

EDUCATION

Degree/Certificate	Institute/Board	CGPA/Percentage	Year
MS(Research) - CSE	Indian Institute Of Technology Indore	9.56 CPI	2022-2024
B.Tech - CSE	Department Of Technology, Shivaji University, Kolhapur	8.80 CGPA	2016-2020
HSC	Adarsh Junior College, Akola	77.54%	2016
SSC	Holy Cross Convent High School, Akola	94.00%	2014

EXPERIENCE

- Persistent Systems Limited

Software Engineer/Site Reliability Engineer(DevOps)

November 2020 - July 2022

Github

– Developed some crucial REST API’s using Spring Boot alongwith JUnit test-cases. Automated workflows as and when required, assisted in the development of several microservices, and the deployment and documentation of the project.

– Implementing automated CI/CD deployment pipelines using Kubernetes, Docker, OpenShift for automation, scalability, and reliability. Monitoring application and infrastructure performance and troubleshooting issues as they arise. Using and maintaining infrastructure as code from tools like Ansible and Terraform.

– Undertook feature testing of RedHat Openshift. Experienced hands-on with several Linux distributions.

– Platforms - Eclipse IDE/ IntelliJ IDEA, Spring Boot, Maven, JUnit, Git, Swagger, SonarQube, Postman. Linux (Ubuntu, CentOS), MySQL/PostgreSQL/MongoDB, Docker, Kubernetes, OpenShift,Prometheus, Grafana, EFK stack.
- Bharat Sanchar Nigam Limited (BSNL)

Summer Intern

May 2018 - June 2018

Certificate

– Acquired extensive knowledge in the field of telecommunications, with a focus on Mobile Communication Systems, Cyber Security, and Digital Transmission Systems. Explored Digital Switching Systems, for optimization of efficient switching mechanisms in telecommunications networks, ensuring seamless connectivity.

PROJECTS AND RESEARCH

- MahaEmoSen: Towards Emotion-aware Multimodal Marathi Sentiment Analysis

Published: ACM Transactions on Asian and Low-Resource Language Information Processing

July 2022 - August 2023

Paper link

– Unconventional approach that incorporates emotions from tweets alongside textual and visual data for deep learning based sentiment analysis. First ever attempt to introduce multimodality for sentiment analysis in Marathi Language.

– Novelties: Back-Translation, Data-Augmentation, Word-level Attention techniques and Emotion-tag inclusion.

– Proposed methodology excels in Marathi sentiment analysis, particularly in resource-constrained scenarios.

– Platforms/Libraries - Python3, Jupyter, Tensorflow, RoBERTa, VGG-16, IndicNLP, DataKund Bot-Studio.
- Unified Multimodal Sentiment Analysis and Emotion Recognition

Dr. Nagendra Kumar, Aman Kumar - IIT Indore (Ongoing work)

April 2023 - Present

Github

– Existing research works on videos, study sentiment and emotion separately, missing their complementary knowledge.

– Attempting to develop a unified deep learning architecture for efficient sentiment and emotion prediction from diverse modalities. Pioneered to include some novel techniques, experimented with benchmark datasets to procure excelling results.

– Platforms/Libraries - Python, Jupyter, Tensorflow, Graphsage, Sine-Cosine Algorithm.
- Stance Detection on Twitter for COVID-19 Misinformation

Dr. Nagendra Kumar, Mohit Gwal - IIT Indore (Ongoing work)

April 2023 - Present

– Deep learning approach using pre-trained BERT, data augmentation and attention mechanisms to enhance feature learning.

– Dimensionality reduction used to improve accuracy in identifying misinformation stances on Twitter during the pandemic.

– Platforms/Libraries - Python3, Jupyter, Tensorflow, BERT.
- Deep Learning Based Classification Models for Unbalanced Datasets

Dr. Puneet Gupta - IIT Indore

August 2022 - December 2023

GitHub

– Addressing imbalanced data in classification problems for better performance on minority classes.

– Motivation: Vital for fraud detection and disease diagnosis, especially for ensuring high recall on minority classes.

– Project Focus: Aims improve F1-scores using deep learning for dataset on telecom customer churn prediction.

– Methods: Undersampling, Oversampling, SMOTE, and Ensemble Learning techniques used to address data imbalance.
- Automatic Number Plate Recognition

Dr. Surya Prakash - IIT Indore

August 2022 - December 2023

GitHub

– Worked on edge and arc detection algorithms and using OCR, extracted license plate number from car images.

– Developed an API to send SMS alerts to traffic rules violators by extracting details from their license numbers in our system.
- Real-Time Driver Drowsiness Detection and Alarm System Using OpenCV & Python

Bachelor’s Major Project

December 2019 - April 2020

Github

– Implied CV with CNN’s to create an alternate cheap solution for detecting and alerting a drowsy driver by an alarm.

– Platforms/Libraries - Jupyter, opencv-python, Tensorflow, NumPy, SciPy.

TECHNICAL SKILLS

- **Programming Languages:** C++, Core Java, Python3
- **Core Skills:** Data Structures & Algorithms, OOPs, DBMS, Computer Networks, Operating Systems.
- **Libraries:** Numpy, Pandas, Tensorflow, OpenCV, Scikit-learn, NLTK
- **Tools/Frameworks (Development):** Jupyter, Eclipse IDE/ IntelliJ IDEA, Spring Boot, Maven, Git, Swagger, SonarQube, Postman, database(MySQL/PostgreSQL/MongoDB).
- **Tools/Frameworks (DevOps):** Linux(Ubuntu, CentOS), Docker, Kubernetes, OpenShift, Prometheus, Grafana, EFK stack.

KEY COURSES TAKEN

- **Coursework:** Advanced Algorithms, Machine Learning, Computer Vision.

POSITIONS OF RESPONSIBILITY

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|---|---------------------------------------|
| • Teaching Assistant , Computer Programming, 1 st Year B.Tech | <i>September 2022 - December 2022</i> |
| • Teaching Assistant , Compiler Design, 3 rd Year B.Tech | <i>January 2023 - April 2023</i> |

CERTIFICATIONS AND ACHIEVEMENTS

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| • GATE 2022 , Qualified with rank - 1766 | <i>Scorecard</i> |
| • GATE 2021 , Qualified with rank - 10826 | <i>Scorecard</i> |
| • Deep Learning Specialization , DeepLearning.AI | <i>Link</i> |
| • IBM AI Engineering Specialization , IBM | <i>Link</i> |
| • IBM Data Science Specialization , IBM | <i>Link</i> |
| • Computer Vision Basics , Coursera | <i>Link</i> |
| • Linux BASH Shell Terminal Command Basics , Udemy | <i>Link</i> |
| • ICSI CNSS Certified Network Security Specialist , ICSI(International CyberSecurity Institute), UK | <i>Link</i> |
| • IBM Customer Engagement Specialist Professional Certificate , IBM | <i>Link</i> |

LANGUAGES

- **English:** Professional Working Proficiency.
- **Hindi, Marathi:** Native or Bilingual Proficiency.