Curriculum Vitae

Prachi Arora
Doctoral Research Scholar
Guest Faculty at IIIT Una
Thin Film Coating Facility Department
CSIR-Central Scientific Instruments Organisation (CSIR-CSIO)
Chandigarh-160030, India
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Research Interests: Web Technology, Image processing, Computer vision, Machine Learning, Deep Learning, Microbiology.

Educational Qualifications

Degree	University/College/ School	Branch/Stream	Passing Year	Division
Doctorate	Academy of Scientific & Innovative Research	Engineering Sciences	Pursuing (2019-till now)	1st
Post-Graduation	Central University of Jharkhand	Computer Science	2013-2015	1st
Graduation	Punjab Technical University	Computer Science	2008-2012	1st
Senior School Education	DAV School	Physics, Chemistry, Maths	2008	1st
Secondary School Education	Guru Nanak Mission Public School	General Subjects	2006	1st

Academic Thesis

- Pursuing Doctoral Thesis Titled "Optimization of Copper based water storage device and automated microbial counting for assessment of drinking water"
- Master Thesis Titled on "Performance in Power Efficient Gathering in Sensor Information System (PEGASIS)" in Wireless sensor Network.
- Bachelor Project Titled "TECHHAX QUIZ"

Research Experience (15 months)
Position: Project Assistant Level –III, CSIR-CSIO, Chandigarh
Project: Design, Development, and supply of HUD MK-2 units for Defence and Navy Applications
Year: Sept 2017 –December 2018

Teaching Experience (24 months)
- ❖ Position: Guest faculty in Computer Science

Place: Integrated Institute of Technology (IIIT), Affiliated to Delhi Skill and
        Entrepreneurship University Sec-9 Dwarka

Year: August 2017- May 2018

Subject Taught (BVOC/Diploma)
- Software Engineering
- Desktop Publishing
- Computer graphics (Practical Lab)

❖ Position: Senior Lecturer

Place: Institute of Modern Studies, under PMKY, Dwarka, New Delhi

Year: Jan 2017-May 2017

Subject Taught

Basic of Computer (MS office, PowerPoint Excel)

❖ Position: Senior Lecturer

Place: Agra College of Management and Technology (ACMT), Nirman Vihar, New
      Delhi

Year: Aug 2015-December 2016

Subject Taught (UG/Diploma/B. ED**)**
- Fundamentals of Computer
- Data Structure
- DBMS
- Computer Graphics (both theoretical and Practical lab)

Internship

- Four months training in PHP Language from ZCC Group Institute at Chandigarh, India (2010).
- Three months training in Asp.net from NIIT Poanta Sahib, Himachal Pradesh, India (2009).
- Done 6 weeks course on Ethical hacking from TCIL-IT, Chandigarh, 2012

Software Skills

- Programming Language: Python, MATLAB
- Web designing Language: HTML, Java script, CSS, WordPress, PHP
- Database: SQL, Oracle9i
- Statistical Tool: Graphpad
- Documentation: Microsoft, Latex

Membership Details

- Life Member: Internet Society (ISOC), India
- Life Member: International Association of Engineers (IAENG)
- Life Member: Computer Science Teacher Association (CSTA)
- Life member: Associate Member of Universal Association of Computer & Electronic Engineer (UACEE)-IRED

- Student Member: Royal Microscopical Society (RMS)
- Student Member: Institute of Electrical and Electronic Engineers (IEEE)
- Student Member: Optical Society of America (OSA) Optica
- Volunteer Member: Mayacare Society

Workshop Attended

2021: Attended IEEE SPS Summer School on Deep Learning for Sensor Signal Analytics organized by CSIR-CSIO and IEEE AcSIR CSIO student Branch, Chandigarh (Aug 2-Aug 6).

2019: Worksop on learning and control organized by Indian Institute of Technology (IIT Mandi), Himachal Pradesh, India (22-26th July 2019)

- DST& ACS workshop, INST Mohali, National Agri-Food Biotechnology Institute (NABI), Sector 81, Mohali, Punjab
- Workshop on Basic and Advance Skill for water Testing and Analysis organized by CSIR-CSIO, Chandigarh, India (16th -20 Dec).

2018: Workshop on Electron Microscopy Sponsored by TEQIP-II**,** Punjab Engineering College (PEC), Department on Materials and Metallurgical Engineering, Deemed University, Chandigarh, India. **(August 7 to 9).**

2017: Hands on Training Course/ Workshop on **"Spectroscopic and Chromatographic Techniques"** CSIR-Central Scientific Instruments Organisation, Chandigarh, India. **(November 27 to 30)**

2014: Participation of workshop on cyber security at Central University of Jharkhand, Ranchi.

2010: Participation in Punjab Technical University sponsored workshop in software testing at Indo Global of Architecture, Chandigarh

Conference/Poster Presentation

- ❖ Presented Poster on titled "Traditional Aesthetic Low-cost Immersible Copper Device for Enhancing the Quality of Drinking Water(TA-LICD)" in One Week One Lab Programme at CSIR-CSIO, 26th-30th June 2023.
- ❖ Best poster presentation award in Reminisce at CSIR-CSIO, April 2023
- ❖ Best oral presentation award in Indian International Science Festival under Engineering Science festival organized by Vibha and Govt. of India, at Bhopal, Madhya Pradesh, 2023
- ❖ Presented poster on titled "Development of herbal biscuits using waste Syzygium cumini seeds: primary study on sensory evaluation and nutritional composition organized by INST and CSIR-CSIO jointly on 22nd March 2022.
- ❖ "Bacterial Colony Counting though automatic Image Analysis" organized by AcSIR Gyantarang at CSIR-National East Institute of Science and Technology (NEIST) at Jorhat, Assam, India Jan 2020
- ❖ Attended online OSA student Leadership Conference 11-13 September 2020

- ❖ Participated in E-poster presentation competition on titled "Hand-held and detachable copper alloys fins for storage application" in 14th Chandigarh Science Congress (CHASCON) organized by Panjab University, Chandigarh 17th to 19th Dec 2020.
- ❖ Participated in Online Poster Presentation competition (OPPC 2020) themed on smart Materials on 8 Nov 2020 organized by IEEE AcSIR-CSIO.

Publication

- Arora, Prachi, Suman Tewary, Srinivasan Krishnamurthi, and Neelam Kumari. "Development of a low-cost copper device for inactivation of microorganism in drinking water for human consumption." *Journal of Water Process Engineering* 50 (2022): 103302.
- Prachi Arora "WSN and its Applications" International Journal of Computer Science and Network (IJCSN), Volume 4 Issue 4, ISSN 2277-5420, 2015. IF 0.417
- Prachi arora, Itu singdh, Sandeep Mahato "Review on Energy Efficient Chain based Hierarchical Routing Protocol in WSN" in International Journal of Engineering Research & Technology, 2015

Book Chapter

Prachi Arora "Review on WSN Applications with some issues" in National Conference Library Information Science & Information Technology for Education (NCITE), ISBN: I-63102-455-B,2015

Patent (Design Registration)

- ❖ "Hand-held Copper Based Water Purification Device"App. NO. 10th Jan 2022.

Book Published

Practice Workbook for competitive English Published by Educreation Publisher, ISBN: 9781545702673, 9781545702673 on 10 July 2017

Online Webinar Lecture Attended

- ❖ Attended e-conference on "Atmanirbhar Bharat: Turn crisis into an opportunity" organized by Visvesvaraya Technological University on 20&21 August 2020.
- ❖ 5 day online national level faculty development on "Recent Advances in Applied Chemistry: RACC-2020" From 06-07-2020 to 10-07-2020 by QIS College of Engineering and Technology.
- ❖ Attended webinar on popular science writing organised by Department of Science and Technology (DST) on 20th July and 22nd July 2020.

Educational Outreach Activities

- ❖ Demonstration of science experiment using optical kit provided by OSA at CSIR-CSIO, Chandigarh on Science Day , Feb2020 (https://www.tribuneindia.com/news/chandigarh/csio-transfers-technology-tobel 48717)
- ❖ Conducted Photography contest on 16th May 2020 under OSA Student Chapter.
- ❖ Deliver a Lecture on "Basic of python (including hand on session)" organized by Jigyasa camp at KV, Sec-47, CHD (21 Sept, 2019),

- ❖ Delivered a Lecture on "Design for 360-Degree 3D Light-field Camera and Display (Including hands-on)" at Government High School A Smart School, Sec-50B, CHD, (19 Oct, 2019)
- ❖ Hands-on Session at KV, Sec-47, CHD (27 July, 2019), Under CSIR-CSIO, JIGYASA Program, a New Campaign 100 Lecture Series started for Schools of Chandigarh. The topic of this lecture was Demonstration of some Optics Phenomena using OSA Optics Kits.
- ❖ Delivered Lecturer in science and its importance at Sewa Bharti Charitable Trust, sector 29, Chandigarh.
- ❖ Participated and organized the International Day of light event at CSIR-CSIO, Chandigarh on 16th May 2019.

Achievements and Awards
1. Educational
   - ❖ Participated in Indian International Science Festival under Engineering Science festival category in presenting idea organized by Vibha and Govt. of India, at Panaji, 2021
   - ❖ Selected in Atal Innovation Mission AIM ICDK Water Innovation Challenge 2.0, Jan 2022
   - ❖ Presenting idea in the IDEA FOR LIFE competition organized by Theracues Innovation Pvt. Ltd, Bangalore, Aug 2021.
   - ❖ Winner of Essay competition in Tech fest organized by Sachdeva Engineering College, Mohali at graduation level.
   - ❖ Got third position in multimedia presentation in Tech fest organized by Sachdeva Engineering College, Mohali at graduation level.
   - ❖ Participation in idea competition organised by Chandigarh University in 2010.
   - ❖ Passed National Talent Search Examination on Environment Education at school level.
   - ❖ Cleared Himachal Pradesh State Eligibility Test (HP-SET) in 2018
   - ❖ Cleared Graduate Aptitude Test in Engineering (GATE-2012).
   - ❖ Created websites fmsindia.info/college website.

2. Sports
   - ❖ Gold medal in Long Jump in Ardour 2.0 organized by CSIR-CSIO, Chandigarh, 2021
   - ❖ Bronze medal in High Jump in Ardour 2.0 organized by CSIR-CIO, Chandigarh, 2021.
   - ❖ Silver medal in Kho-Kho and cricket in Ardour 2.0 organized by CSIR-CSIO, Chandigarh, 2021
   - ❖ Bronze medal in Long Jump and High Jump in Ardour 1.0 organized by CSIR-CSIO, Chandigarh, 2019.
   - ❖ Gold medal in three-leg race in graduation level organized by Sachdeva Engineering College, Mohali.
   - ❖ Participated in various athletics at school level at National level.