



MAHARAJA AGRASEN COLLEGE
University of Delhi
VASUNDHARA ENCLAVE, DELHI-110096



Curriculum Vitae of Faculty Members

First Name	Praveen	Middle Name	Kant	Last Name	Pandey
Designation	Professor		Department		Electronics
Date of Birth	10 November 1975		Date of Joining		26 December 2002
Residential Address (Optional)	123, Pocket – E, Mayur Vihar Phase – 2, Delhi – 110091				
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Email Id: pkpandey.du@gmail.com , pkpandey@mac.du.ac.in					

Education

Subject	Institution	Year	Details
Ph.D	University of Delhi	2008	Dept of Electronics, UDSC
Masters	University of Delhi	1999	M.Sc. Electronics
Graduation	University of Delhi	1997	B.Sc. (H) Electronics

Career Profile

Organization/ Institution	Post Held	Department	Adhoc/Temp/ Permanent	From	To
Maharaja Agrasen College	Assistant Professor	Electronics	Adhoc	08-09-99	30-04-01
Bhaskaracharya College of Applied Science	Assistant Professor	Electronics	Adhoc	30-07-01	30-04-02
ARSD College	Assistant Professor	Electronics	Adhoc	30-07-02	26-10-02
Hansraj College	Assistant Professor	Electronics	Adhoc	28-10-02	24-12-02
Maharaja Agrasen College	Assistant Professor	Electronics	Permanent	26-12-02	20-06-12

Maharaja Agrasen College	Associate Professor	Electronics	Permanent	21-06-12	30-09-18
Maharaja Agrasen College	Professor	Electronics	Permanent	01-10-18	Till date
Administrative Assignments (2021 onwards)					
Abdul Kalam Centre	Coordinator	2025, 2024, 2023, 2022, 2021			
Embedded Systems & Robotics Centre	Coordinator	2025, 2024, 2023, 2022, 2021			
MAC eLearning Team	Coordinator	2025, 2024, 2023, 2022, 2021			
Alumni Committee	Member	2025, 2022, 2021			
Academic Planning Committee	Member	2025, 2023			
Examination Committee	Member	2024, 2023, 2022, 2021			
Student Advisory Committee	Member	2024, 2023			
NAAC Steering Committee	Member	2022, 2021			
NIRF Committee	Member	2022, 2021			
Attendance Committee	Convener	2022			
Purchase Committee	Member	2021			
Research Guidance					
<ol style="list-style-type: none"> Supervision of awarded Doctoral Thesis: - Supervision of Doctoral Thesis, under progress: 03 Supervision of 4th year UG Research Project, under progress: 02 					
Details of Published Research Papers, Books, Monographs, Reviews, Chapter in Books, Translations and Creative Positions held					
Year of Publication	Title	ISSN / ISBN No	Paper / Book / Article	Publisher	Author / Co-Author
2025	Bezier curve-based mobile robot path planning using the Proposed Enhanced Firefly Optimization algorithm	1854-3871	Research paper	Informatica	Co-Author
2024	Pathfinding Performance: A Comparative Study of Modified Firefly and A* Algorithm for Mobile Robot Navigation	978-981-97-7830-0	Chapter / Conference paper	Innovations in Sustainable Technologies and Computing, Springer	Co-Author
2023	A Multi-objective Path-Planning Based on Firefly	978-981-99-5084-3	Chapter / Conference paper	Lecture Notes in Networks and Systems,	Co-Author

	Algorithm for Mobile Robots			vol 755. Springer	
2023	Modified Genetic Algorithm-based Robot Path Planning to Avoid Static Obstacles Collision	978-81-95502-00-4	Chapter / Conference paper	New Frontiers in Communication and Intelligent Systems	Co-Author
2022	Metaheuristic techniques: review, analysis and scope of applications	2767-1933	Chapter / Conference paper	Global Journal of Computer and Engineering Technology	Co-Author
2021	An Improved Terrain Profiling System with High-Precision Range Measurement Method for Underwater Surveyor Robot	2194-5357	Chapter / Conference paper	Springer	Corresponding Author
2020	Intelligent Energy Information and Management System for Academic Institutes	978-981-15-3634-2	Chapter / Conference paper	Springer	Corresponding Author
2019	Autonomous Landmine Detection Robot: Design and Applications	978-81-940528-0-7	Chapter	Maharaja Agrasen College	Author
2018	A Smart Healthcare Monitoring System Using Smartphone Interface	978-1-5386-3476-9	Research Paper	IEEE	Co-Author
2018	An Intelligent Terrain Profiling Embedded System for Underwater Applications	978-1-5386-0886-9	Research Paper	IEEE	Author
2017	Designing and Developing Energy Information System for Academic Institutes	1818-7803	Research Paper	Journal of Engineering and Applied Sciences	Author
2014	Redefining Curriculum for Inspired Learning	978-81-7273-958-4	Research Paper	Authorspress	Co-Author

2014	Teaching Microprocessor - A Project Based Learning	978-81-7273- 958-4	Research Paper	Authorspress	Co-Author
2009	Study of Optical Absorption and Photoluminescence of Quantum Dots of CdS formed in Borosilicate Glass Matrix	1402-4896	Research Paper	Physica Scripta	Co-Author
2009	Compositional Effect on the Optical Absorption and Photoluminescence of CdS _x Se _{1-x} Quantum Dots Embedded in Borosilicate Glasses	1793-5350	Research Paper	International Journal of Nanoscience	Co-Author
2009	Two-Photon Absorption in Quantum Dots of CdS _x Se _{1-x} using Open Aperture Z-scan and Femtosecond Laser	1793-7094	Research Paper	Nano	Co-Author
2008	Development of Low Size Dispersion, High Volume Fraction and Strong Quantum Confined CdS _x Se _{1-x} Quantum Dots Embedded in Borosilicate Glass Matrix and Study of their Optical Properties	1662-8985	Research Paper	Advanced Materials Research	Co-Author
2008	Growth Dynamics of II-VI Compound Semiconductor Quantum Dots Embedded in Borosilicate Glass Matrix	1793-5350	Research Paper	International Journal of Nanoscience	Co-Author
2008	A Novel Method for the Estimation of Surface Recombination Velocity of Polycrystalline CIGS Solar Cells	2470-1564	Research Paper	Synthesis and Reactivity in Inorganic, Metal-Organic and Nano-	Co-Author

				Metal Chemistry	
2007	Trap Elimination and Reduction of Size Dispersion due to Aging in CdS _x Se _{1-x} Quantum Dots	1388-0764	Research Paper	Journal of Nanoparticle Research	Co-Author
2006	Study of CdTe Quantum Dots Grown using a Two-Step Annealing Method	1402-4896	Research Paper	Physica Scripta	Co-Author
2004	An Improved Model to Estimate Temperature Profile of Laser Irradiated Quantum Dot in Glass		Research Paper	Physics of Semiconductor Devices IWPSD-2003	Author
2004	Growth of CdTe and CdSe Quantum Dots in Glass Matrix using Two-Step Annealing Method		Research Paper	Physics of Semiconductor Devices IWPSD-2003	Co-Author
2003	Growth of Group II-VI Semiconductor Quantum Dots with Strong Quantum Confinement and Low Size Dispersion	0370-1972	Research Paper	Physica Status Solidi (B)	Author
2002	Theoretical Model for Estimating Surface Recombination Velocity of Polycrystalline CIGS Solar Cells	0277-786X	Research Paper	SPIE proceedings series	Co-Author
2002	A New Model for the Laser Irradiation Effects on the Quantum Dots in Glass Matrix	0277-786X	Research Paper	SPIE proceedings series	Co-Author
Participation in conferences, seminars, workshops, refreshers, orientation courses attended, summer institutes etc.					
State/National International	Title	Organization		Period	

International	3rd International Conference On Innovative Computing And Communication		2020
International	International Conference on Efficient Solar Power Generation and Energy Harvesting		2019
International	International Conference on Computational intelligence and communication technology		2018
National	National Conference on Fostering Quality Research in Higher Education		2018
International	International Conference on Innovative Research in Engineering and Science		2017
National	National seminar on Engineering Education and Research Seminar on LabVIEW	National Instruments, and AKG Engineering College	2017
State	Faculty development workshop on Digital Circuit Design using VHDL	Zakir Hussain College, University of Delhi	2016
National	National Conference on Striving & Thriving towards Diffusion of Student-driven Research In Science and Technology for Inspired Learning		2014
State	Workshop on 'Introduction to Robotics'	IIT Bombay	2013
State	Academic Congress 'Enabling the Youth: Redefining Education'		2012
National	Refresher Course in Physics & Electronics	CPDHE, DU	2008-09
National	Refresher Course in Physics & Electronics	CPDHE, DU	2007-08
International	International Conference on Materials for Advanced Technologies		2007
International	International Conference on Materials for Advanced Technologies		2007
National	Workshop on 'e- Learning & Content Design'	ILLL, DU	2007

International	International Workshop on the Physics of Semiconductor Devices		2005
International	International Conference on Materials for Advanced Technologies		2005
National	Orientation Course	CPDHE, DU	2005
National	Refresher Course in Physics & Electronics	CPDHE, DU	2004
International	International Workshop on the Physics of Semiconductor Devices		2003
National	NCTP		2002
International	The International Society for Optical Engineering		2002
International	International Workshop on the Physics of Semiconductor Devices		2001

Awards and Distinctions

- Teaching Excellence Award for Innovation, University of Delhi, 2015
- e-Yantra Robotics Teacher Competition – 2013, Second Prize, organized by ERTS Lab, IIT Bombay, 2014

Public Service/University Service/Consulting Activity

- Member, Curriculum Review and Feedback Committee, Amity Institute of Renewable and Alternate Energy, Amity University, 2018
- Member, committee for designing of syllabus for “Embedded Systems” paper, Dept of Electronic Science, UDSC, 2014
- Member, committee for designing of syllabus for “Microprocessors & Microcontrollers” paper, Dept of Electronic Science, UDSC, 2010
- Technical Consultancy, Real Time Systems, 2006 to 2016
- Technical Consultancy, Havell’s India Ltd., 1998 to 2002

Projects /Collaborations

Title of the Project	Major/ Minor	Funding Agency	Status	Level
Design and Development of the ‘SmartConnect’ Mobile App for Enhancing Student Information System in Colleges	Minor	Maharaja Agrasen College	Ongoing	College

Application of Advanced Oxidation Processes (AOPs) for Environmental Remediation Specifically in and Around Ghazipur (New Delhi) Land Fill Area	Minor	NCERT	Ongoing	National
To Design and Develop Low Cost, Self-learning heterogeneous Swarm Robotic Ecosystem	Major	University of Delhi	Completed	University
Problem Based Learning within Simulation Environment	Major	University of Delhi	Completed	University
Fostering Diffusion of Educational Technologies in Undergraduate Learning for the Students, by the Students	Major	University of Delhi	Completed	University
Redefining Curriculum: Integrating ICT for Innovation Eco-System	Major	University of Delhi	Completed	University

I certify that the information given above is correct and factual to the best of my knowledge.

Date: 1st August 2025

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