Resume

Name of Teaching Staff	Pankaj A. Sonawane
Designation	Assistant Professor
Department & Institute	Computer Engineering, D. J. Sanghvi College of Engineering, Mumbai-400056
Date of Joining the Institution	06/01/2016



Profile Links	 Web of Science Research ID <u>AAB-7002-2022</u> Scopus Author Profile https://www.scopus.com/authid/detail.uri?authorId=57215082862 Google Scholar Profile https://scholar.google.co.in/citations?user=COgP1UAAAAAJ&hl=e n Research Gate Profile https://www.researchgate.net/profile/Pankaj-Sonawane-2
Patent Publication	Invention titled "Deep learning based Language translator" was published on 05/11/2021 in The Patent Office Journal No. 45/2021.
Copyright Publication	Title of work "Python Based Attendance Management Tool for Online Lectures during Covid19 Pandemic" was registered for copyright.

Qualifications with Class/Grade:

- Master of Engineering (M.E.) in Computer Engineering completed in April 2013, From Mumbai University with Distinction.
 Dissertation Topic: "Human Activity Recognition using Blob Features."
- **Bachelor of Engineering (B.E.)** in Computer Engineering completed in June 2008 from Mumbai University with First Class.

Total Experience in Years (Teaching:12+ Years)

- Currently working as an Assistant Professor in Department of Computer Engineering of D.J. Sanghvi College of Engineering, Vile Parle Mumbai from 06th Jan2016. (TAAC(CT)ICD/ 2016-17/21227).
- Worked as Assistant Professor in Department of Computer Engineering of St.John College of Engineering and Technology, Tal. Palghar, from 12th Jan 2012 to 05th Jan 2016.(Concol No./IS/ECD/2015-16/46259)
- Worked as a lecturer in Computer Department of YTCEM Karjat from July 2010 to Jan 2012.(Concol No.-IS/ECD/2012-13/1548)
- Worked as a lecturer in Computer Department of MGM'S CET, Navi Mumbai from July 2009 to July 2010.
- Worked as a lecturer in Computer Department of SES COE Dhule from Sept 2008 to July 2009.

Courses Taught / Currently Teaching

- Structured Programming Approach (UG)
- Computer Programming (UG)
- Data Structure (UG)
- Analysis of Algorithm (UG)
- OOPM-Java (UG)
- Operating System (UG)
- Digital Signal and Image Processing (UG)
- Computer Vision (UG)
- Parallel and distributed systems (UG)
- Advanced Computer Networks and Designing (PG)
- High Performance Computing (UG & PG)
- Computational Intelligence (PG)

Certification and Courses Completed

(Online)

IBM

Pattern Recognition and Anomaly Detection, IBM Course for Trainer July 2021.

SAS

• *SAS(R) Programming 1: Essentials, July 2021.*

COUSERA

- Assessment in Higher Education: Professional Development for Teachers
- Cyber security Awareness and Innovation
- Learning to Teach Online
- Statistics with SAS
- Neural Style Transfer with Tensor Flow
- Python Data Structures
- Develop a Company Website with Wix
- Create Your First Web App with Python and Flask
- Work Smarter, Not Harder: Time Management for Personal & Professional Productivity
- Positive Psychology
- Image and Video Processing: From Mars to Hollywood with a Stop at the Hospital
- Simple Recurrent Neural Network with Keras
- Getting Started with SAS Visual Analytics
- Introduction to Machine Learning
- Doing More with SAS Programming
- Classical Cryptosystems and Core Concepts
- Computer Vision Image Basics with Open CV and Python

NPTEL Courses:

- Introduction to machine Learning Jan-Apr 2020
- Problem Solving through Programming in C July-Oct 2021

Academic Duties:

- 1. Worked as one of the Coordinator for Organizing AICTE-ISTE Approved One Week STTP on "Smart Computing," Organized during 12th to 16th July 2021 at DJSCE Mumbai.
- 2. Worked as a Coordinator for organizing One Day Faculty development program for SVKM's Institutes on "Applications of Power Automate, Power Virtual Assistant for AI Educational Bot" on 5th June 2020 at DJSCE Mumbai.
- 3. Organized Orientation Program of ASSDF-BE: CE and CSL: IL in Association with University of Mumbai on 12th July 2019.
- 4. Worked as one of the coordinators for organizing a "Expert talk on Natural Language Processing and Sentiment Analysis of Text "on 27th Feb. 2019 for the Third Year Students.
- 5. Worked as one of the Coordinator for Organizing AICTE-ISTE Approved One Week STTP on "Insights of Machine Learning and Deep Learning," Organized during 2nd to 6th July 2018 at DJSCE Mumbai.

Workshop, lecture series & conferences attended:

- 1. Attended one week FDP on during organized by
- 2. Attended one week FDP on Recent Advancement in AI and machine Learning during 25th Oct 2021-30th Oct 2021 organized by The Assam Kaziranga University.
- 3. Attended one week FDP on Role of Teacher in Creating Effective Learning Environment for Students during 25th Oct 2021-30th Oct 2021 organized by North Eastern Regional Institute of Science and Technology(NERIST)
- 4. Attended one-week AICTE Training and Learning (ATAL) Academy Online Elementary FDP on, "Signal Processing and Machine Learning towards Engineering Applications," during 23rd August to 27th August 2021 organized by North Eastern Regional Institute of Science and Technology(NERIST)
- 5. Attended one week FDP on "Post Pandemic Scenario Building using AI, ML and Optimization Techniques during 10th July 2020 to 14th July 2020 organized by KDK College of Engineering, Nagpur
- 6. Attended webinar on "Cybersecurity in the era of Digital Transformation", organized by DJSCE Mumbai on 24th August 2021.
- 7. Attended one day Seminar on "Research Avenues and Challenges in Higher Education" organized by the University of Mumbai at Pherozeshah Mehta Bhavan, Kalina Campus Mumbai.
- 8. Attended two day ISTE workshop on Writing Effective Conference Papers" held at K.J.Somaiya COE Vidyavihar Mumbai.
- 9. Attended "Four Day Workshop on Rational Software Architect", organized by IBM at YTCEM Bhivpuri Tal.Karjat.

10. Attended "Two Weeks ISTE Workshop on Database Management System" organized by IIT Bombay,held at RCPIT Shirpur,Dist. Dhule

Papers presented in International Conferences: 07

- 1. Dev Savla, Kaustubh Kekre, Amogh Parab, Jay Gala, Ramchandra Mangrulkar and Pankaj Sonawane, "Virtual Farmer," presented in 11th International Conference on Computing Communication and Networking Technologies (ICCNT) during 1st July 2020 to 3rd July 2020, organized by IEEE Kharagpur Section, IIT Kharagpur. [doi:10.1109/ICCCNT49239.2020.9225686]
- 2. Devansh Shah, Purav Nisar, Pankaj Sonawane, Chest Pathology Detection Using Medical Imaging presented in 2nd International Conference on Advanced Computing Technologies and Applications 2020(ICACTA) organized by D. J. Sanghvi College of Engineering, Mumbai.
- 3. Shanay Shah, Heeket Mehta, Pankaj Sonawane, "<u>Pneumonia Detection Using Convolutional Neural Networks</u>" presented in 3rd International Conference on Smart Systems and Inventive Technology (ICSSIT) 2020
- 4. Vimal Shah, Pratik Autee, Pankaj Sonawane, <u>Detection of Melanoma from Skin</u>
 <u>Lesion Images using Deep Learning Techniques</u> presented in International Conference on Data Science and Engineering (ICDSE) IEEE Conference
- 5. Pankaj Sonawane, Karan Shah, Parth Patel, Shikhar Shah, Jay Shah, "Speech To Indian Sign Language (ISL) Translation System", presented in International Conference on Computing, Communication, and Intelligent Systems, IEEE conference.
- 6. Presented a paper "Stroke Prediction using machine Learning" in International conference on Advances in Computer Engineering and Communication Technology (ICACET 2021) in Oct 2021.
- 7. Presented a paper "Early Sepsis Detection using Machine Learning and Neural Networks" in 2nd Global Conference for Advancement in Technology (GCAT) Bangalore, India. Oct 1-3, 2021.

Papers presented in International Journals: 04

- 1. Prof. Pankaj Sonawane Jash Sheth, Sohan Shirodkar, Vishesh Vohra, "A Review of Deep Learning based Object Detection Techniques", published in International Journal for Research in Applied Science & Engineering Technology (IJRASET) Volume 7, Issue IX, September 2019.
- 2. Pankaj Sonawane' Rahil Sarvaiya, Chirag Patel, Karthik Shetty, Somil Shah, 'Medical Image Synthesis using Computer Vision Techniques 'published in International Journal of Innovative Technology and Exploring Engineering, g (IJITEE) ISSN: 2278-3075, Volume-9, Issue-3, January 2020.
- Swapnil Kadakia and Pankaj Sonawane Aniruddha Das, Aniket Shahane, Shreya Desai, "Exploratory Analysis and Forecasting of Suicides in India published in International Journal of Advanced Science and Technology, Vol. 29, No. 4, (2020), pp. 10622–10632
- 4. Published a paper on "<u>A Multi-Modular Approach for Gesture Recognition and Text Formulation in American Sign Language</u>" in International Journal of Computer Applications Technology and Research Volume 9–Issue 07, 217-224, 2020, ISSN:-2319–8656

Book Chapter [4]

- 8. The chapter entitled, 'Application of Deep Learning in Counting WBCs, RBCs And Blood Platelets Using Faster Region Convolutional Neural Network,' authored by Nirav Jain, Shail Shah, Ramchandra Mangrulkar, Pankaj Sonawane, has been accepted for publication in CRC Press, Taylor, and Francis Series Book 'Design of Intelligent System using Machine Learning and Deep Learning.' [Design of Intelligent Applications using Machine Learning and Deep Lea (routledge.com)]
- 9. The chapter entitled, 'Comprehensive Study of Failed & Semi-Failed Machine Learning Applications Using a Novel 3C Approach', authored by Neel Patel, Prem Bhajaj, Pratik Panchal, Tanmai Prabhune, Pankaj Sonawane, Ramchandra Mangrulkar has been
 - accepted for publication in CRC Press, Taylor and Francis Series Book 'Design of Intelligent System using Machine Learning and Deep Learning'. [Design of Intelligent Applications using Machine Learning and Deep Lea (routledge.com)]
- 10. The chapter entitled, "The Invisible Eye A Security Mechanism to Protect Motorways: Architecture and Design Principles" authored by Neel Patel (TE) and Dr. Ramchandra
 - S. Mangrulkar has been accepted for publication in Springer book entitled, "Internet of Things, Smart Computing and Technology: A Roadmap Ahead". [https://link.springer.com/chapter/10.1007/978-3-030-39047-1 17]