CURRICULUM VITAE

Dr. Sameena Naaz

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CAREER OBJECTIVE:

- To impart the knowledge attained by education and personal experiences to the coming generation.
- To mentor my students and counsel them.
- To contribute to the administrative responsibilities of the department as well as university**.**
- To contribute in the field of research and development.

EXPERIENCE:

I have a total experience of 16+ years in the field of teaching, learning and research with one year overseas experience. The details are as under:

- Working as an Assistant Professor in the department of Computer Science Faculty of Management and Information Technology, Jamia Hamdard, New Delhi since July 2004.
- Worked as a lecturer at Amity School of Engineering and Technology from August 2003 to July 2004
- Worked as a lecturer in School of Computer and Information Technology Inti College Malaysia, Malaysia from August 2002 to July 2003.
- Worked as a lecturer in the department of Computer Science Faculty of Management studies and Information Technology Jamia Hamdard New Delhi from December 2000 to May 2002.

- **Post Graduate courses taught** :

  Master of Technology
  Master of Computer Applications
  Master of Science-Information Technology
  Master of Science-Computer Science

- **Undergraduate courses taught:**

  Bachelor of Computer Applications
  Bachelor of Multimedia Studies
  Business Information Technology

Bachelor of Information Technology
Bachelor in Software Engineering
Bachelor of Computer Science
Bachelor of Computer Systems and Networks
B. Tech Computer Science
B. Tech Electronics and Communication
B. Tech Information Technology

- **Subjects taught at undergraduate and post graduate level:**

C Programming
Operating Systems
Basic Computing
Computer Graphics
Network Management
Computer Architecture
System Analysis and Design
Distributed Operating Systems
Object Oriented Programming
Data Communication and Networks
Business Data Processing and File Systems
System software and assembly language programming
Microprocessors

PROJECTS/DISSERTATIONS GUIDED:

Undergraduate Level

- Guided a number of BCA, B.Tech (CS) and B.Tech (IT) final year students in their projects.

Post Graduate Level

- Guided a number of students of M.Sc (Computer Science/ Information Technology) in their dissertation.
- Guided many students of MCA in their dissertation.
- Guided many students of M.Tech (Computer Science) in their dissertation.

QUALIFICATIONS:

- Ph.D (Computer Science) from Jamia Hamdard University in March 2014.
  Topic of Research: To Develop and Analyze a Fuzzy Based Algorithm for Load Balancing in a Distributed Environment.
- M. Tech (Communication and information systems) from Aligarh Muslim University, Aligarh (U.P., India) in 2000 attaining 80.4% marks.

- B.Sc Engg. (Computers) from Aligarh Muslim University, Aligarh (U.P., India) in 1998 attaining 76.7 % marks (8.725 CPI).
- 10+2 in 1994 attaining 72.0% marks.
- High School in 1992 attaining 81.8% marks.

LANGUAGES/ PACKAGES/ SIMULATION SOFTWARES: C, C++, Fortran, HTML, Visual Basic, FOXPRO, 8085/8086 Assembly language, MATLAB, OPNET, OMNET, NS 2, Wireshark, Hadoop framework.

OPERATING SYSTEMS: Windows95, Windows 98, Windows2000, Windows XP, Unix/Linux, Windows7/8, Mac

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PH.D. THESIS ABSTRACT:

- A load balancing queue based algorithm has been developed for the distributed environment which distributes the traffic among the servers in fair way regardless of the network traffic, and how much the servers can serve in unit time. The proposed algorithm is concerned with checking the traffic, aggregating it and distributing the requested jobs between the servers by the network load balancer.
  Preliminary results show that this algorithm has the potential to significantly improve fairness of load balancing between the servers when ever the traffic is coming. The capacity of the server is of major importance in the serving of traffic request. The fairness is very important to increase the performance of the system as well as it gives out all the clients request in shortest time and help the system to be scalable.

- A distributed system is assumed to be a collection of autonomous nodes connected by a communication network. Message passing is the only form of communication among nodes. The system model with d dimensions has 2^d nodes. If we number the nodes from 0 thru (2^d)-1 and look at the numbers as d-digit binary numbers, then each node will be connected to d other nodes which differ only in one bit. That is, suppose d=4 for example, then 0010 (node 2) will be connected to 1010 (node 10), 0110 (node 6), 0000 (0) and 0011 (node 3).The system model is a compound module type which consists of a sender (source) and receiver (sink) module.
  The implementation of this algorithm has been done on MATLAB using Fuzzy Logic Toolbox. Two input parameters and one output parameter has been taken. The first input parameter is ‘load’ and the second one is ‘Number of heavy Load Node’ and the output parameter is ‘status of load balance node’.
  The results of the simulation were compared with the results without using fuzzy logic and it was found that for all cases the response times of the algorithm developed in this work is lesser than the one where fuzzy logic is not used.

- For the same system model discussed above the various defuzzification methods have been studied and compared. The results obtained using the five defuzzification methods have been compared here. It has been found that the centroid method, bisector method and mean of maximum method are giving us approximately the same results in the load balancing application that we have taken. Where as for the smallest of maximum and

largest of maximum approaches there is wide variations in the results that are obtained. The reason for this is that these two methods use the two extremes i.e smallest or largest values for calculation of the crisp value.
Hence it has been concluded that centroid, bisector and MOM methods are better as compared to the LOM, SOM, as there is more consistency in the results.

PROJECTS UNDERTAKEN:

At Post Graduate Level:

- **Application of Genetic Algorithm in Optimization of any Function:** In genetic Algorithms the search procedures are based on the mechanics of natural selection and natural genetics. Here the main aim was to reduce the total side lobe energy of any received sequence of data. For this various steps in Genetic Algorithms, that is, selection, crossover, mutation, reinsertion were carried out.

- **Optimum Detection in Block Data Transmission System using Genetic Algorithms:** If we are transmitting any data through telephone channel or HF radio links then these channels themselves introduce some frequency shift into the spectrum of the transmitted signal. This causes serious problem in the detection of received signal. The individual transmitted signal elements are spread out in time, so that these overlap each other at the receiver end. This is known as Intersymbol Interference. To avoid this sufficient gaps have been introduced after the transmission of a group of signal elements, referred to as a block. Insertion of these gaps leads to the elimination of Intersymbol Interference between successive blocks. In the work here Genetic Algorithm has been used for detection of these blocks

At Undergraduate Level:

- **Hostel Management System:** This system was developed using FOXPRO 2.5. It has all the modules that are required for proper maintenance of records of any hostel. There is provision for addition, deletion and modification of information about various students. Listing of students along with their room numbers can be done. There is also a module which deals with the fee submission of students.

- **Morphing:** Morphing depicts objects that smoothly changes shape. This project incorporates morphing concept for nearly similar looking objects. Here morphing is achieved by merely changing the colors rather than the conventional method of polygons. The concept used here is that if one image is converted to another image in definite number of steps giving different frames for each step, then an individual frame can be considered as a combination of colored pixel. This system was developed using Visual Basic-4 (32 bit)

- **Information System for Department Library:** The system developed here maintains a record of books available in the department library of Computer Engineering

Department. Various activities that are a part of working of the library are incorporated in this project with good interactive interface. This project has been developed using C language.

- **Combinational circuit Designer:** This software has been developed using Visual Basic-4 (32 bit) and it works as a tool for designing a combinational circuit. It also provides the facility to reduce a Boolean expression given in truth table format to the most simplified form. The circuit designed using this software can be verified for any combination of input variables. The maximum number of input variables that can be handled by this software is limited to four.

- **Image Editor:** The software developed in this project can be used for manipulating colored bitmaps, icons etc. Through this software one can brighten, filter the image through red, blue and green channels, convert a high or true color image to 8 bit gray scale or 1 bit black and white image. The image can also be flipped horizontally, vertically and can be rotated by 90° or 270°. It has been developed in Visual Basic-4 (32 bit)

- **Development of Website for the faculty of Science A.M.U.:** This project was carried out as a small step in developing the web site of Aligarh Muslim University-a premier central university of international repute. All the information about the various departments of Science faculty has been provided in it. This implementation was done using HTML 4.0

PAPERS PUBLISHED IN JOURNALS:

1. Sameena Naaz, Afshar Alam, Ranjit Biswas, "Implementation of a new Fuzzy Based Load Balancing Algorithm for Hypercubes" (IJCSIS) International Journal of Computer Science and Information Security, Vol. 8, No.9, December 2010, page 270 - 274. ISSN 1947-5500. LJS Publisher **Indexed in** Google Scholar, ScientificCommons, Citeseer* Beta, Scirus.
2. Sameena Naaz, Afshar Alam and Ranjit Biswas, "Effect of different defuzzification methods in a fuzzy based load balancing application", IJCSI International Journal of Computer Science Issues, Vol. 8, Issue 5, No 1, September 2011, page 261 – 267. ISSN (Online): 1694-0814, Indexed in Google Scholar, Scirus, Citeseer, DOAJ, BASE, ScientificCommons etc. Google Scholar Impact Factor 0.242
3. Sameena Naaz, Afshar Alam and Ranjit Biswas, "Load Balancing Algorithms for Peer to Peer and Client Server Distributed Environments". International Journal of Computer Applications, Volume 47, Number 8, June 2012, page 17 – 21. Online ISSN 0975-8887. Published by Foundation of Computer Science, New York, USA. doi: 10.5120/7208-9995.
4. Roop Ranjan, Sameena Naaz, Neeraj Kaushik "Web Miner: A Tool for Discovery of Usage Patterns from Web Data" International Journal on Computer Science and Engineering, Volume 5 Issue 5, May 2013, pages 286-293. ISSN(Print): 2278-9960; ISSN(Online): 2278-9979 ; Impact Factor: 2.3176

5. Sameena Naaz, "Routing in Vehicular Ad Hoc Network (VANET)", International Journal of Advanced Research in Computer Science and Software Engineering, Volume 4, Issue 12, December 2014 ISSN: 2277 128X, page 346-350.
6. Sameena Naaz, M Hayat Khan, "Analysis of Web Pages through Link Structure", International Journal of Computer Applications, Volume 122 – No.11, July 2015, page 22-26. Online ISSN 0975-8887. Published by Foundation of Computer Science, New York, USA. doi: 10.5120/21745-4981.
7. Sameena Naaz, Firdoos Ahmad Badroo , "Investigating DHCP and DNS Protocols using Wireshark", IOSR Journal of Computer Engineering (IOSR-JCE) e-ISSN: 2278-0661,p-ISSN: 2278-8727, Volume 18, Issue 3, Ver. II (May-Jun. 2016), PP 01-08
8. Sameena Naaz, Faizan Ahmad Siddiqui, "Comparative Study of Cloud Forensics Tools", Communications on Applied Electronics (CAE) ISSN: 2394-4714, Foundation of Computer Science FCS, New York, USA Volume 5 – No.3, June 2016, page 24-30.
9. Sameena Naaz, Farhana Mariyam, "A Fuzzy Based Approach for the Elicitation of Attributed Values of Goal Models", International Journal of Computer Science and Information Security, Volume 14, No 7, July 2016. ISSN 1947-5500. LJS Publisher **Indexed in ESCI-IP and science- Thomson Reuters- Web of Science. Impact factor 0.519.** Page 525-536.
10. Sameena Naaz, Iffat Rehman Ansari, Amir Khan, "Load Balancing of Virtual Machines Using Service Broker Algorithm", International Journal of Advanced Technology in Engineering and Science, Volume 4, Issue 9, September 2016, ISSN 2348-7550, Page 232-238.
11. Iffat Rehman Ansari, Shahnawaz Uddin and Sameena Naaz, "Use of Matched Filter in Direct Sequence Spread Spectrum Techniques", Indian Journal of Science and Technology, Vol 9(47), DOI: 10.17485/ijst/2016/v9i47/100967, December 2016, ISSN (Print) : 0974-6846 ISSN (Online) : *0974-5645,* Pages 1-7.
12. Shahnawaz Uddin, Iffat Rehman Ansari and Sameena Naaz, *"*Low Bit Rate Speech Coding Using Differential Pulse Code Modulation*",* Advances in Research, SCIENCEDOMAIN International, *Volume 8(3): 2016; ISSN: 2348-0394, Page 1-6.*
13. Insha Qayoom, Sameena Naaz, "Review on Secure and Authentic Identification System using Finger Veins", International Journal of Advanced Research in Computer Science, Volume 8, No. 5, May-June 2017, ISSN No. 0976-5697. Page 2285-2288.
14. Manasha Saqib, Sameena Naaz, "Spatial and Frequency Domain Digital Image Watermarking Techniques for Copyright Protection", International Journal of Engineering Science and Technology (IJEST), Vol. 9 No.06 Jun 2017, ISSN: 0975-5462, Page: 691-699.

CONFERENCES ATTENDED AND PAPERS PUBLISHED IN NATIONAL CONFERENCES:

1. Sameena Naaz, Parul Agarwal, "A Fuzzy Algorithm for Scheduling Real Time Jobs in Multiprocessor Systems" in Proc. of National Conference INDIACom-2008, Bharati

Vidyapeeth's Institute of Computer Applications and Management, New Delhi, February 8-9, 2008, ISSN 0973 – 7529, ISBN 978 -81-904526 -2 -5. Page no. 533 -536.

2. Attended a conference and presented a paper titled "Network Load Balancing Technical Overview" at National Conference on Recent Developments in Computing and it's Applications, held on August 12 – 13, 2009 at Hamdard University, New Delhi. IK International Publishing House Pvt. Ltd. ISBN 978 -93 – 80026- 78 -7. Page No. 73 -79.
3. Sameena Naaz, Afshar Alam and Ranjit Biswas, "Load Balancing Queue Based Algorithm for Distributed Systems", Proc. of National Conference on Mathematical Techniques: Emerging Paradigms for Electronics and IT Industries MATEIT – 2010, Deen Dayal Upadhyaya College University of Delhi, India, January 30 -31, 2010, Pp. PS 8.1 – PS 8.5
4. Sameena Naaz, Afshar Alam, "A comparative study of the defuzzification methods in an application" in Proc. of 1st National Conference On Next Generation Computing and Information Security (NCNGCIS-2011) "Emerging Trends for Future Challenges", IMS Noida, 25th & 26th March, 2011, ISBN: 978-81-921148-0-4, Page 39 – 45.
5. Roop Ranjan, Sameena Naaz, Dr. B.K.Gupta "Web Miner: A Tool for Usage Mining on a Dynamic Website" in Proc. of 3rd National Conference on Next Generation Computing and Information Security: ―Emerging Trends & Challenges (NCNGCIS-2013) held on 22nd -23rd March 2013 at IMS Noida.

CONFERENCES ATTENDED AND PAPERS PUBLISHED IN INTERNATIONAL CONFERENCES:

1. Sameena Naaz, Afshar Alam, "Optimum Detection in Block Data Transmission Systems Using Genetic Algorithm" in Proc. of International Conference on Computer Networks and Security ICCNS 08, Vishwakarma Institute of Technology, Pune, India, September 27 – 28, 2008, Pp. 228-233.
2. Sameena Naaz, Mohamed Meftah Alrayes, "A Dynamic Load Balancing Algorithm for Web Applications" presented at International Conference on Computing: Updates and Trends (CUT – 2010), Jaipuria Group of Institutions Ghaziabad, February 6th 2010, Pp 10.
3. Sameena Naaz, Iffat Rehman Ansari, Amir Khan "Load Balancing of Virtual Machines Using Service Broker Algorithm", in Proc. of 7th International Conference on Recent Innovations in Science, Engineering and Management, The Institute of Engineers Delhi State Center (India), 16th September 2016, Page no. 138-144.
4. Shahnawaz Uddin, Iffat Rehman Ansari and Sameena Naaz , "Design and Simulation of a Digitally programmable Frequency Hopping Oscillator", Proc. of 4th International Conference on "Computing for Sustainable Global Development", Bharati Vidyapeeth's Institute of Computer Applications and Management (BVICAM), New Delhi (INDIA) 01st -03rd March, 2017, IEEE Conference ID: 40353. Pp 160-164.

BOOK CHAPTERS:

1. Sameena Naaz, MohamedMeftah ALRayes "A Dynamic Load Balancing Algorithm for Web Applications" Computer and Information Technology, "APH Publishing Corporation", ISBN: 978-81-313-0881-3.

SEMINARS/WORKSHOPS/TRAININGS ATTENDED:

- Underwent training for one month at Hartron Workstation Chandigarh India.
- Attended a two days teachers training workshop from 3rd to 4th October 2001 held at Jamia
- Hamdard, New Delhi.
- Attended a five days teachers training workshop from 6th to 10th May 2002 held at Jamia Hamdard, New Delhi.
- Attended a two days workshop on "Enhancing teaching skills and the educational environment" from 12th to 13th December 2002 held at Inti College Malaysia, Malaysia.
- Attended a one day faculty development program organized by Amity Institute of training and development, Center for faculty development on October 18, 2003.
- Attended Linux workshop on 21st August 2004
- Attended the Linux demo day
- Attended a seminar lecture on Hypertext and Multimedia.
- Attended the Erudition session of NERDZ 2005(two days IT festival organized by department of Computer Science Jamia Hamdard)
- Attended a seminar lecture on Grid Technology held in the department of Computer Science Jamia Hamdard on 5th August 2006.
- Attended a 4-week orientation programme at Jamia Milia Islamia in Jan – Feb 2007.
- Attended a two day National Workshop on Software Security held on 13 – 14 September, 2007 at Jamia Millia Islamia. New Delhi
- Attended a two day regional seminar on "Intellectual Property Protection & Management" held on 11th -12th February, 2009 at Jamia Hamdard, Hamdard Nagar New Delhi.
- Attended a two day national seminar on " Current Challenges and Opportunities in Pharmaceutical Industry" held on 7th -8th March 09 at Hamdard Convention Centre, Jamia Hamdard.
- Participated in a workshop on "Basic Robotics and introduction for autonomous robotics" organized by MITBOTS (An IIT Delhi Alumni Group), Robotic Foundation of India. (August 21-22, 2009)
- Attended a workshop on Network Security and Applications (NSA-2011), organized by University Polytechnic, Aligarh Muslim University, Aligarh, UP on 5th -6th February 2011.
- Participated in the Walk and Workshop on "Awareness, Preparedness and Management for Risks Reduction of Disaster" on the occasion of "UN International Disaster

Reduction Day" organized by Faculty of medicine Jamia Hamdard held on 12th October 2011.

- Attended a seminar on "Innovations in Apple Inc. (A tribute to Steve Paul Jobs)" organized by the Department of Computer Science, FMIT, Jamia Hamdard in association with ISTE, CSI and IEEE held on 21st October, 2011.
- Attended a 3 week Refresher Course in Mathematics, Operational Research and Computer Science at Centre for Professional Development in Higher Education (CPDHE), University of Delhi from December 12th to 31st, 2011.
- Attended a 2 day Annual Faculty/ Teacher's Convention-2015, held on 3rd and 4th November 2015, Organized by Department of Computer Science, Jamia Hamdard, New Delhi. Theme: Academic Knowledge and Skill Required for Enterpreneurship.
- Attended 4th 3 week Winter School at UGC-Human Resource Development Centre Jamia Millia Islamia from December 8th to 30th 2015.
- Attended 7TH DBT-BIF NATIONAL WORKSHOP on Translational Bioinformatics held at Department of Computer Science, Jamia Millia Islamia, New Delhi on February 15-16, 2017.
- Attended a One Week Faculty Development Programme (24th – 29th July, 2017) on "Emerging Research Trends in Computer Science & IT" in collaboration with IEEE Computer Society (Delhi Section), CSI Delhi Chapter & ISTE Delhi Section from 24th – 29th July, 2017, at Bharati Vidyapeeth's Institute of Computer Applications and Management (BVICAM).

SEMINARS/WORKSHOPS/TRAININGS ORGANIZED:

- Organizing member of National Conference on Recent Developments in Computing and it's Applications, held on August 12 – 13, 2009 at Hamdard University, New Delhi.
- Organizing member of a two-day Annual Faculty/ Teacher's Convention-2015, held at Department of Computer Science, Jamia Hamdard, New Delhi on 3rd and 4th November 2015.
- Organizing member of one-day StartUp India/ Digital India Convention held at Department of Computer Science and Engineering, Jamia Hamdard, New Delhi on 31st January 2017.
- Organizing member of one-day National Seminar on Emerging Technologies held at Department of Computer Science and Engineering, School of Engineering Sciences and Technology, New Delhi on 2nd March, 2017.
- Organized two-day National Seminar on Cloud Computing and its Applications at Department of Computer Science and Engineering, School of Engineering Sciences and Technology, New Delhi on 9th -10th March, 2017.

- Organized a one-day workshop on ANDROID in collaboration with APTRON Solutions Pvt. Ltd. at Department of Computer Science and Engineering, Jamia Hamdard, on 17th April 2017.

PAPERS REVIEWED:

- Reviewed a paper titled "FUZZY LOGIC BASED FRAMEWORK FOR MOBILE ROBOT NAVIGATION WITH TARGET TRACKING", submitted for the International Journal of Computational Vision and Robotics (IJCVR), Inderscience Publishers, 2015.
- Performance Enhancement of 3D Posts based Antenna using High Impedance Surface, International Conference on Innovations in Electronics, Signal Processing and Communication, February, 2017.
- Wormhole Attack Prevention and Detection Approaches in Mobile Ad hoc Networks: A Survey, International Journal of Engineering Research in Computer Science and Engineering(IJERCSE), June, 2017.

EDITORIAL BOARD MEMBER:

- International Journal of Engineering Research in Computer Science and Engineering (IJERCSE).
- International Journal of Advanced Research in Computer Science (IJARCS).

DEPARTMENT/UNIVERSITY LEVEL ACTIVITIES ORGANIZED:

- Organizing member of two day cultural and literary fest NERDZ 2015 held at Department of Computer Science and Engineering, Jamia Hamdard, New Delhi on November 17-18, 2015.

ADMINISTRATIVE WORK:

- Has been the member of the academic council of Jamia Hamdard.
- Has been the member of the Board of Studies of the Department of Computer Science, FMIT.
- Member of purchase committee at the department level for purchase of instruments for setting up of various labs for the B. Tech Course
- Designed the course structure of B. Tech Computer Science and B. Tech Information Technology for these new courses introduced at Jamia Hamdard from academic session 2007-2008.
- Modified the course structure and developed the course content for M. Tech (CS) introduced from session 2007 – 2008.
- Reviewed the Bye Laws of Bachelor of Computer Applications designed by the University
- Developed the curriculum of the courses taught at the post graduate and under graduate level
- Semester examination paper setting, examiner and evaluator of the various courses taught.

- Moderator of the semester examinations papers of Bachelor of Information Technology (BIT), Bachelor of Computer Applications (BCA), M. Sc(Computer Science and Information Technology) and Master of Computer Applications(MCA)
- Time Table setter for the BIT, BCA and MCA courses at Jamia Hamdard.
- Organized an educational trip of one week to Goa for the students of BIT in year 2001.
- Worked as a warden of a girls hostel of the university in 2001 – 2002.
- Class counselor of M.Sc final year students.
- Course coordinator of B.Tech Computer Science and Information Technology
- Secretary of Computer Science Activities Network, a network of student's activities.
- Member of Doctoral Committee of the department.

MEMBER OF PROFESSIONAL BODIES:

1. Member "International Association of Computer Science and Information Technology (IACSIT)", Singapore.

2. Life Member ISTE.

PERSONAL INFORMATION:

Father's Name	: Mr. Mohd. Hakim Ansari.
Mothers's Name	: Mrs. Shamsha Khatoon.
Date of Birth	: 2nd February 1977.
Marital Status	: Married.
Nationality	: Indian.
Sex	: Female.
Passport No.	: M1535398

Place: New Delhi
Date: August 3, 2017

(**Dr. Sameena Naaz)**