Faculty Profile

- **Faculty Name** : Mr. Prathmesh. S. Powar
- **Qualification** : M-Tech
- **Designation** : Assistant Professor
- **Department** : Computer Science & Engineering
- **Responsibility** : PG Coordinator CSE, Associate COE, TCA & Website Coordinator, AICTE Parakh Nodal Officer, Trainer for Skill India Courses.
- **Mobile No. / Extension** : 8551817272
- **Email Id.** : psp@amgoi.edu.in, pgcse@amgoi.edu.in

- **Educational Qualification**

Sl.	Degree	Branch	University	Class
1	B.E.	Computer Engineering	Mumbai University	First
2	M.Tech	Computer Engineering	Dr. BATU	Distinction

- **Professional experience**:-

Total Teaching experience in years:-07

Sl.	Organization	Post	Period
1	Ashokrao Mane Group of Institutions, Vathar	Assistant Professor	14 June 2015 to Till Date
2	Dr. BATU	Teaching Assistant	August 2012 to August 2014

- **Subject Taught**:-

Undergraduate Subjects			
1	Microprocessor	2	Computer Network
3	Network Technologies	4	Operating System -ii
5	OOP	6	Information Security
7	System Programming	8	Computer Programming
9	Programming Lab-ii	10	Web Technology
11	Database Engineering	12	Software Testing & Quality Assurance
13	Distributed System	14	Soft Skills and Personality Development
15	Data Structure	16	Digital Electronics & Microprocessor
17	Advanced Database System	18	Development Engineering
19	Business English	20	Web technologies -ii
Postgraduate Subjects			
1	Advanced Computer Network	2	Software Testing
3	Machine Learning	4	Agile Project Management & DevOps

- **Project Work at U.G.:-**   Remote Desktop Management
- **Project Work at P.G.:-**   Personal Web Search Engine

- **Research Area of Interest:-**   Machine Learning, Artificial Intelligence,Neural Networks. Software Engineering & Testing. Data Science. Cloud Technologies, IO & Industry 4.0 applications

- <u>**Paper Presented in National & International Conference**</u>**:- 12+**
- **No. of Project Guided at U.G. Level:-**   18
- **No. of Project Guided at P.G. Level:-**   15
- **No. of Certified Courses completed:-**   06

Contributions at University Level

1. Senior Supervisor for Shivaji University, Kolhapur
2. CAP In-Charge for Dr. BATU
3. SRPD / QPD Coordinator for Shivaji University and Dr. BATU Examinations
4. Paper Setter for several subjects in Dr. BATU, RIT & DKTE
5. Online Exam Coordinator, Shivaji University, Kolhapur.

Publications / Project/Patents

Book Chapter

- *"EfficientNet B5: A Robust Approach to Detect Morphed Images" in Recent Research Trends in Computer Science (November 2023)*

Conference Papers

- *"EfficientNet B5: A Robust Approach to Detect Morphed Images" at the National Conference on Advances in Computer Science and Informatics (NCACSI-23) (September 2023)*

International Journals

- *"Multi-class weather forecasting: A Review" in International Journal of Scientific Research and Development (November 2023)*
- *"Cloud Data Center's Virtual Machine Optimization Based on User Need" in Journal of Emerging Technologies and Innovative Research (October 2023)*
- *"Content/Subject Base Mail Classification using NLP" in International Journal of Recent and Progress in Research (April 2023)*
- *"Azure DevOps: The Next Era of Application Lifecycle Management" in International Journal of Computer Science and Mobile Computing (December 2023)*
- *"Survey on Different Morphology Detection Techniques" in International Journal of Scientific Research in Science and Technology (October 2023)*
- *"Fingerprint Based Gender Classification by Using Neural Network" in International Journal of Research and Applications in Robotics (October 2023)*
- *"Empowering Critical Business Functions: Azure DevOps for Accelerate Software Development Life Cycle Management" in International Journal of Recent and Progress in Research (April 2023)*
- *"Optimizing Cloud Resource Allocation Using Reduction Round Robin Algorithm" in International Journal of Scientific Research and Development (November 2023)*
- *"Deep Learning Based Weather Classification System" in International Journal of Scientific Research and Development (November 2023)*
- *"Semantic Email Sorting System with Postfix Integration" in International Journal of Recent*

and Progress in Research (April 2023)
- "Reinforcement Learning For Unsupervised Video Summarization: A Deep Summarization Network Approach" In Industrial Engineering Journal Issn 0970-2555 (Oct 2024)
- "IOT Based vehicles pollution analysis and control using machine learning model" in industrial engineering journal ISSN 0970-2555 (Oct 2024)
- "Deep Learning Approaches for Orchard Mapping" Dec-2024

Project

Project Title:
ASCMS: Automation of Stone Crusher Management System :: DIPEX 2025-2160

Theme:
Industrial Automation

Project Category:
Software

Abstract:
ASCMS is a smart software solution aimed at transforming the stone crushing industry by integrating automation, AI, IoT, and cloud technologies. It addresses challenges like theft, manual errors, and inefficiencies by automating key processes such as weighbridge operations, fleet tracking, invoicing, and predictive maintenance. The system uses AI for real-time theft detection, blockchain for secure transactions, and cloud dashboards for monitoring, aiming to create a safer, transparent, and efficient stone crushing environment.

Current Stage:
Testing Phase

Objective:
To automate and optimize stone crusher operations using IoT, AI, and cloud tracking to prevent theft, reduce errors, enhance transparency, enable predictive maintenance, and ensure real-time monitoring.

Problem Statement:

Traditional stone crushing operations suffer from theft, manual record-keeping, equipment failure, and lack of real-time monitoring—causing financial losses and inefficiencies. A smart automated system is needed to ensure theft-proof, data-driven, and efficient operations.

Proposed Solution:

ASCMS is an AI-driven, IoT-integrated system that includes smart weighbridge automation, GPS and RFID-based tracking, AI-powered theft detection, predictive maintenance, blockchain-secured transactions, and cloud-based dashboards for real-time insights and alerts.

Patents
- New Design Application Titled "AI- Powered Orchard Mapping Device" Design Patent is

applied on 01-04-2025 this is in Pipe Line.
- Design Patent for above mentioned Project is also in pipeline

STTP / Refresher Course / FDP/Workshop Attended/Conducted/Coordinated

Coordinated
1. Faculty Capacity and Capability Building at AMGOI (April 2024) 2. FDP on Drone Technology by KITS Tech Learning Centre, Akola (04 July to 09 July 2024 3. FDP on Green Skills & AI by Edunet Foundation Shell India Pvt Ltd.(18-23 Dec 2024)
Conducted
-Several workshops on industrial safety during Industrial Safety Week (4th May to 10th May 2024)
Attended
1. Faculty Development Program, AMGOI, Vathar (January 2016, 5 days) 2. STTP on "Optimization Techniques and Awareness on Research," AMGOI, Vathar (30th Dec 2019 to 03rd Jan 2020) 3. STTP on "Training to Research Scholars to Find Research GAP Identification," AMGOI, Vathar (28-29 Feb 2020) 4. Workshop on "Examination Reforms," Online (29th April – 02nd May 2020) 5. Intelligent technologies for autonomous vehicle system at RIT AICTE Sponsored (14-20 jan 2022) 6. Faculty Capacity and Capability Building at AMGOI (April 2024) 7. FDP on Drone Technology by KITS Tech Learning Center, Akola (04 July to 09 July 2024 8. FDP on Green Skills & AI by Edunet Foundation Shell India Pvt Ltd. (18-24 Dec 2024) 9. ATAL FDP on Urban Development of Smart Cities and Mobility at Ashokrao Mane Group of Institutions Vathar from 30/12/2024 to 04/01/2025. 10. FDP on LaTeX By Spoken Tutorials Project, IIT Bombay from 2025-01-06 to 2025-01-11
Invited Talks/Expert Lectures Delivered
1. One-day workshop on LaTeX at AMGOI, Vathar 2. Two-day workshop on Basics of Computer Network for TE CSE students at AMGOI 3. Guest Lecture on Recent Trends in Computer at AMP, Vathar 4. Webinar on Research Trends in Computer Engineering (July 2020) on Google Meet for UG and PG Students