



Dr. Rutuja Deshmukh



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Associate Professor and Head of Department - Electronics and Telecommunication department having published 8 patents with more than 12+ years of experience of teaching 2+ years of hands-on experience executing data-driven solutions to increase efficiency, accuracy, and utility of internal data processing. Experienced at creating data regression models, using predictive data modeling, and analyzing data mining algorithms to deliver insights and implement action-oriented solutions to complex problems. Looking to use my skills in Statistics to manage statistical machine learning and data-related solutions. Passionate about reinforcement learning, intelligent systems, various configurations of neural Network, mathematical modeling.



Experience

2013 - Present **D. Y. Patil College of Engineering, Pune, Maharashtra**

Head of Department, Associate Professor

2012 - 2013 **Priyadarshini College of Engineering, Nagpur**

Assistant professor

2011 - 2012 **Priyadarshini Institute of Engineering and Technology, Nagpur**

Assistant Professor

Published and recognized Projects: (Published more than 20 research papers) :

- Sentiment analyzing humanoid robot: MANOMITRA
- Industrial Automation Using IOT With Image Processing
- Voyager Smart Wallet with Integrated Antitheft System using Python
- Exploratory Data Analysis and Data Visualization of Lego Database
- Stock- Market sentiment dataset analysis
- Conducted a data regression analysis of the relationship between company stock prices and industry trends, achieving a 15% more accurate prediction of performance than previous years.
- Increased accessibility and usability of customer data by redesigning data visualization techniques to include statistical graphs and information graphics
- Mobile Charging By Using Coin Insertion Module and Renewable Resource.
- Development of an IOT Based Toll Booth for cash free operation.

Patents Published:

- An alteration in Turbo Encoder and its inter leaver for optimal transmission of high dimensional data.
- An Innovation In Inter leaver With High Dimensional Encoding Using Hybrid Group Search Optimizer.
- 16 Bit DLL Multiplier Using Low Power Pulse Generator.
- 10t SRAM Design Using Stack Transistor Technique.
- Milk Pasteurization To Substantially Reduce The Levels Of Spoilage Organisms.
- An Alteration in Automation of Sewage Treatment Plant Using PLC & SCADA.



Education

- **Ph.D.** in Electronics Engineering, 2021
- **M.Tech** in VLSI, Year 2011
- **Bachelor of Engineering**, Year 2009



Skills

- Proficient in **C++**, and **Python**
- Experienced at managing relational and non-relational database software such as MySQL, SQLite3.



Tools and Technology

- Python
- MATLAB
- C++, C



Certification

- Python Programming
- Machine learning, Data Science and Deep Learning using Python



Cognitive Learning

- Python, Advance Python
- Machine Learning
- Data Science
- Deep Learning
- Artificial Intelligence
- Tableau



Other Technical Skills

- HTML, CSS, Java Script
- Shell Scripting Basics



Interest and Hobbies

- Swimming
- Listening Music
- Reading Literature

Papers Published in SCOPUS:

- Content Based Image Retrieval in PEER to PEER Network.
- Uncertainty Based Sampling Approach for Relevance Feedback.
- Industrial Automation Using IoT with Image Processing.
- Mobile Charging by Using Coin Insertion Module and Renewable Resources.
- Centrally Controlled On-Chip Criminal Face Recognition Embedded in Traffic Cameras.
- Automatic Pantry Ordered System using ZIGBEE Module.
- Design of Interleaver with High Dimensional Encoding Principle using Hybrid Group Search Optimization.

Positions of Trust:

Reviewer to IEEE Systems Journal.

Reviewed Paper IDs:

1. Manuscript ID ISJ-SH-19-07549 entitled "Femtolet based Low Power HetNet using Soft Fractional Frequency Reuse"
2. Manuscript ID ISJ-RE-19-07678.R1 entitled "Simultaneous benefit maximization of conflicting opinions: Modeling and analysis"

Reviewer to IEEE Second International Conference on Technology, Engineering, Management for Societal impact using Marketing, Entrepreneurship and Talent