

# Pardeep Kumar Jindal

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## PROFESSIONAL EXPERIENCE 10YRS+

### Teaching Associate & Research Scholar, Jan 2016 - Present

Electronics and Communication Engineering, Thapar Institute of Engineering and Technology (Deemed to be University), Patiala (Punjab-147004) India.

Courses: Arduino based IoT and RoboCar Project Labs, Microprocessor, Microcontroller, Analog, Digital Electronics and MATLAB Labs.

### Assistant professor and Head of Department, Jan 2011 - Jan 2016

Aryabhatta Group of Institutes, Barnala, Punjab, India.

Job Profile: Work related to Department, Examination and Teaching UG.

[5 years]

### Sr. Lecturer and Head of Department, Aug 2008 - Jan 2011

Baba Isher Singh Polytechnic College, Kot-Ise-Khan, Moga, Punjab, India.

Job Profile: Work related to Department, Examination and Teaching.

[2 years 6 months]

### Sr. Hardware Executive, May 2006 - Feb 2007

ORG. Informatics Limited (franchisee for HECL), Chandigarh, India.

Job Profile: Technical support, testing

[10 months]

## EDUCATION

### Ph.D. [ECE], Thesis Submitted

Thapar Institute of Engineering and Technology (Deemed to be University), Patiala-147004.

Topic: *Temperature Dependent Performance Analysis of Mixed-MWCNT Bundle as VLSI Interconnects*. Publications: Four Research articles, Three Published in SCI/SCOPUS Journals and One under revision.

Course Work 7.2 CGPA

### M.Tech. [ECE], July 2010 - June 2014

GGG College of Engineering & Technology, Talwandi Saboo, Bathinda. (Affiliated to PTU, Jalandhar, Punjab)

Topic: *Self-Phase Modulation Reduction in Fiber for WDM Transmission using EDFA*. Three Research articles Published in International Journals.

Percentage: 62.77%

### B.Tech. [EIE], July 2002 - June 2005

Maharishi Markandeshwar Engineering College, Mullana, Ambala. (Affiliated to KU, Kurukshetra, Haryana)

Percentage: 65.33%

### Diploma [ECE], August 1998 - July 2001

LLRM Poly. College, Ajitwal, Moga, Punjab (Affiliated to PSBTE & IT, Chandigarh).

Percentage: 60.60%

## RESEARCH PUBLICATIONS

Statistics	SCI/SCOPUS Journal	Int. Journal	Conference	Book
	SCI Published=2			
	Under Revision=1	Int.=5	Int.=1	LAP Lambert=1
	SCOPUS=1			

### SCI/SCOPUS Journal Publications

1. **Pardeep Kumar Jindal** and Karmjit Singh Sandha, "*Thermally-Aware Modeling and Performance Analysis of Mixed-MWCNTB as Very Large Scale Integrated Interconnects Material for Nano-Electronic Integrated Circuits Design*", Journal of Nanoelectronics and Optoelectronics, 14(9): 1255-1266, 2019. [IF 0.771]
2. **Pardeep Kumar Jindal** and Karmjit Singh Sandha, "*Influence of variable temperature on performance of mixed-MWCNT, MWCNT and SWCNT nanostructures as interconnects for high-performance VLSI-IC design*", Journal of Materials Science: Materials in Electronics, Springer, 31(3): 1828-1838, 2020. [IF 2.22]
3. **Pardeep Kumar Jindal** and Karmjit Singh Sandha, "*Performance of Mixed-MWCNT Structures as VLSI Interconnect for Nanometer Technology Nodes*", International Journal of Recent Technology and Engineering, ISSN: 2277-3878, Volume-8, Issue-1, May 2019.
4. **Pardeep Kumar Jindal** and Karmjit Singh Sandha, "*Impact of temperature on the performance of MMT, MWCNTB, SWCNTB and Copper Nano-interconnect*", Journal of Circuits, Systems, and Computers [**Under Revision**]

## International Journal Publications

1. **Pardeep Kumar Jindal**, Baljinder Kaur and Navdeep Bansal, “*Self Phase Modulation Reduction for WDM Transmission using EDFA, A Review*”, International Journal of Application or Innovation in Engineering & Management (IJAEM), ISSN 2319-4847, Volume-2, Issue-10, Oct 2013.
2. **Pardeep Kumar Jindal**, Baljinder Kaur and Navdeep Bansal, “*Self Phase Modulation Reduction for WDM Transmission using EDFA*”, International Journal of Application or Innovation in Engineering & Management, ISSN 2319-4847, Volume-2, Issue-12, Dec 2013.
3. **Pardeep Kumar Jindal**, Harisharan Aggarwal and Navdeep Bansal, “*Performance of WDM Transmission using EDFA over maximum distance of transmission*”, International Journal of Application or Innovation in Engineering & Management, ISSN 2319-4847, Volume-3, Issue-5, May 2014.
4. Navdeep Bansal, Sukhjeet Singh and **Pardeep Kumar Jindal**, “*Implementation of channel estimation algorithms in OFDM for 64 Subcarriers*”, International Journal of Electronics and Communication Engineering & Technology, ISSN 0976-6472, Volume-4, Issue-4, Aug 2013.
5. Navdeep Bansal, Sukhjeet Singh and **Pardeep Kumar Jindal**, “*Channel Estimation Algorithms in OFDM, A Review*”, International Journal of Application or Innovation in Engineering & Management, ISSN 2319-4847, Volume-2, Issue-6, June 2013.

## International Conference

1. **Pardeep Kumar Jindal**, Sukhjeet Singh and Navdeep Bansal, “*Implementation of channel estimation algorithms in OFDM for 64,128 and 256 subcarriers with qam & psk modulations*”, 7th International Conference on Advanced Computing and Communication Technologies (ICACCT™-2013).

## Book

1. **Pardeep Kumar Jindal**, “*SPM Reduction in Fiber Using EDFA*”, published by LAP Lambert Academic Publishing (19 November 2014), ISBN-13 Number 978-3659632709.

## TECHNICAL SKILLS

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### Programming Languages

Python, SCILAB, MATLAB, Latex, MS-Office (Excel, power point, word, visio), Assembly Programming (Microprocessor, Microcontroller, ARM), µVision keil software.

### Technical Subjects

RoboCar (Arduino based), Raspberry Pi and IoT projects, Microprocessor, Microcontroller, Embedded System, Analog Electronics and Digital Electronic.

## PROJECTS

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Design of Tx, Rx and IR sensor for Arduino based Auto Robo-Car

Design of IoT Applications based on Arduino and Raspberry Pi

Design of GSM based Home Automation

Design on fixed and variable DC power supply.

## INDUSTRIAL TRAINING

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06 Weeks training on, “**Designing and testing of Magger, Digital Multimeter, Current and Voltage meter**”, at RIKEN Instrumentation Ltd., Panchkula, Haryana, India.

06 Weeks training on, “**Testing of Power Line Comm. between the power plants through the power wires**”, at Guru Nanak Dev Thermal Plant, Bathinda, Punjab, India.

## WORKSHOP/ TRAINING ATTENDED

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1. Faculty Development Program on Power System Optimization, Modernization of Communication organized by PTU Jalandhar at Aryabhatta College of Engineering and Technology, Barnala from 9th -13th January, 2012.
2. Embedded System Design using Atmel XMEGA XPLD A1 and ARM based SAM 4L organized by Atmel India University Program at Thapar University, Patiala from July 15, 2013 to July 16, 2013.

3. Amazing Optical Properties of Graphene organized by SPIE student Chapter, ECED, IIT Roorkee on Nov 2016.
4. Faculty Development Program on VLSI Devices & Technology organized by the Electronics & ICT Academy, IIT Roorkee at C-DAC Mohali, Punjab from 8th -12th January, 2018.

## PERSONAL DETAIL

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Father's Name : Sri Som Nath Jindal      Mother's Name : Smt. Darshna Devi  
Date of Birth : Dec 11, 1982      Marital Status : Married  
Nationality : Indian      Hobbies : Acquiring Knowledge  
Personal Strength : Quick Learner, Leadership Skills, Self-Confident, Hard Working.  
Permanent Address : #123, Nainewal Road, Near Grain Market, Bhadour, Teh. Tapa, Distt. Barnala, Punjab-148102.

## REFERENCES

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- Dr. K. S. Sandha  
Assistant Professor, Department of Electronics and Communication Engineering  
Thapar Institute of Engineering and Technology (Deemed to be University), Patiala-147004.  
Phone: +91-9646020543  
E-mail: kssandha@thapar.edu
- Dr. Ankush Kansal  
Associate Professor, Department of Electronics and Communication Engineering  
Thapar Institute of Engineering and Technology (Deemed to be University), Patiala-147004.  
Phone: +91-9464140086  
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- Dr. Manoj Mittal  
Assistant Professor, Department of Mechanical Engineering, IKG Punjab Technical University, Jalandhar, Punjab.  
Phone: +91-90415-63833  
E-mail: manojmittal74@gmail.com
- Dr. Ajay Kumar Mittal  
Professor and Campus Director, Department of Applied Sciences, Aryabhata Group of Institutes, Barnala, Punjab.  
Phone: +91-9872677011  
E-mail: ajay11mittal@gmail.com

## DECLARATION

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I hereby state that all the information mentioned above is true to the best of my knowledge and I shall be held responsible for any discrepancy found later.

**Date:** July 18, 2021  
**Place:** Chandigarh.



**Pardeep Kumar Jindal**