

Dr. Roopali Garg

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Experience

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| Jan 2012- Jan 2015: | Coordinator- Department of IT, UIET, Panjab University, Chandigarh |
| Dec 2016- till date: | Associate Professor Deptt. of IT, UIET, Panjab University, Chandigarh |
| Aug 2003 – Dec 2016: | Assistant Professor, Deptt. of IT, UIET, Panjab University, Chandigarh |
| Jan 2003 - Aug 2003: | Lecturer, Department of Electronics & Electrical Communication, Punjab Engineering College (now PEC University of Technology), Sector 12, Chandigarh |

Qualification

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| Doctorate: | PhD in Electronics and Electrical Engineering |
| Post-Graduation: | Master of Engineering (Electronics) Punjab Engineering College, Panjab University, Chandigarh Year: 2002 Percentage: 75.73 |
| Graduation: | Bachelor of Engineering (Electronics & Electrical Communication) Punjab Engineering College, Panjab University, Chandigarh Year: 2000 Percentage: 80.7. <i>Gold Medalist.</i> <i>Awarded Administrator's Gold Medal by Chandigarh Administration</i> |
| Advance P.G Diploma: | Advance Postgraduate Diploma in VLSI Design Semiconductor Complex Limited (SCL), Mohali. Duration: 6 months (Nov 2001 to May 2002) |

Research Domain: Wireless communication, Cognitive radios, Machine learning

Subjects Taught: Wireless Communication, Optical Communication, Object oriented Languages, Digital Electronics, Microprocessors and Assembly Language, Multimedia Systems

Research Projects/ Consultancy

1. Consultancy work titled *Development and Maintenance of a Mobile App for social Meet-ups Embedded with curated Commerce* is being provided to M/s Boolean Ventura Private Limited, New Delhi. Cost: Rs 10, 74000/-. Duration: 2 years.
2. Project titled *Pedestrian Detection using Thermal Imaging* (sub theme of Traffic sensing Information Technologies) under the Design Innovation Centre, an initiative of MHRD, Govt. of India. Cost Rs 10,50,000/-. Duration: 3 years.
3. Project *Unified Command and Control (UCC) for smart management of Electrical Energy and Water Supply* to be deployed at Hostels of Panjab University, Chandigarh, funded by Panjab University and Design Innovation Centre, Ministry of Human Resource and Development, Govt. of India.

Projects Submitted

1. IOTree-IOT based Air Pollution Monitoring and Control System submitted to Natural Resources Data Management System division of Department of Science and Technology of Government of India for approval
2. Modernization and Removal of Obsolescence (Modrobs) submitted to All India Council for Technical Education (AICTE) for approval

Awards/Achievements

1. Awarded with Certificate of Appreciation by Centre for Industry Institute Partnership Programme (CIIPP), Panjab University for undertaking an Industrial Project.
2. Awarded Administrator's Gold Medal for the period 1996-2000 by Chandigarh Administration.
3. Awarded with University Gold Medal by Panjab University, Chandigarh for securing overall First Rank in Bachelor of Engineering (Electronics & Electrical Communication).

Research Supervised

18 M.Tech scholars have received M.Tech degree
01 M.Tech research is ongoing
02 PhD registered

Extension Activities and Research Interaction

- ❖ Chaired sessions in various conferences like WCECS-2016, ICAN-2011, WECON-2015 etc.
- ❖ Invited talks at various institutes/ events like NITTTR Chandigarh, Netsolutions, Jaypee University, PEC University, Infosys, Ranbaxy, Chitkara University, Income Tax Office under Ministry of Finance Govt. of India etc.
- ❖ Reviewer for multiple International Journals and Conferences:

- IEEE Access
 - Journal of Educational Studies, Taylor and Francis
 - Journal of Computer Science, Science Publication
 - Wireless personal communications
 - IGI Global
 - Bioinfo Publications
 - International Journal of Advanced Computer Science and Applications
 - IEEE International Conference Recent Advances in Engineering and Computational Sciences-2015
 - IEEE International Conference on Computational Intelligence and Communication Networks 2016.
- ❖ Editorial board of 5th International conference on Signal processing (CSIP 2018) as well as PCM member of AIRCC world-wide.

University/Institute Visits for Interaction

- Europe: French "Institut Européen d'Administration des Affaires (INSEAD), Fontainebleau France, January-August 2014
- USA: University of California Berkeley, October 2016
- India: IIM Lucknow ISB Mohali, IIT Delhi

Membership Of Professional Bodies

- ❖ IEEE Member vide Membership Number 93983072
- ❖ Life Member IAENG (International Association of Engineers) vide Membership number 170956
- ❖ Life Member of Institution of Electronics and Telecommunication Engineers (IETE) vide M223460
- ❖ Life Member of Indian Society of Technical Education (ISTE) LM73518
- ❖ Life Associate Member of Institute of Engineers, India (IEI) vide AM 099028-3

Administrative and Academic Responsibilities

- Faculty incharge for activities under Institution Innovation Council, Ministry of Human Resource Development, Govt. of India.
- Member Board of Studies for Information technology, Panjab University, Chandigarh.
- Member Board of Control, Panjab University, Chandigarh.
- Member library Committee, Technical committee, Sports Committee, Magazine Committee, Academic & Administrative Committee, of UIET for the year 2018.
- PRO for Department of IT, UIET for the year 2018.
- Incharge Swachhta Ambassador Committee of University Institute of Engineering and Technology.
- Member for Degree Award Ceremony committee for year 2017, 2018, 2019.
- Scrutiny of CAS forms for regular posts of Assistant Prof in IT.
- Centre Superintendent of University Exams for BE/ME at Panjab University.

- Member of University level Committees: Board of Control, Board of Studies, E-Governance committee, Equivalence Committee, 10th Managing Committee, framing PhD guidelines.

Seminars/Workshops Organized

- Organized workshop on Cognitive Skills Design and Critical Thinking under Institution Innovation Council on Nov 20, 2018 at Panjab University, Chandigarh.
- Organized oneM2M workshop in collaboration with TSDSI under India-EU Cooperation on ICT-Related Standardization, Policy and Legislation on Feb 19, 2018 at Panjab University, Chandigarh.
- Organized Engineering and Management Sciences Section of 12th Chandigarh Science Congress, Chascon 2018 held at Panjab University from Feb 12-14, 2018.
- Organized workshop on Swayam and Swayam Prabha on Jan 19, 2018 at UIET, Panjab University. Resource Person: Dr. Manpreet Singh Manna, Director AICTE.
- Organized Innovative Design Contest under Design Innovation Centre (DIC) on Sep 18-19, 2017 at UIET, Panjab University, Chandigarh.
- Organizing Secretary for Engineering Section for 11th Chandigarh Science Congress, Chascon 2017 held at Panjab University from March 9-11, 2017.
- Organized symposium “Emerging Trends in IT” on Nov 17-18, 2016 at Panjab University, Chandigarh.
- Organized Guest Lecture by Professors from Germany on Data Mining and Business Intelligence for BE IT Students from Nov 17-21, 2014.
- Organized symposium “Emerging Trends in Telecommunication & IT” on Nov 12-13, 2014 at Panjab University, Chandigarh.
- Organized symposium “Emerging Trends in Telecommunication & IT” on Oct 3-4, 2013 at Panjab University, Chandigarh.

Workshop/Courses Attended

- One week Short term course on “Use of Digital technologies in Teaching Learning” at NITTTR, Chandigarh from Feb 25, 2019 to March 1, 2019.
- Five days FDP on Machine Learning & deep Learning: Applications in NLP, Computer Vision and IoT organized by Deptt. of CSE, UIET, Panjab University from July 10-14, 2018.
- Six days TEQIP-II sponsored FDP “Teaching Pedagogies: Sharpen the Tools” organized by Dr. SSBUI CET, Panjab University, Chandigarh from 19th - 24th Sept 2016.
- Six days UGC sponsored Short Term Course “Harmonizing Self: Becoming and Being” organized by Human Resource Development Centre, Panjab University, Chandigarh from 11May 2016- 17 May 2016.
- Five-week online course on “Customer Analytics” by Wharton University of Pennsylvania offered through Coursera in Nov 2015.
- Six days Refresher Course “Saksham – IT Champion Training Project” by Microsoft from 16-21 March 2015 organized at UGC Academic Staff College, Panjab University, Chandigarh.
- 3 day FDP on “Student Evaluation” organized by NITTTR, Chandigarh at Chandigarh College of Architecture from July 30, 2018-Aug 1, 2018.
- Online course on “Advanced Excel Techniques” organized by E&ICT and conducted by IIT Kanpur. Certification on July 24, 2018. 10 hours module with certification exam.

- Workshop on “Smart Energy Metering System for Modern Grid” held at UIET, Panjab University on Feb 17, 2017.
- Workshop on 3D modeling and printing skill development (funded by MHRD, under Design innovation Centre) held at UIET, Panjab University, Chandigarh from Sept 21-23, 2017.
- Workshop on car safety and Internet safety by Consumer Voice NGO in collaboration with Google and Consumer International held at Deptt of IT, UIET on July 20, 2016.
- International workshop on Bioinformatics at Chitkara University, Rajpura on July 27, 2016.
- TEQIP sponsored workshop on “Recent Trends in Signal Processing” organized by Electronics & Communication deptt. UIET, Panjab University from Apr 28-29, 2016.
- Symposium on “Emerging Trends in Telecommunication & IT” organized by UIET, Panjab University, Chandigarh under Teqip-II on Nov 12-13, 2014.
- Seminar on “System Design using Optiwave” jointly organized by Deptt. of ECE, UIET, Panjab University and Gigasoft India, New Delhi on Nov 21, 2014.
- French Course level A1 and A2 at Alliance Francaise de Chandigarh June 2013-Dec 2013. Certified by French Government on March 2014.
- Faculty Enablement Program on Mobile Apps Development conducted by Infosys Ltd., DC Chandigarh from May 14-16, 2013.
- FDP on Business Intelligence & Cloud Computing conducted by TCS, held on Jan 9, 2013
- Campus Connect Deep Dive Faculty Enablement Program on Business English conducted by Infosys Ltd., Chandigarh from Oct 9-11, 2012.

Scholarly Contributions

- Total Number of Publications: 84
- Referred International Journal: 44
- International Conference proceedings: 19
- National Conferences/Seminars: 21
- Books: 02
- Book Chapters: 05

(ROOPALI GARG)