CURRICULAM VITAE

Dr. HARDEEP SINGH SAINI

H.No.188, Gillco Valley ROPAR-140001(PUNJAB) Mb. 9988016668, 9592787766 *E-Mail ID* -- hardeep_saini17@yahoo.co.in

.....

CAREER OBJECTIVE

TO CONTRIBUTE MY ZEAL OF WORKING IN THE GROWTH OF ORGANIZATION

EXPERIENCE:

Teaching Experience: - Total: 14 Years

Indo Global College of Engineering, Abhipur (Mohali)

Presently working as Professor in Electronics & Communication Engineering department from 18.02.2013 at Indo Global College of Engineering, Abhipur (Mohali) and **Associate Dean Academic in the same college.**

Indo Global College of Engineering, Abhipur (Mohali)

Worked as an Associate Prof. in Electronics & Communication Engineering department from 10.01.2011 to 17.02.2013 at Indo Global College of Engineering, Abhipur (Mohali) and **Associate Dean Academic in the same college.**

Indo Global College of Engineering, Abhipur (Mohali)

Worked as an Asstt. Prof. in Electronics & Communication Engineering department from 21.06.2007 to 09.01.2011 at Indo Global College of Engineering, Abhipur (Mohali) and Associate Dean Academic in the same college.

Doaba Polytechnic College Raipur

- ➤ Head of ECE Department since January 2006 to June-2007
 - Administration and teaching of subject related to Electronics & communication Engineering.

- Lecturer in ECE Department since 2 June 2003 to January 2006
 - All subject related to Electronics & communication Engineering.
- ➤ Jr. Lecturer in ECE Department since 25 Oct. 2000 to 1st June 2003.
 - To teach theoretical concepts of Microprocessors, Digital Electronics
 - To teach the performance of practical in Digital Electronic Microprocessor (8085, 8086) & Microwave Labs and other labs
- Laboratory Technician in ECE Department since 15 Feb 1999 to 24 Oct. 2000.
 - To teach performance of practical in Electronics Devices & Circuit, Digital Electronics, Communication lab, Microwave labs and other Electronics Labs.

Industry Experience: - Total: - 01 Years (approx.)

PCP International LTD. (Site Office Thermal Plant, Ropar)

- ➤ Jr. Engineer during period 01-5-1998 to 31-10-1998.
 - Supervision, Repair of cards, Digital as well as Analog instruments

OFFICE PLUS PVT. LTD.(Chandigarh)

- Trainee Engineer during period 18 -11-1997 to 12-4-1998.
 - Service & Repair of Fax machine, EPABX Machine.

EDUCATION

Technical:

- **Ph.D** on "Contention Mitigation in Optical Burst Switching Networks" in Electronics and Communication Engineering Department from Singhania University, Rajasthan in 2012.
- **M.Tech** (Electronics & Communication Engineering.) from PTU JALANDHAR by securing 70% Marks in 2007.

Title of Thesis: Mammographic Image Analysis

- **A.M.I.E.** (**Electronics & Communication Engg.**) from the THE INSTITUTION OF ENGINEERS (INDIA), CALCUTTA in 2002.
- **A.M.I.E.** (Electrical Engg.) from the THE INSTITUTION OF ENGINEERS (INDIA), CALCUTTA only 2 papers left
- 3 year Diploma in Electronics and Communication Engineering from G.T.B Khalsa Polytechnic, Malout under Punjab Sate Board of Technical Education & Industrial Training by securing 70% Marks in 1997.
- 3 months Computer Software Course from ISCT Computer Center, Ropar covering DOS, Windows, Ms-Office.

Academic:

- 12th (Non Medical) from Punjab School Education Board in March 1993.
- Matric from Punjab School Education Board in March 1991.

PUBLICATION

International Journals:

Twenty Five Publications (*List Attached as Annexure 1*)

Two Major Publications:

S. No.	Authors	Title	Year	Journal, Volume and No.
1	Hardeep Singh, Jai Parkash, Dinesh Arora and AmitWason	Fault Tolerant Congestion Based Algorithms in OBS Network	2011	International Journal of Engineering-CSC Journals, ISSN (Online) - 1985-2312, Vol.5, No.5, Paper ID-IJE-317, pp.350-359.
2	Hardeep Singh, Jai Parkash, Dinesh Arora and AmitWason	Wavelength assignment Algorithms in OBS Networks	2012	OPTIK: International Journal for Light and Electron Optics, ISSN: 0030-4026, Paper ID-11-626, Vol.123, No. 20.

> International Conference:

Seven Publications (List Attached as Annexure 1)

> National Conference:

Fifteen Publications (List Attached as Annexure 1)

Books :

- A Text Book on Electronics Instruments and Measurement published by IPH Publications, Jalandhar
- A Text Book on Electronics Instrumentation published by IPH Publications, Jalandhar
- A Text Book on **Optical Fiber Communication** published by IPH Publications, Jalandhar
- Question Bank on Electronics Instruments and Measurement published by IPH Publications, Jalandhar

Co- Author in Books:

- A Text Book on **Microprocessor** (8085) published by IPH Publications, Jalandhar
- A Text Book on Advanced Microprocessor (8086 & Micro Controller) published by IPH Publications, Jalandhar
- A Text Book on Principle of Communication Engineering published by IPH Publications, Jalandhar
- Question Bank on Advanced Microprocessor published by IPH Publications,
 Jalandhar

MEMBERSHIP

- Associate of The Institution Of Engineers (India), Calcutta
- **MIETE** (Life Membership-Institution of Electronics & Telecom Engineers)

THESIS GUIDED

 Guided Two M.Tech Thesis on "Optical Fiber Technology" under Punjab Technical University, Jalandhar.

EXTRA ACTIVITIES

- Associate Dean Academics at Indo Global College of Engineering, Abhipur (Mohali)
- Involvement in preparation of various function in college
- Paper checking in the Technical board & PTU
- Discipline Committee member
- Supdt. in the Examination
- Coordinator for PTU Youth Fest
- Coordinator for Convocation in Indo Global College of Engineering for last 3 Years.

WORKSHOPS/TRAINING/CONFERENCES ATTENTED

• Attended a Conference Software Testing an Emerging Field on Feb2009, UNO InfoTech, is an American based organization.

- Attended winter school on Strategic Management for Excellence conducted by NITTTR, Chandigarh at Indo Global College of Engineering, Abhipur from 19/1/09 to 23/01/09.
- Short term Training Programme on New Trends in Mobile communication (AICTE & ISTE sponsored) at Rayat Institute of Engg & Technology, Railmajra (Nawanshahar) from 23/6/2008 to 27/6/2008.
- Faculty Awareness Camp on Entrepreneurship (Sponsored by-ISTE & National Science and Technology Entrepreneurship development Board) at Rayat Institute of Engg & Technology, Railmajra (Nawanshahar) from June28, 2008 to June30, 2008.
- Training Program on Occupational Hazards, Safety and Environment at TTTI, Chandigarh form 9/1/2002 to 11/1/2002.
- Short term program (2/5/05 to 6/5/05) on Evaluation and Setting of Question paper conducted by TTTI, Chandigarh.
- Participation in workshop for Curriculum (For Polytechnic Colleges) revised in February 2005 at TTTI, Chandigarh.
- Completed MHRD/AICTE sponsored summer school on "Effective Curriculum Implementation" conducted by the NITTTR Chandigarh from 14/9/2009 to 18/9/2009.
- Workshop on "Recent Trends in Optical Fiber Communication" on 19/7/2010 to 20/7/2010 conducted by Eureka Electrosoft Solutions Pvt. Ltd
- Workshop on "Route Planning in Optical Fiber Communication" on 4/3/2011 conducted by Eureka Electrosoft Solutions Pvt. Ltd.
- Faculty Development Program for Technical Teachers from 12/7/2010 to 16/7/2010 at Indo Global College of Engineering, Abhipur, Mohali.
- Faculty Development Program on "Recent Advancements in IT and Communication" from 19/7/2010 to 23/7/2010 at Indo Global College of Engineering, Abhipur, Mohali.
- Faculty Development Program on "Next Generation Wireless Networks" from 26/7/2010 to 30/7/2010 at Baba Banda Singh Bahadur Engineering College, Fatehgarh Sahib.
- Workshop on "Patent Awareness" organized by Indo Global College of Engineering in association with Punjab State Council for Science & Technology, Chandigarh on 14/12/2011.
- 41st ISTE Section Faculty Convention-2011 on 29/11/2011 held at Indo Global College of Engineering, Abhipur, Mohali.

PERSONAL DETAILS

Father's Name : S. Mohan Singh

Date of Birth : 15-11-1975

Gender : Male
Marital Status : Married
Category : General

Dated: (Dr. Hardeep Singh Saini)

Annexure-1

International Journals:

S. No.	Authors	Title	Year	Journal, Volume and No.	
No. 1 2	Hardeep Singh, Jai Parkash, Dinesh Arora and AmitWason Hardeep Singh, Jai	Contention Mitigation in Optical Burst Switching using First-Fit, Random and Reserved Channel Scheduling Burst Contention	2011	International Journal of Electronics & Communication Technology, ISSN: 2230-7109(Online), ISSN: 2230-9543(Print), Vol.2, Issue 3, pp.219-222. Research Cell: International	
	Parkash, Dinesh Arora and AmitWason resolving mechanism for Optical Burst Switching			Journal of Engineering Science, ISSN: 2229-6913, Vol.1, Issue-July 2011, pp. 65-70.	
3	Hardeep Singh, Jai Parkash, Dinesh Arora and AmitWason	Analysis of Blocking Probability in OBS Networks	2011	International Journal of Scientific and Engineering Research (IJSER), ISSN 2229-5518, Vol.2, No.11.	
4	Hardeep Singh, Jai Parkash, Dinesh Arora and AmitWason	Fault Tolerant Congestion Based Algorithms in OBS Network	2011	International Journal of Engineering-CSC Journals, ISSN (Online) - 1985-2312, Vol.5, No.5, Paper ID-IJE-317, pp.350-359.	
5	Dinesh Arora, Jai Parkash, Hardeep Singh and AmitWason	Effect of Effective Refractive Index of Grating in FBG Splitter	2011	International journal of Engineering Science and technology (IJEST), ISSN: 0975-5462,Vol.3,No.9.	
6	Dinesh Arora, Jai Parkash, Hardeep Singh and AmitWason	Reflectivity and Braggs Wavelength in FBG	2011	International Journal of Engineering-CSC Journals, ISSN (Online) - 1985-2312. Vol.5, No.5, Paper ID-IJE-316, pp.341-349.	

_	IJENO KI O [IJENO	Researchers Promotion Group	1	ID: IJENS-1208-Hardeep
7	Dinesh Arora, Jai Parkash, Hardeep Singh and AmitWason,	Ethernet Passive Optical Network	2011	International Journal of Computer Science & Technology, ISSN: 2230- 7109(Online), ISSN: 2230- 9543(Print) Vol.2, Issue 4, Version-3, Paper ID- IJCST/24/3/A-371, pp.479-481.
8	Hardeep Singh, Dinesh Arora and Pardeep Kumar	Analysis of Switching Techniques in Optical Network	2011	IRACST - International Journal of Computer Science and Information Technology & Security (IJCSITS), ISSN (Online) -2249- 9555, ISSN: 2250-1355 (Print), Vol.1, No. 2, pp. 147-152.
9	Manish Kansal, Hardeep Singh Saini and Dinesh Arora	Designing & FPGA implementation of IIR filter used for detecting clinical information from ECG	2011	International Journal of Engineering and Advanced Technology (IJEAT), ISSN: 2249-8958, Vol.1, No.1, pp.67- 72.
10	Manish Kansal ,Vijay Kumar, Dinesh Arora and Hardeep Singh Saini,	Designing & Implementation of Digital filter for removal of power supply noise	2011	International Journal of soft computing and Engineering (IJSCE), ISSN: 2231-2307, Vol.1, No.4, pp.242-246.
11	Manish Kansal, Dinesh Arora and Hardeep Singh Saini Hardeep Singh, Jai Parkash, Dinesh Arora and	FPGA Implementation of FIR Filter used for DSP using Matlab&Modelsim Wavelength assignment Algorithms	2011	International Journal of Electronics Engineering Research (IJEER), Vol.3, No.3, pp.363-373. OPTIK: International Journal for Light and Electron Optics, ISSN:
	AmitWason	in OBS Networks		0030-4026, Paper ID-11-626, Vol.123, No. 20.
13	Jitender Sharma, Hardeep Singh and Dinesh Arora	Analysis of Reno: A TCP Variant	2012	International Journal of Electronic and Communication Engineering (IJECE), International Research Publication House, ISSN: 0974- 2166, Vol.5, No.3, pp.267-277.
14	Harsimranjot and Hardeep Singh Saini	Trends in Dynamic Random Access	2012	International Journal of Microcircuits and Electronic

	IJENS-RPG [IJENS	Researchers Promotion Group]		ID: IJENS-1268-Hardeep
		Memory (DRAM) Cell Design-A Review		(IJME), International Research Publication House, ISSN: 0974- 2204, Vol.3, No.1, pp. 27-36.
15	ParamjeetKaur, Hardeep Singh and Satinderpal Ahuja	Review of Optical world technologies and switching network Devices	2012	International journal of advanced research in computer science and software Engineering, ISSN: 2277-128X, Vol.2, No.2.
16	Harsimranjot, Dr.S.B.L. Trapathi and Hardeep Singh Saini	Performance Optimization of Fiber Distributed Data Networks	2012	International journal of Advances in Science and Technology (IJAST), ISSN: 2229-5216, Vol.4, No.6, pp.1-5.
17	Paramjit Kaur, Hardeep Singh and Satinder Pal Ahuja	A Fault Tolerant Algorithms for the Minimization of Blocking Probability in Optical Burst Switching Network	2012	International Journal of Computer Application, ISSN: 0975-8887, Vol.52, No.21, pp.5-11
18	Punardeep Singh and Hardeep Singh Saini	Congestion Control in Wavelength Division Multiplexed Networks	2012	International Journal of Nanotechnology and Applications (IJNA), Vol.6, No.2, pp.115-122.
19	Harsimranjot, Dr.S.B.L. Trapathi and Hardeep Singh Saini	Analysis of Efficient FDDI Network	2012	International Journal of Engineering Research and Applications (IJERA), ISSN: 2248-962, Vol.2, No.5, pp.2159-2162.
20	Hardeep Singh Saini and Dr. AmitWason	Role of Optic Sensors in Engineering and Technology	2012	International Journal of IT, Engineering and Applied Sciences Research (IJIEASR), ISSN: 2319- 4413, Vol.1, No.1, pp.69-73.
21	Dinesh Arora, Jai Parkash, Hardeep Singh and AmitWason	FBG Based Splitters for Ethernet Passive Optical Networks	2012	British Journal of Engineering and Technology, Vol. 1, No. 1, pp. 317-326.
22	Harsimranjot, Hardeep Singh Saini and Dr.S.B.L. Trapathi	Response Time and Redundancy Analysis of FDDI Network	2012	International Journal of High Performance Communication Systems and Networking, Serial Publication, Vol.4,No.2,pp.79- 82.
23	Hardeep Singh Saini and Dr.Amit Wason	Contention Avoidance and Resolution Schemes in Optical	2012	International journal of Advances in Science and Technology (IJAST), ISSN:

ID	: I	JEN	IS- :	1268	3-Har	dee	b
----	-----	-----	--------------	------	-------	-----	---

24	Preeti Singh and Hardeep Singh Saini	Burst Switched Networks Localization Algorithms for Mobile Wireless Sensor Networks -A Review and Future Scope	2013	2229-5216, Vol.4, No.5, pp.25-31 International Journal of Electronics & Communication Technology (IJECT), Vol.4, No.3 (Spl.), pp.90-92.
25	Gulzar Ahmad Dar and Hardeep Singh Saini	Wavelength Assignment in Wavelength Division Multiplexed Network- A Review	2013	International Journal of Electronics & Communication Technology (IJECT), Vol.4, No.3 (Spl.), pp.120-122.

Paper Published in Inter-National Conference

- 1. Inderpreet Kaur, Iqbaldeep Kaur, Amit Verma and **Hardeep Singh**, "Image Clustering network particles swam optimization", in International Conference on Emerging trends in Electronics and communication (11 Sep-2009) at Indo Global College of Engineering, Abhipur, Mohali, pp.4.11.
- Hardeep Singh, Dinesh Arora, Suneet Garg and Gagandeep Singh, "A Review on key research issues of Smart Antennas", International Conference on Emerging trends in Electronics and communication (11 Sep-2009) at Indo Global College of Engineering, Abhipur, Mohali.
- 3. Suneet Garg, Dinesh Arora, **Hardeep Singh** and Gagandeep Singh, "An overview of Smart Antennas at handheld terminate", International Conference on Emerging trends in Electronics and communication (11 Sep-2009) at Indo Global College of Engineering, Abhipur, Mohali.
- 4. Dinesh Arora, Suneet Garg, **Hardeep Singh** and Gagandeep Singh, "A Review of Interferences Rejection techniques in next generation wireless Systems", International Conference on Emerging trends in Electronics and communication (11 Sep-2009) at Indo Global College of Engineering ,Abhipur, Mohali.
- 5. Jai Prakash and **Hardeep Singh**, "Impact of Global recession and forecasting its futuristic trends", in International Conference on Management at Indo Global College of Engineering, Abhipur, Mohali (2009).
- 6. Lipsa Walia, Inderpreet Kaur, Neenu Gupta and **Hardeep Singh**, "*Implementing Wave length multiplexing system using EDFA*", in International Conference on Emerging trends in Electronics and communication (11 Sep-2009) at Indo Global College of Engineering

7. Dinesh Arora, Jitender Sharma and **Hardeep Singh**, "On Training BPO Executives", International Conference on Training and Employment (26 Aug-2009) at Indo Global College of Engineering, Abhipur, Mohali.

Paper Published in National Conference

- **1. Hardeep Singh** and Manjit Kaur, "On Cybernetics", National Conference on Communication and embedded systems", (12 march 2004) at Lala Lajpat Rai Institute of Engg. & Technology, Moga.
- 2. Hardeep Singh and Manjit Kaur, "On Artificial Neural Network", National Conference on Communication and embedded systems (12 March 2004) at Lala Lajpat Rai Institute of Engg. and Technology, Moga.
- **3.** Manjit Kaur, **Hardeep Singh** and Jitendra Virmani, "Basics of Image Compression", pp.187-190, at Rayat Engineering College, Railmajra (Nawanshahar).
- **4.** Manjit Kaur, **Hardeep Singh** and Jitendra Virmani, "*Image Compression Techniques*" at Rayat Engineering College, Railmajra (Nawanshahar).
- Jitendra Virmani, Hardeep Singh and Manjit Kaur, "Digital Watermarking in special domain", National Conference on Information and Emerging Technologies-NCIET-2007(September 2007) at I.E.T. Bhaddal, Ropar, pp.240-241.
- **6.** Jitendra Virmani and **Hardeep Singh Saini**, "Wavelet based filtering for Digital Mammograms", pp.183-190, at Rayat Engg College, Railmajra (Nawanshahar).
- 7. Design and Analysis of Animation System in National Conference on Animation Perspectives organized by CSE Deptt. at Indo Global College of Engineering, Abhipur, Mohali (2009).

- **8. Hardeep Singh Saini** and Dr. Dinesh Chander, "Strategic Human Resource Management: Practices in Electronic Industry in India" in National Conference on Recent Trends in Human Resource Management at Indo Global College of Engineering on 1st March 2012.
- **9.** Dr. Dinesh Chander and **Hardeep Singh Saini**, "The Challenges of Strategic Management of Human Resources in Construction Industry" in National Conference on Recent Trends in Human Resource Management at Indo Global College of Engineering on 1st March 2012.
- **10.** Hardeep Singh Saini & Dinesh Arora, "Corporate social responsibility of electronics sector towards controlling environmental pollution", pp.52-54, National conference on corporate social responsibility, at Indo Global College of Engineering on 21 Oct. 2010.
- 11. Dr. Dinesh Chander and Hardeep Singh Saini, "Role of Regulatory Bodies in Development of Quality Assurance Process in Technical Education in India", 41st ISTE Section Faculty Convention-2011 held on 29th November, 2011 at Indo Global College of Engineering, Abhipur.
- 12. Dr. Dinesh Chander, **Hardeep Singh Saini** and Dinesh Arora, "*Echo Generated in Mobile Phones and its Cancellation*", National Conference on Advanced Communication & Instrumentation Engineering held on 11th November, 2010 at Indo Global College of Engineering, Abhipur, Mohali (India), pp.166-170.
- 13. Amit Wason, R.S. Kaler, **Hardeep Singh** and Dinesh Arora, "*Bandwidth Allocation and Design in Passive Optical Network*", National Conference on Recent advances in Computational techniques in Electrical Engineering (RACTEE 2010) at Sant Longowal Institute of Engineering and Technology, Longowal, Sangrur (Punjab).
- 14. Dinesh Chander and **Hardeep Singh Saini**, "Application of Remote Sensing to Water resources Management", National Conference on Futuristic Trends in Computing by 2020 at Indo Global College of Engineering, Abhipur, Mohali (India),2012.
- 15. Punardeep, Hardeep Singh and Amit Wason, "Blocking Performance of WDM Networks-A Review", National Conference on Challenges in Emerging Computer Technologies, at Rayat & Bahra Institute of Engineering and Bio-Technology, Mohali, 16-17 May 2012.

- 16. **Hardeep Singh Saini** and Dinesh Chander, " *Use of Electronic Equipment in Automation of Irrigation Schemes in India*", National Conference on Advancements in Solid State Devices & Circuits, at Indo Global College of Engineering, Abhipur Mohali (India),15 April-2013.
- 17. Punardeep, **Hardeep Singh** and Amit Wason, "*Performance Evaluation of WDM Optical Networks*", National Conference on Futuristic Trends in Computing by 2020 at Indo Global College of Engineering, Abhipur, Mohali (India),2012.