recent Advances in Computer Science and communications*. **Indexed in Scopus / SCIE.**
- [iv] **Bhargava, S.** et al. [2021]. – **9 papers, 2 patents and 1 book chapter are in pipeline and waiting for their acceptance.**

**OTHER APIs(significant)**

1. Taken Guest lectures & Tutorials on C++ in M.C.A., Deptt. Of Mathematics, **IIT Roorkie, Roorkie**, from July 2000 to December 2000.
2. Reviewer in International Journal of Computer Science Issues (IJCSI: Impact Factor: 0.242), IACSIT, WJMS, IJCSIS, International Journal of Computational Linguistics.
3. Coordinated B.Tech. (CSE) with specialization in Cloud Computing, the program is running in collaboration with IBM.
4. Coordinated the following FDPs / SDPs in collaboration with IBM, each of 50 hrs duration:
  - (i) **FDP on enterprise development in cloud applications.**
  - (ii) **FDP on mobile application development.**
  - (iii) **SDP on enterprise development in cloud applications.**
  - (iv) **SDP on mobile application development.**





5. Online FDP attended – 6
6. Online FDP conducted – 1
7. Online webinar attended + conducted – 10 + 1
8. Online workshop attended – 3
9. Online Courses from Coursera - 7
10. More than 20 research papers are under publication process.
11. Made the course identification code policy for DIT University.
12. A member of the Academic Council of DIT University.
13. Designed the syllabi for Ph. D. Entrance examination (Computer Science) fully on my own for Banasthali Vidyapith. Later designed a systematic method to prepare a question bank for Ph. D. Entrance exam.
14. Assistant Superintendent of the Examination in Banasthali Vidyapith.
15. Centre Superintendent of the Examination in DIT University.
16. Examiner and paper setter for various universities.
17. Approximately **250 students of MCA** have been guided so far in their minor / major projects.
18. Approximately **100 students of M Tech (CS/IT)** have been guided so far as internal / main supervisor during their major projects.
19. Guiding **SIX Ph D students**.

**REFERENCES** *Will be provided when required.*