# Dr. Deepak Painuli

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## **EDUCATION**

## Gurukul Kangri (Deemed to be University), Haridwar

2024

Ph.D. (CSE)

KSOU, Mysore

2013

Master of Technology (Information Technology)

**UPTU, Uttar Pradesh** 

2006

Bachelor of Technology (Information Technology)

#### AREA OF TEACHING INTEREST:

- Operating System
- Data Structure
- Computer Networks
- Machine Learning

#### **AREA OF RESEARCH:**

- Machine Learning Application in Medical Diagnosis
- Artificial Intelligence in Agriculture Domain, Software Domain and Cyber-Security.

## **PUBLICATIONS:**

- Painuli, D., Bhardwaj, S., & Kose, U. (2025). Efficient Feature Selection and Hyperparameter Tuning for Improved Speech Signal-Based Parkinson's Disease Diagnosis via Machine Learning Techniques. Health Technology Assessment in Action, 9(1).
- Painuli, D., & Bhardwaj, S. (2022). Recent Advancement in Cancer Diagnosis Using Machine Learning and Deep Learning Techniques: A Comprehensive Review. Computers in Biology and Medicine, 146, 105580. (SCIE Indexed [IF-7.7])
- Painuli, D., Bhardwaj, S., Köse, U. (2023). Optimized Diagnosis of Central Nervous System (CNS) Cancer Using Gene Expression Microarray & Machine Learning (ML)

- Methods, European Chemical Bulletin, 12(10), 9757-9771. (SCOPUS Indexed [IF-3.71])
- Painuli, D., Bhardwaj, S., Köse, U. (2023). Optimized Speech Signal-Based Diagnosis of Parkinson's Disease Using Machine Learning Techniques – Augmented by An Efficient Feature Selection & Hyperparameter Tuning Approach, Machine Intelligence Research, 17(03), 9523-9547. (SCOPUS Indexed [CS-8.4])
- Painuli, D., Kumar, S., Bhardwaj, S., & Aggarwal, M. (2023). Machine Learning Based Study on Aphid Infestation in Agriculture Crop at Uttarakhand, Advances in Food Sciences, 45(02), 42-56. (WoS Indexed [IF-1.17])
- Painuli, D., Mishra, D., Bhardwaj, S., & Aggarwal, M. (2020). Machine Learning Based Model to Combat Covid19, International Journal of Information Technology and Electrical Engineering, 09(04), 33-40. (UGC Care Indexed)
- Painuli, D., Mishra, D., Bhardwaj, S., & Aggarwal, M. (2020). Fuzzy Rule Based System to Predict COVID19-A Deadly Virus. International Journal of Management and Humanities, 3(4), 5.
- Jyoti, N, Mishra, D., Rathi, N., & Painuli, D. (2018). Fuzzy Expert System to diagnose Psoriasis Disease. International Journal of Computer Science and Information Security (IJCSIS), 16(9). (UGC Care Indexed)
- Painuli, D. & Mishra, D. (2017). Threats of Cloud Computing and Its Security-A Survey. International Journal of Current Engineering and Scientific Research (IJCESR), 4(10). 80-94. (UGC Care Indexed)
- Painuli, D. & Mishra, D. (2017). A Rule Based Hybrid Expert System Model for Diagnosis of Diabetes. International Journal of Current Engineering and Scientific Research (IJCESR), 4(10). 116-119. (UGC Care Indexed)
- Painuli, D. & Joshi, A. (2017). Path Determination and Optimizing: Manet. International Journal of Current Engineering and Scientific Research (IJCESR), 4(10). 120-121. (UGC Care Indexed)
- Saini, S., Vig, V., & Painuli, D. (2016). Speaker Recognition- A Fact Based Approach Using Neural Network and HMM/GMM, International Journal of Engineering Research & Management Technology, 03(03). 44-49.
- Mishra, D., Rathi, N., & Painuli, D. (2016). Rule Based Expert System for Medical Diagnosis-A Review, International Journal of Engineering Technology, Management and Applied Sciences, 04(12). 167-172.
- Rao, D., Painuli, D., & Verma, K.K. (2016). Homomorphic Hybrid Encryption for Cloud Computing, International Journal of Advanced Research in Computer and Communication Engineering, 05(05). 663-666.
- Samant, S., Painuli, D., & Gupta, A. (2016). Secured Password Authentication Scheme, International Journal of Computer Science and Information Technology & Security (IJCSITS), 05(05). 663-666.

## **BOOK CHAPTER PUBLICATIONS**

- Painuli, D., & Mishra, D. (2025). Employing a Machine Learning Approach for Predicting Monkeypox Disease in Conjunction with the Influence of Rudraksha Beads. In Modern Approaches in Identification and Therapeutic Applications of Secondary Metabolites- Biocomputation In Herbal Medicine, Vol-02. Apple Academic Press. (SCOPUS Indexed)
- Painuli, D., Mishra, D., Bhardwaj, S., & Aggarwal, M. (2021). Forecast and prediction of COVID-19 using machine learning. In Data Science for COVID-19 (pp. 381-397). Academic Press. (SCOPUS Indexed)
- Painuli, D., Bhardwaj, S., Köse, U. (2023). Recent Advancement in Pancreatic Cancer Diagnosis Using Machine Learning-Based Methods: A Systematic Review. In: Advances and Applications of Artificial Intelligence & Machine Learning. ICAAAIML 2022. Lecture Notes in Electrical Engineering, vol 1078. Springer, Singapore. (SCOPUS Indexed)

### PATENT/DESIGN-PUBLISHED/GRANTED

- Painuli, D. et.al. "System And Method For Detecting Abnormalities In X-Ray And Ct Scan Images". Patent Published in Official Journal of Patent Office (UK). Date 28/02/2025. Application No: 202511011329.
- Painuli, D. et.al. "Armo Safe: Advanced Military Footwear For Enhanced Soldier Safety ". Patent Filled in Official Journal of Patent Office (UK). Date 09/01/2025. Application No: 202511002143.
- Painuli, D. et.al. "AI based Smart Goggles for Construction Labours". Design Published & Granted in Official Journal of Patent Office (UK). Date 07/07/2023. Design No: 6306172.
- Painuli, D. et.al. "Soft Fairness Based Scheduling Mechanism Using Machine Learning for Cloud Computing". Patent Published in Official Journal of Patent Office (INDIA). Date 10/09/2021. Application No: 202141039379.
- Painuli, D. et.al. "Robust Outlier Detection in Noisy Data Classification System Under Abundant Mislabeled Training Instances Using SVM LIE Group Machine Learning Model for Brain Images". Patent Published in Official Journal of Patent Office (INDIA). Date 27/08/2021. Application No: 202141037190.

## CONFERENCE PAPER PRESENTATION

- Presented a research paper on "Evaluating Convolutional Neural Network performance for Retinal Disease Detection: A Comparative Analysis of Enhanced and Non-Enhanced Image Dataset" in International Conference, Smart Innovations, Engineering Systems & Design (SIESD-2025), held on May 23-24, 2019 at Quantum University, Roorkee.
- Presented a research paper on "Approach to the diagnosis of Parkinson's Diseases" in IEEE-COER-2019 International Conference on Artificial Intelligence and applications, held on Nov 20-21, 2019 at COER, Roorkee.
- Presented a research paper on "Recent Advancement in Pancreatic Cancer Diagnosis using Machine Learning-based Methods-A Systematic Review" in International Conference on Advances and Applications of Artificial Intelligence and Machine Learning, held on Sept 16-17, 2022 at Sharda University, Greater Noida, Uttar Pradesh.
- Presented a research paper on "Optimized Leukemia Cancer Diagnosis using Gene Expression Microarray and Machine Learning Techniques" in National Conference on Knowledge, Cultural Traditions and Practices in India, held on March 29-30, 2023 at Gurukula Kangri (Deemed to be University), Haridwar.
- Presented a research paper on "Gene Expression Microarray-based Diagnosis of Central Nervous System (CNS) Cancer using Machine Learning (ML) Methods" in International Conference on Recent Advancement and Innovation in Engineering & Technology (RAIET-2023), held on Feb 24-25, 2023 at Maharishi School of Engineering & Technology (MUIT), Lucknow.
- Presented a research paper on "Revolutionizing Colon Cancer Diagnosis via ensemble of Gene Microarrays Technique and Machine Learning Methods" in International Conference on Veda-Vijana & Sanskriti Maha kumbha, held on December 23-25, 2023 at Gurukula Kangri (Deemed to be University), Haridwar.

## SHORT-TERM TRAINING PROGRAM (STTP) / WORKSHOPS

- One Week USERC Workshop on "Data Analytics Using Advanced Mathematical Tools" organized by Faculty of Engineering & Technology, Gurukula Kangri (Deemed to be) University, Haridwar (13 March 2023 to 18 March 2023).
- One Week AICTE Workshop on "UHV Refresher 1 UHV-II" organized by All India Council for Technical Education (AICTE), New Delhi (22 Feb 2021 to 26 Feb 2021).
- One Week AICTE Workshop on "Inculcating Universal Human Values in Technical Education-UHV-I" organized by All India Council for Technical Education (AICTE), New Delhi (08 Feb 2021 to 12 Feb 2021).
- One Week AICTE approved STTP on "Applied Machine Learning Algorithms and Applications" organized by Department of Electronics and Communication Engineering, AITS, Tirupati (14 Dec 2020 to 19 Dec 2020).
- One Week AICTE approved STC on "Block chain and Machine Learning" organized by Department of Computer Science & Engineering, FET-GKV, Hardwar, Uttarakhand (29 June 2020 to 03 July 2020).

- One Week ATAL FDP on "AI-Driven Growth: Shaping India's Economy and Global Leadership" organized by MCT'S Rajiv Gandhi Institute Of Technology, Mumbai (24 Feb 2025 to 01 March 2025)
- One Week ATAL FDP on "Artificial intelligence for Science and Engineering" organized by National Institute of Technology, Nagaland (17 Feb 2025 to 22 Feb 2025)
- One Week ATAL FDP on "AI and data science in Small business: Transforming the future of business" organized by Vivekanand Education Society's Business School, Mumbai (10 Feb 2025 to 15 Feb 2025)
- One Week ATAL FDP on "Exploring Ai Using Ibm Watson And Google Colab" organized by Gurukula Kangri Vishwavidyalaya, Haridwar (03 Feb 2025 to 08 Feb 2025)
- One Week FDP on "Cloud Application Development Using REDHAT OpenShift" organized by Faculty of Engineering & Technology, Gurukula Kangri (Deemed to be) University, Haridwar (25 Sept 2023 to 29 Sept 2023).
- Two Week ATAL FDP on "Academic Leadership" organized by Faculty of Engineering & Technology, Gurukula Kangri (Deemed to be) University, Haridwar (19 Sept 2022 to 30 Sept 2022).
- One Week ATAL FDP on "Advance Statistical & Machine Learning Models (ASMLM-2021)" organized by Indian Institute of Information Technology, Ranchi (15 Dec 2021 to 19 Dec 2021)
- One Week ATAL FDP on "Applied Artificial Intelligence" organized by CDAC, Noida (29 Nov 2021 to 03 Dec 2021)
- One Week ATAL FDP on "Intelligent Computing in Healthcare" organized by National Institute of Technology, Raipur (20 Sept 2021 to 24 Sept 2021).
- One Week ATAL FDP on "Machine Learning in Medical Image Processing" organized by Katihar Engineering College, Katihar (05 Sept 2021 to 09 Sept 2021).
- One Week ATAL FDP on "Artificial Intelligence in Revolutionizing Healthcare" organized by National Institute of Technology Puducherry, Karaikal (19 July 2021 to 23 July 2021).
- One Week International Virtual FDP on "Emerging Techniques in Biomedical Instrumentation-ETBI 2021" organized by Koneru Lakshmaiah University, Guntur (28 June 2021 to 03 July 2021).
- One Week ATAL FDP on "Academic Leadership & Management of Technical Education" organized by Faculty of Engineering & Technology, Gurukula Kangri (Deemed to be) University, Haridwar (17 May 2021 to 21 May 2021).
- One Week ATAL FDP on "Applications of Artificial Intelligence in Healthcare" organized by Model Engineering College., Kochi (22 Feb 2021 to 26 Feb 2021).
- One Week ATAL FDP on "Artificial Intelligence In Computer Vision" organized by PSNA College of Engineering & Technology, Dindigul (04 Jan 2021 to 08 Jan 2021).
- One Week ATAL FDP on "Artificial Intelligence In Health Dynamics: Conventional Medicare to Intelligent Healthcare" organized by Kalinga Institute of Industrial

- Technology, Bhubaneswar (21 Dec 2020 to 25 Dec 2020).
- One Week ATAL FDP on "Blockchain" organized by Department of Computer Science & Engineering, FET-GKV, Hardwar, Uttarakhand (14 Dec 2020 to 18 Dec 2020).
- One Week AICTE approved FDP on "Quantum Computing and Machine Learning" organized by JNTUA College of Engineering, Pulivendula (30 Nov 2020 to 05 Dec 2020).
- One Week ATAL FDP on "Artificial Intelligence" organized by Advanced Signal Processing Group, CDAC, Kolkata (23 Nov 2020 to 27 Nov 2020).
- One Week ATAL FDP on "Artificial Intelligence Exploring Pharmacokinetics with Artificial Intelligence and Quantum Computing" organized by Bharati Vidyapeeth College of Pharmacy, Kolhapur (02 Nov 2020 to 06 Nov 2020).
- One Week FDP on "Research Writing in High Quality International Journal/Conferences" organized by Department of Electronics and Communication Engineering, Atria Institute of Technology, Bengaluru, Karnataka (10 Aug 2020 to 14 Aug 2020).
- One Week FDP on "Data Science & AI" organized by Mangalmay Institute of Engineering & Technology, Greater Noida, Delhi (25 May 2020 to 29 May 2020).
- Attended many Technical webinars (<5 Days) organized by eminent engineering colleges of country and also some from foreign country (during Covid-19 pandemic).

PROFESSIONAL EXPERIENCE:	19+ YEARS
TEACHING EXPERIENCE	14+ YEARS
COED University Decades	2024-Till Date
COER University, Roorkee Associate Professor & Head of Department (CSE)	2024
Gurukul Kangri (Deemed to be University), Haridwar Assistant Professor	2024
Quantum University, Roorkee Assistant Professor & Center Superintendent of Examination	2011-2019
INDUSTRY EXPERIENCE	05 YEARS
Metrotel Wireless Pvt Ltd, Ahmadabad RF Planner (Optimizer)	2010-2011
Prithvi Info Sol Pvt Ltd, Hyderabad RF Engineer (Data Analyzer)	2008-2010
Nutek India Pvt Ltd, Gurgaon RF Engineer (Drive Test)	2006-2008

## **REVIEWERSHIP PERFORMED:**

- Artificial Intelligence Review (SCIE-Q1, IF-12.00)
- International Journal of Biological Macromolecules (SCIE-Q1, IF-08.20)
- Cancer Medicine (SCIE-Q2, IF-04.01)
- Intelligent Automation and Soft Computing (SCIE-Q2, IF-03.41)
- BMC Gastro Enterology (SCIE-Q3, IF-3.25)
- International Journal of Healthcare Management (SCOPUS-Q2, IF-2.191)
- Bulletin of Electrical Engineering and Informatics (SCOPUS-Q3, IF-1.866)
- Journal of Advanced Research in Applied Sciences and Engineering Technology (SCOPUS-Q2, IF-1.40)
- International Journal of Intelligent Systems and Applications in Engineering (SCOPUS-Q4, IF-0.74)

## **INVITED EXPERT LECTURE:**

- Presented an invited Expert Talk on "Journal Scope and Validation on UGC Care, Web of Science & Scopus" in National workshop on Research and Innovation by Researchers for Researchers, held on 27 Feb 2023, at Gurukula Kangri (Deemed to be University), Haridwar.
- Presented an invited Expert Talk on "IT Awareness" in Department of Mathematics & Statistics, held on 19 Dec 2022, at Kanya Gurukul Campus – Gurukula Kangri (Deemed to be University), Haridwar.

### **AWARDS & ACHIEVEMENTS:**

- Mentorship of Three Courses on DeepLearning.AI (Coursera) for year 2021.
- Best Faculty Award 2016 by Quantum University, Roorkee.
- Certification of Coordination in Ethical Hacking & Cyber Security.
- IBM Certification for RAD 6.0.
- NIIT Certification in C++ Programming.

## **EXTRA-CURRICULAR ACTIVITY:**

- Organized many Hackathons, Workshops, Technical Seminars and events for Students Skill Development at COER University.
- Worked as placement coordinator at Faculty of Engineering & Technology, Gurukula Kangri (Demmed to be University), Haridwar
- Organized several workshops related to Cloud Computing, machine learning, generative AI, Career Counselling etc., in Faculty of Engineering & Technology, Gurukula Kangri

(Demmed to be University), Haridwar

- Worked as Center Superintendent of Examination from 2012 to 2019 at Quantum.
- Performed Convenorship for many activities in Quantum University's Tech & Annual Fest.
- Been member of many Quantum University's academics and administrative committees.

## **SKILL HIGHLIGHTS:**

- Team Leader
- Strong Decision Maker
- Complex Problem Solver & Fast Learner
- Service-focused & Creative Thinker

## **FUNDAMENTAL SOFTWARE SKILLS:**

- Operating System: Windows OS, Linux OS (Ubuntu), Mac OS.
- Language: C, Python.
- Package: MS Office, IBM RAD 6.0, Anaconda Framework.

## **DECLARATION:**

I hereby declare that the above-mentioned information is correct to the best of my knowledge.

Your Sincerely,

**Dr. Deepak Painuli**Associate Professor & Head (CSE)

COER, University, Roorkee.