



Prachi Rawat

Assistant Professor

✉ prachi.rawat03@gmail.com

☎ +91-8433090521

🌐 www.linkedin.com/in/prachi-rawat-69426a24b

Dedicated and passionate Assistant Professor in the Computer Science and Engineering department with 1 year of hands-on teaching experience. Adept at designing and delivering engaging and comprehensive curriculum for undergraduate and graduate courses. Skilled in fostering a collaborative and inclusive learning environment that encourages student participation and success. Possesses strong technical expertise in programming languages, software development, and data structures. Committed to advancing academic research and contributing to the field through innovative projects and publications.

Work Experience

Govind Ballabh Pant Institute of Engineering and Technology, Pauri, UK

August 2023 - Present

Assistant Professor

- Designed and delivered lectures for UG and PG courses in Data Structures, Algorithms, Cloud Computing, Python, and Soft Computing.
- Developed comprehensive course materials including assignments, exams, and hands-on projects to enhance student understanding.
- Guided students through project-based learning and encouraged hands-on experimentation to reinforce theoretical concepts.
- Integrated modern tools and technology to create an engaging and inclusive learning environment.
- Served as Residential Warden for the girls' hostel for 1.5 years, managing student welfare, discipline, and hostel administration.

Research Interests

Machine Learning, Edge AI

Publications

- P. Rawat, P. Kumar, V. K. Tamta, and A. Kumar, "A Comprehensive Approach to Indian Sign Language Recognition: Leveraging LSTM and MediaPipe Holistic for Dynamic and Static Hand Gesture Recognition," EAI Endorsed Transactions on AI and Robotics, vol. 4, May 2025. DOI: 10.4108/airo.8693
- P. Rawat, R. Saini, and A. Kumar, "Comparative Analysis of Machine Learning Techniques for Early Detection of Breast Cancer," International Journal on Computational Modelling Applications, vol. 2, no. 2, pp. 45–62, May 2025. DOI: 10.63503/j.ijcma.2025.89
- Anuj Kumar, Prachi Rawat, Priyank Aswal, and Manjeet Nath, "Sentiment Analysis of Amazon Reviews: Comparative Performance of Machine Learning Algorithms," Proceedings of ICAST 2025. Presented at ICAST, June 2025. (Accepted, In Press)

Projects

AI-Powered Embedded Vision System (Confidential Project, Remoteward)

Software Development Consultant

March 2025 - June 2025

- Developed a real-time computer vision solution for an edge device using lightweight deep

learning models and image processing techniques.

- Involved in full-cycle deployment from model training to integration on microcontroller hardware using Edge Impulse and TinyML frameworks.
- Focused on resource optimization for low-power, low-resolution environments.
- Collaborated with a cross-functional team under a non-disclosure agreement (NDA).

Real-time Indian Sign Language Detection using LSTM & MediaPipe

- Developed a sequential LSTM model for ISL recognition using MediaPipe Holistic and TensorFlow. Created a custom dataset, implemented gesture tracking, and contributed to publication efforts.

Breast Cancer Prediction Using ML Classifiers

- Built a comparative pipeline using ML algorithms like SVM, Random Forest, and Logistic Regression. Evaluated performance using accuracy and F1-score.

Sentiment Analysis of Amazon Reviews

- Designed and tested classification models (Logistic Regression, SVM, Naïve Bayes) for sentiment analysis. Work presented at ICAST 2025.

Certifications

- Cisco Introduction to Data Science
- Coursera's Google Professional Data Analytics Certification (Ongoing)
- Accenture Data Analytics and Visualization Virtual experience program
- Guvi Python
- Guvi AI for India 2.0

Education

Govind Ballabh Pant Institute of Engineering and Technology

October 2021 - July 2023

- Master of Technology (M.Tech.) in Computer Science Engineering scoring 89.11%

Doon Institute of Engineering and Technology

August 2011 - August 2015

- Bachelor of Technology (B.Tech.) in Electronics and Communications Engineering scoring 72.7%