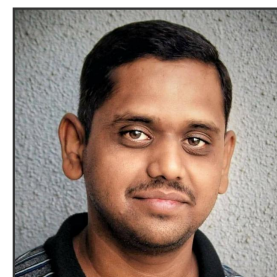# Prasad Kanhegaonkar

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Brief Bio

Prasad Kanhegaonkar received his B.Tech. and M.E. degrees in Computer Science and Engineering from Shri Guru Gobind Singhji Institute of Engineering and Technology, Nanded, India and Government Engineering College, Aurangabad, India respectively. He is an Assistant Professor in the Department of Computer Science and Engineering at Shri Guru Gobind Singhji Institute of Engineering and Technology, Nanded, India. He is currently pursuing a Ph.D. from the Department of Computer Science and Engineering, Indian Institute of Technology, Indore, India. His research interests include parallel computing, image processing, computer vision, machine learning and deep learning.

Education

Indian Institute of Technology Indore   *Indore, India*
Ph.D. in Computer Science & Engineering   *Dec 2021 - Current*

Indira Gandhi National Open University   *New Delhi, India*
Post Graduate Diploma in Financial Management   *August 2012 - July 2014*

Government Engineering College   *Aurangabad, India*
M.E. (Computer Science & Engineering)   *Sept 2010 - June 2012*

Shri Guru Gobind Singhji Institute of Engineering & Technology   *Nanded, India*
B.Tech. (Computer Science & Engineering)   *Aug 2005 - May 2009*

Work Experience

Shri Guru Gobind Singhji Institute of Engineering & Technology   *Nanded, India*
Assistant Professor   *Aug 2016 - Present*

GES R H Sapat COE   *Nashik, India*
Assistant Professor   *July 2012 - Aug 2016*

Government Polytechnic   *Hingoli, India*
Lecturer   *Sept 2009 - Sept 2010*

Membership

- **Member of IEEE (No : 97161500)**
- **Life member ISTE, New Delhi (No : LM68294)**

Research

Research Area of Interest:

- Parallel Computing, Image Processing, Computer Vision, Machine Learning, Deep Learning.

Publications

INTERNATIONAL CONFERENCES:

- Prasad Kanhegaonkar, Avinash Gulve, "Review of Pixel Value Difference Methods in Steganography", International Conference on Recent Technologies (I-CORT 2012), Institute of Knowledge College of Engineering Pune, 9 to 11 February 2012

- Prasad Kanhegaonkar, Avinash Gulve, "A Novel Image Steganographic Method using Octa-Way Pixel-Value Differencing", International Conference on Computer Science & Information Technology (CSIT), Bhopal, 8 July 2012

- Prasad Kanhegaonkar, Sruthi Ponugoti, Surya Prakash, "Skin Lesion Classification using CNN & Transformer Networks for Computer Assisted Diagnosis", International Conference on Smart Systems & Advanced Computing (SYSCOM 2022), Macau, China, 30 to 31 December 2022

BOOK CHAPTERS:

- Rahul Chaurasia, Anirban Sengupta, Prasad Kanhegaonkar, "Secured Integrated Circuit (IC/IP) Design Flow", Nanoelectronics for Next-Generation Integrated Circuits, CRC Press, pp:257-274

Teaching

COURSES TAUGHT AT GESRHSCOE NASHIK [JULY 2012 - AUG 2016]:

- Digital Signal Processing, Digital Electronics & Logic Design, Software Engineering, Microprocessor Interfacing Techniques, Design & Analysis of Algorithms, Embedded Operating Systems, Data Communication & Wireless Sensor Networks, Smart System Design & Application

COURSES TAUGHT AT SGGSIE&T NANDED [AUG 2016 - PRESENT]:

- UCS 101: Introduction to Computers & Programming | Aug16-Dec16 | UG

- CS 329: Unix System Programming | Dec16-May17 & Dec17- May18 | UG

- CS 335B: Combinatorics, Probability & Statistics | Dec16-May17 & Dec20- May21 | UG

- CS 441A: Machine Learning | Jul17-Dec17 & Jul18- Dec18 | UG

- ESC 107: Programming for Problem Solving | Dec18-May19 | UG

- PCC-NS-516: Number Theory & Cryptography | Dec18-May19 | PG

- PCC-CS-202: Data Structures | Jul19-Dec19 | UG

- PCC-CS-207: Design & Analysis of Algorithms | Dec19-May20 | UG

- CS 441I: Bandit Algorithm (Online Machine Learning) | July20-Dec20 | UG

- PEC-NS-531: Deep Learning | May21-Sept21 | PG

Training

TRAINING PROGRAMS ORGANIZED:

- Emerging New Dimensions of Higher Education in India | GESRHSCOE Nashik | 20 to 21 February 2015

- Machine Learning & Applications | SGGSIE&T Nanded | 21 to 25 January 2019 (One Week FDP)

- Probability & Statistics | SGGSIE&T Nanded | 15 to 20 March 2019 (One Week FDP)

- Fundamentals of accelerated computing using OpenMP & CUDA C | SGGSIE&T Nanded | 27 to 29 December 2019

EXPERT TALKS DELIVERED / RESOURCE PERSON:

- Principal Component Analysis | Expert Talk Date: 30 June 2016 | FDP: Data Mining using R | Venue: VNIT Nagpur | FDP Dates: 27 June to 2 July 2016 (One Week)

- Basics of Machine Learning and its Applications | Expert Talk Date: 25 to 26 September 2018 | FDP: Data Analytics & Machine Learning | Venue: Govt College of Engineering, Jalgaon | FDP Dates: 25-29 September 2018 (One Week)

- Decision Trees | Expert Talk Date: 25 January 2019 | FDP: Machine Learning & Applications | Venue: SGGSIE&T Nanded | FDP Dates: 21 to 25 January 2019 (One Week)

- Introduction to R Software | Expert Talk Date: 17 and 20 March 2019 | FDP: Probability & Statistics | Venue: SGGSIE&T Nanded | FDP Dates: 15 to 20 March 2019 (One Week)

Training Programs Attended:

- Basics of LaTeX | GESRHSCOE Nashik | 13 to 14 July 2013

- Digital Electronics & Logic Design | VIIT Pune (SPPU Workshop) | 27 July 2013

- Programming Lab - III | G H Raisoni IE&T Pune (SPPU Workshop) | 26 to 27 December 2014

- Computer Lab- II | PVG COET Pune (SPPU Workshop) | 2014

- Smart System Design & Applications | JSPM Narhe Pune (SPPU Workshop) | 17 July 2015

- Fundamentals of Writing a Ph.D. Thesis | GESRHSCOE Nashik | 9 January 2016

- Importance of Statistics & Design of Experiments in Engineering | VNIT Nagpur | 18 to 22 January 2016 (One Week)

- Digital Signal Processing | VNIT Nagpur | 5 to 7 March 2016

- Data Mining using R | VNIT Nagpur | 27 June to 2 July 2016

- Coding Theory & Cryptography | SGGSIE&T, Nanded | 26 to 31 December 2016 (One Week)

- Deep Learning & Applications | IIT Kanpur | 12 to 16 January 2017 (One Week)

- Machine Learning & High Performance Computing | SGGSIE&T, Nanded | 9 to 10 March 2017

- Big Image Data Processing using ML Algorithms | NIT Warangal | 11 to 16 December 2017 (One Week)

- Essentials of Neural Network and Fuzzy Logic | SGGSIE&T, Nanded | 18 to 22 December 2017 (One Week)

- Cyber Security | SGGSIE&T Nanded | 6 to 10 March 2018 (One Week)

- Computer Networks | SGGSIE&T, Nanded | 12 to 16 March 2018 (One Week)

- AI & Machine Learning | MNIT Jaipur | 4 to 8 June 2018 (One Week)

- ANN & Deep Learning | MNIT Jaipur | 11 to 15 June 2018 (One Week)

- Internet of Things | MNIT Jaipur | 18 to 22 June 2018 (One Week)

- Analytical Techniques for Applied Research | SGGSIE&T Nanded | 16 to 20 February 2020 (One Week)

- Quantum Computing | MNIT Jaipur | 24 to 29 August 2020 (One Week)

- Matrix Computations | SGGSIE&T Nanded | 22 to 27 February 2021 (One Week)

- Current Trends of Deep Learning in Various Research Domains | VIT-APU Amaravathi - NIT Warangal | 20 to 24 September 2021 (One Week)

Certifications

Certificate Courses Completed:

- SWAYAM Platform (NITTTR Bhopal):

- Module 1: Orientation towards Technical Education and Curriculum Aspects, [February 2021]

- Module 2: Professional Ethics and Sustainability, [February 2021]

- Module 3: Communication Skills, Modes and Knowledge Dissemination, [February 2021]

- Module 4: Instructional Planning and Delivery, [February 2021]

- Module 5: Technology Enabled Learning and Life-Long Self Learning, [February 2022]

- Module 6: Student Assessment and Evaluation, [February 2022]

- Module 7: Creative problem Solving, innovation and Meaningful R & D, [February 2022]

- Module 8: Institutional Management and Administrative Procedures, [February 2022]

Services

Administrative Experience / Responsibilities Shouldered:

- Class Coordinator - BTech(CSE), June 2018 to June 2019 & July 2020 to December 2020

- Class Coordinator - SYBTech(CSE), July 2019 to May 2020
- Lab Incharge-Machine Learning Lab, May 2017 to Jan 2022

Other Activities / Responsibilities:
- Member of DUGC, CSE Dept, SGGSIE&T, Nanded, [Aug 2016 - Jan 2022]
- Coordinator for proposals submission to AICTE, DTE and NIRF [Aug 2016 - Jan 2022]
- Member of departmental purchase committee

Other Responsibilities (GESRHSCOE Nashik-July2012-August2016):
- External senior supervisor for university theory exams at Late G N Sapkal College of Engineering, Nashik (Savitribai Phule Pune University)
- External examiner for practical exams
- Lab in charge for eLearning Lab
- Time Table Coordinator
- Rector of Boys' Hostel

Students

Core areas:
- Cryptography, Security, Image Processing, Computer Vision
- Pattern Recognition, Machine Learning, Deep Learning
- ERP Systems, [Android / PHP / Java / Python / Javascript]

Masters Thesis Guided:
- ADAS : Automated Driver Assistance System | Katik Bagade | 2019
- Face Recognition | Poonam Sable | 2020
- Plant Leaf and Disease Recognition using Deep Learning | Rohan Lone | 2021

MTech Seminars Guided:
- Fingerprint Recognition System Using Bozorth3 Algorithm For The Traffic Police | Vaibhav Supe | 2017
- Intrusion Detection System using Deep Learning | Katik Bagade | 2018
- Intrusion Detection System in Cloud Environment | Akshay Gujar | 2019
- Plant Leaf & Disease Recognition using Deep Learning | Rohan Lone | 2020

BTech Projects Guided :
- Recognizing speed limit on speed limit signs by using convolutional neural networks | Abhinav Shukla & Krishna Bhandari | 2018
- Clinic Management System (web portal) | Ranjit Ubale | 2018
- IB Enterprise Resource Planning | Dnyaneshwar Ghuge | 2018 | (Using Flask)
- Multi purpose web portal | Renuka Pailwan & Vaishali Nirude | 2018 | (Using PHP-Laravel)
- A Neural Representation of Sketch Drawings | Sanskriti Dongare, Dipti Chavare & Ashwini Pawar | 2019
- Fingerprint Recognition and Liveness Detection | Priya Bhusalwad & Supriya Sawant | 2019
- Indoor Scene Understanding by Scene Classification and Object Detection | Kaustubh Joshi, Rohit Katariya & Kalpana Dhonde | 2019
- Document Summarisation | Ankush Azade, Purudewa Pawar & Manaskar Devendra | 2020
- Image Steganography | Pranjali Pethe & Priyanka Suryawanshi | 2021
- Stock Price Prediction System | Sairaj Sontakke | 2021
- OpenCV application for detection of drowsiness | Shivani Awale | 2021

INTERNSHIPS:

- Venue: Testbook | Nikhil Chaudhari | 2019 | Android app developer

- Venue: Trikara Tech Pvt Ltd | Jaideep Kadam | 2020 | Javascript & PHP frameworks

- Venue: Sarvaha Sys Pvt Ltd | Pratik Wakode | 2020 | Javascript & PHP frameworks

- Venue: Flipshope | Bhakti Somani | 2020 | (Full Stack Developer)

- Venue: Paralaxiom Tech Pvt Ltd | Juilee Edlabadkar | 2020 | Deep Learning/Computer Vision

- Venue: Raja Software Labs | Nishant Patil | 2020 | Java/Android

- Venue: LitsBros Pvt Ltd | Abhijeet Dange | 2021

- Venue: GS Lab | Sahil Rajendra Nagrale | 2021

- Venue: LitsBros Pvt Ltd | Gagandeep Kaur Cheema | 2021

Other

SERVICES TO COMMUNITY:

- Worked as Covid Warrior during COVID-19 pandemic [Role: Counsellor, Auditor, Helpline Control Room]