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Faculty: Science and Technology

Department: Mechanical Engineering

Name of the Faculty: Prof. (Dr.) Siddharth Jabade
Department: Mechanical Engineering
LinkedIn: https://www.linkedin.com/in/siddharth-jabade-a7a31b212/
Research Gate: https://www.researchgate.net/profile/Siddharth-Jabade

Research Summary:

Prof. Siddharth Jabade has received his Ph.D. in Mechanical Engineering from Indian Institute of Technology Bombay (IITB). He has multi-faceted experience in education, research, innovation, intellectual property rights (IPR) and technology commercialization to enable ideation to impact the value chain of innovation. He was Director of Innovation and IPR at the Asian Institute of Technology in Thailand. He has served as an International Consultant for the Asian Development Bank, UNESCO and as a resource person to the World Intellectual Property Organization. He has authored a book titled Nanotechnology Intellectual Property Rights: Research, Design and Commercialization published by CRC press. He is currently the lead author of a book titled Foundations of 21st Century Curriculum: Emerging Technologies, Humanities and the Augmented Age, to be submitted for publication later this year.

Most recently he was the co-inventor of affordable housing technology for SMART GRAM—an initiative sponsored by the President of India‘s office. The Ministry of Housing & Urban Affairs‘ Affordable Sustainable Housing Accelerators (ASHA) Award was given to this innovative housing technology on January 1, 2021 by Prime Minister Narendra Modi.

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Name of the Faculty: Prof. (Dr.) Kedar Sant
Department: Mechanical Engineering
LinkedIn: https://www.linkedin.com/in/kedarsant/
Research Area Keywords: Refrigeration systems, Cryogenic systems, Non-conventional Energy Sources, Thermal systems, Heat transfer equipment

Research Summary:

The educational qualifications being B.E. (Mech), M.E. (Mech – Heat Power) and Ph. D. (Mech from IIT Bombay) and experience of almost two and a half decades. The specialization being in Thermal and Fluids branch of Mechanical Engineering, broader areas of interest for research are Refrigeration, Cryogenics, Non-conventional Energy Sources, Thermal systems and Heat Transfer Equipment. The specific research areas are as follows:-

1. Refrigeration systems – analysis for performance enhancement, development of non-conventional systems,
2. Cryogenic systems – Stirling cryocoolers, Materials to be used at cryogenic temperatures
3. Non-conventional Energy Sources – Performance enhancement of Solar Thermal systems for different applications, Development of Solar Thermal systems for new applications
4. Thermal systems – Analysis and development of energy efficient thermal systems, Waste heat recovery in thermal systems, Efficient refrigeration compressor system
5. Heat transfer equipment – Analysis and development of Heat pipes and Loop heat pipes for various applications

Guided M. Tech and B. Tech student projects in above mentioned areas. Completed and ongoing different research projects funded by SPPU, ISRO etc. About 10 research papers published in last 3 years.

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Name of the Faculty: Prof. (Dr.) Nitin Vijay Satpute
Department: Mechanical Engineering
LinkedIn: www.linkedin.com/in/nitinsatpute123

Google Scholar: https://scholar.google.com/citations?authuser=1&user=nEgkxUkAAAAJ

Research Summary: Implementing novel and efficient solutions for low frequency vibration energy harvesting. Although vibration energy harvesting has been implemented mainly to ensure battery/cable free operation for small sensors, there is wider scope for improving weight to power ratio and broadband energy recovery of these systems. Innovative features in the published research includes detailed mathematical modeling, better fail-safe characteristics and improved efficiency for the given vibration spectrum.

Computer simulations and experimental investigation to implement non-linear damping systems in order to overcome the limitation of passive vibration isolators to have very low natural frequency in comparison to the operating frequency.

Numerical simulation supported with experimentation on reduced scale prototypes to evaluate the performance. Different sensors like LVDT, accelerometer, rotary encoder and load cells have been used to measure the system parameters. I have found computer-based time and frequency-based data acquisition and analysis to be extremely supportive in design and analysis of the energy harvesters.

Externally sponsored research projects include application of nanoparticles and

phase change material, Semi-active torsional based on MR fluid and development of adsorption-based oxygen generator for health care use.

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Department: Computer Engineering

Name of the Faculty: Prof. (Dr.) Kailas Patil
Department: Computer Engineering
LinkedIn: https://www.linkedin.com/in/kailaspatil/
Google Scholar: https://scholar.google.co.in/citations?user=PVxc2VcAAAAJ&hl=en

Research Summary:

Prof. Kailas has built niche expertise for over 18 years with 90+ Publications to his name.

He is listed as India's top 15 Cyber Security Researcher, National Critical Information Infrastructure Protection Center (NCIIP) for 2 consecutive years (2021 & 2020).

Furthermore, he was also listed as India's top 15 Cyber Security Researcher, National Critical Information Infrastructure Protection Center (NCIIP) for 2 consecutive years (2021 & 2020)

His three research domains

1. **Internet of Things (IoT)**

The Internet of things (IoT) is the network of physical devices, home appliances, and other items embedded with electronics, sensors, actuators, and network connectivity which enable these objects to connect and exchange data. The applications for internet connected devices are extensive. The research projects in this domain will focus on innovating farming methods. Farming challenges caused by population growth and climate change have made it one of the first industries to utilize the IoT. Also, IoT research projects to enable remote health monitoring and emergency notification systems. In addition, research projects to assist in the integration of communications, control, and information processing across various navigation and transportation systems.

2. **Renewable Energy: (Green Energy)**

Energy is often crucial in human development. The research projects in this domain will focus on renewable technologies and green power that are suited for rural and remote areas. Green power is electricity generated from renewable energy sources.

3. **Security:**

The research projects in this domain will focus on cloud security issues and challenges, auditing systems, network security, mobile security and web security.

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Name of the Faculty: Dr. Sanjesh Sadanand Pawale
Department: Computer Engineering
LinkedIn: https://www.linkedin.com/in/sanjesh-pawale-032a20184/

Research Summary:

1. Computer Network: Main research focus will be on congestion in the network, where the network may be wired and wireless or hybrid type. In wireless network the key issue is to identify the random loss and congestion loss. There is a lot of scope to design various novel methodologies to detect congestion in the network and provide the solution to minimize it with improvement of various networking parameters such as throughput and bandwidth of the network. We can improve the packet delivery ratio as well as the congestion window size also the increase the performance of the overall network.
2. Computer Graphics: This is the second research area where the research work is going on in the field of Computer graphics and image processing. Medical field is one of the domain for applications of image processing algorithms. In computer networking domain also computer graphics and image processing is applied to compress the image or video before sending on network.

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Name of the Supervisor:	**Dr. Reshma Pise**
Designation:	Assistant Professor and Head of Computer Engineering Department
Department:	Computer Engineering
Faculty:	Science and Technology
Research Area Keywords:	Machine Learning, Natural Language Processing, Image Processing , Data Science
LinkedIn (URL):	https://www.linkedin.com/in/reshma-pise-b74745108/
Google Scholar (URL):	https://scholar.google.com/citations?hl=en&authuser=1&user=uowbr5QAAAAJ
Research Summary:	Area of research interest include Deep Learning, Natural Language Processing (NLP), and Image Processing. Her research contributions significantly impact applications of artificial intelligence (AI) in healthcare, social media analysis, **education, and industry.** Dr. Reshma Pise holds a granted patent and has published over 15 research papers in national and international journals indexed in Scopus and Web of Science (WoS). Authored book chapters in reputed publishers like Taylor & Francis, CRC Press, IGI Global and IET.

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Name of the Faculty: Dr. Bharati Ainapure
Department: Computer Engineering
LinkedIn: https://www.linkedin.com/in/dr-bharati-ainapure-9b967362/
Google Scholar: https://scholar.google.co.in/citations?user=QESJWnAAAAAJ&hl=en

Research Summary: Dr. Bharati Ainapure has completed B.E. in Computer Science and Engineering from Karnataka University and M. Tech in Computer Science and Engineering from Vishweshryaya Technological Univeristy, Kanataka, in 2008. She did her Ph.D from JNTU, Anatapur, India. Currently, she is working as Associate Professor in Computer Engineering Department, Vishwakarma University, Pune, India. She has more than 20 years of experience in teaching and industry and has published more than 30 research papers in renowned international journals and conferences. She has got an Australian patent grant in 2020. Her research interests include Cloud Computing, Machine Learning, Parallel Computing and high performance computing.

Funded Research Projects: Received the amount of Rs. 1,80000/- from BCUD, Pune university for the project title –Elastic Resource Scaling & Load Balancer for Online Shopping using Cloud Computing‖ during 2013-15 and Received NVDIA Kits from NVDIA worth Rs. 1,29,666/-

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Name of the Faculty: Dr. Sandip S. Thite

Designation: Assistant Professor

Department: Computer Engineering

Research Area Keywords: Computer Network, Cyber Security, Internet of Things

LinkedIn: https://www.linkedin.com/in/dr-sandip-thite-97828435

Google Scholar: https://scholar.google.com/citations?hl=en&user=6-EoQg0AAAAJ

Research Summary: Dr. Sandip Thite has 14 years of teaching experience. He published 14 research papers in the domain of Computer networks, Wireless network, Cyber security, Cyber Physical system and Internet of Things. Some of the research papers are published in various Scopus indexed international journals while others are in UGC care journals and presented in national and international conference. He published patent with the title Secure Cyber Physical Systems for Smart Home Applications which is currently under examination. He has three copyrights related to his research work. He received Ph. D. research incentive grant of 2,50,000/- Rs. from Ministry of Electronics and Information Technology, Government of India, on successful completion of the Ph.D. under Visvesvaraya PhD Scheme for Electronics & IT. He has passed the World Intellectual Property Organization (WIPO) certificate examination for Intellectual Property (DL101E). He has detailed knowledge about Intellectual Property Rights. His major research domains include Computer Network, Cyber Security, Internet of Things, Operating System.

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Name of the Supervisor:	Dr. Kavita Suresh Kumavat
Designation:	Assistant Professor
Department:	Computer Engineering
Faculty:	Science and Technology
Research Area Keywords:	Security, DDoS, WSNs, IoT, Network Simulations, Attacks
LinkedIn:	linkedin.com/in/kavita-kumavat-3633077a
Google Scholar (URL):	https://scholar.google.com/citations?user=Er1DVxwAAAAJ&hl=en

Research Summary:

My research focuses on various aspects of security and networking, including intrusion detection systems, cryptographic protocols, secure software development, security against DoS and DDoS attacks, networking using NS2, and the security of IoT. I have published extensively in top-tier journals and conferences, contributing valuable insights and solutions to the field.

As a guide, I believe in a hands-on approach to learning, encouraging students to explore practical aspects of security through experimentation and real-world projects. I emphasize the importance of collaboration and interdisciplinary research, believing that the best solutions to security challenges often come from combining multiple methods like ML, AI, Deep learning, Cryptographic methods, decision tree-based algorithms, etc.

Overall, I am committed to advancing knowledge in security and networking and guiding students to become skilled researchers who can make a meaningful contribution to the field. My goal is to inspire and mentor the next generation of security experts who will help make the digital world safer and more secure for all.

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Name of the Faculty: Dr. Pratibha Mahajan
Designation: Assistant Professor
Department: Computer Engineering
Research Area Recommender Systems, Information Systems,
Keywords: IoT, Edge Computing, Knowledge graphs

LinkedIn: https://www.linkedin.com/in/pratibha-mahajan-9906b8228/
Google Scholar: https://scholar.google.com/citations?user=U0qFZnMAAAAJ&hl=en

Research Summary:

Salient features of Ph.D. research work "A Context-Aware Recommender System Architecture for Smart Social Networks"

It proposes a Context-Aware Recommender System Architecture for Smart Social Networks specifically for Event Based Social Networks (EBSNs) and Smart object Based Social Networks (SBSNs). Context modeling and integration have been identified as a major challenge in context-aware recommender systems. To overcome this challenge in EBSNs, Three-Tier IoT-Edge-Cloud (3T-IEC) architecture has been proposed that utilizes edge computing layer to preprocess and filter IoT data for deriving contextual attributes in event generation process. Furthermore, a novel Smart Object Recommendation architecture (SORec) for SBSN has been proposed to suggest appropriate smart objects to users. In order to meet the requirements of these dynamic and everchanging smart social networks, the proposed 3T-IEC architecture has been extended to 3T-IEC* that provides more accurate and personalized recommendations for inductive applications. The proposed architectures lay out a solid foundation for the future development of recommendation applications by researchers and developers.

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Name of the Supervisor:	**Dr. Pavitha Nooji**
Designation:	Assistant Professor
Department:	Computer Engineering
Faculty:	Science & Technology
Research Area Keywords:	Machine Learning, Deep Learning, Natural Language Processing, Explainable Artificial Intelligence
LinkedIn (URL):	www.linkedin.com/in/dr-pavitha-nooji-147506200
Google Scholar (URL):	https://scholar.google.com/citations?user=SVoSzSAAAAAJ&hl=en

Research Summary:

The research centers on developing and applying advanced techniques in machine learning and explainable artificial intelligence (XAI) to solve real-world problems across multiple domains. Emphasis is placed on designing interpretable models that promote trust and transparency in AI-driven systems, especially in scenarios involving critical decision-making. By prioritizing explainability, the work ensures that AI solutions are both reliable and actionable in high-stakes applications.

A significant portion of the research also delves into advancements in natural language processing (NLP). This includes tackling tasks such as sentiment analysis, part-of-speech tagging, and text summarization, with the goal of deriving meaningful insights from unstructured textual data. These methodologies have been applied to practical use cases, such as analyzing customer sentiment and facilitating automated language translation, thereby enhancing the usability of AI in linguistics-based applications.

With over 40 peer-reviewed publications in journals and conferences, the research contributes both theoretical advancements and practical insights to the fields of machine learning and artificial intelligence. This body of work addresses critical challenges in areas like model interpretability, risk assessment, and data analytics.

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Name of the Supervisor:	**Dr. Kalyani Dhananjay Kadam**
Designation:	Assistant Professor
Department:	Computer Engineering
Faculty:	Science and Technology
Research Area Keywords:	Computer Vision, Deep Learning, Machine Learning, Explainable AI
LinkedIn (URL):	https://www.linkedin.com/in/dr-kalyani-dhananjay-kadam-410b5934b/
Google Scholar (URL):	https://scholar.google.com/citations?user=oCdQ3b0AAAAJ&hl=en

Research Summary:

The research work focused on fake image detection and its interpretability using various XAL techniques. With the increasing use of AI-generated images, detecting fake visuals has become a critical challenge. Explainable AI (XAI) offers a promising approach to enhance the transparency and reliability of fake image detection by providing insights into how AI models distinguish real from fake images. My research work explored the application of XAI techniques in detecting fake images, focusing on methods like LIME (Local Interpretable Model-agnostic Explanations, Grad-CAM, GradCAM++, Eigen CAM. These techniques help to visualize the decision-making process of deep learning models by highlighting key features that contribute to classification. By analyzing patterns such as pixel inconsistencies, unnatural textures, and anomalies in lighting and shadows, XAI improves trust in AI-driven detection systems. The study evaluated the performance of explainable models on datasets like COVERAGE, MISD, COUMBIA GRAY, CASIA 1.0 and 2.0, Wild Web. Experimental results demonstrated that incorporating XAI enhances model interpretability without significantly compromising detection accuracy. Furthermore, it aids human experts in validating AI decisions, Integrating XAI into fake image detection not only improves model transparency but also builds user trust in automated systems.

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Department: Computer Science

Name of the Supervisor:	Dr. Rajkumar Jagdale
Designation:	Assistant Professor and Head
Department:	Computer Science
Faculty:	Science and Technology
Research Area Keywords:	Sentiment Analysis, Opinion Mining, Text Mining, NLP, Machine Learning, Big Data Analytics
LinkedIn:	https://www.linkedin.com/in/rajkumarjagdale/
Google Scholar (URL):	https://scholar.google.com/citations?user=mT88ELYAAAAJ&hl=en

Research Summary:

Dr. Rajkumar Jagdale specializes in Sentiment Analysis and Opinion Mining, Text Mining, Machine Learning, Big Data Analytics, and Robotic Process Automation. His doctoral research focused on "Analyzing the Popularity of Online Products Using Aspect-Level Sentiment Analysis," examining Twitter and Amazon product review datasets. His work introduces novel concepts such as "Boredom" emotion and associated lexicon expansions, alongside refining sentiment analysis methodologies through algorithmic adjustments and parameter considerations. He emphasizes the importance of achieving decision-making accuracy by enhancing sentiment/opinion scores and exploring diverse emotional nuances. Dr. Jagdale has contributed 13 research articles to prestigious international journals and conferences. He has been recognized with the JASSO Scholarship from the Japan Student Services Organization for attending the "Smart Material and AI" Spring School at Tokushima University in 2019. He also received the DST INSPIRE Fellowship from Department of Science and Technology, Government of India. Additionally, he earned distinction as a Gold Medallist in the M.Sc Computer Science Program and is an active member of CSI, IAENG, and ISCA.

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Name of the Faculty:	Dr. Pooja A. Kulkarni
Designation:	Assistant Professor
Department:	Computer Science
LinkedIn:	https://www.linkedin.com/in/pooja-kulkarni-42645965
Google Scholar:	https://scholar.google.com/citations?user=lOn_Jy0AAAAJ&hl=en
Research Summary:	As a computer science faculty my primary research focus remained to utilize IT technology for effective management and improved consumer experience. I have written research papers and done my Ph.D research with an objective of benefiting to the society, companies and government. One of my research paper is on understanding challenges in implanting smart city project in Pune. Wherein we found major challenges is not having clarity about smart city project to both implements and citizens. Another research work was on adoption of electronic payment system by senior citizens. Wherein I tried to identify what problems are faced by senior citizens while adopting electronic payment system. I found that they are willing to use the electronic payment system however; the complexity is major obstacle for them. I also studied security related issues in mobile application from user perspective in another research paper. I have written papers on BI and cloud computing. I studied mobile financial transactions consumer behavior in rural and urban users. My PhD topic was _An Analysis of Electronic Payment and Security in Online Financial Applications with Respect to User Behavior in the Selected Region of Maharashtra State‘. My research was based on TAM model (Technology Acceptance Model) proposed by Davis in 1969. I studied security issues in financial transaction through cell phone. I also proposed preventive mechanism to take care of security issues.

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Name of the Faculty: Dr. Madhuri Pant
Designation: Assistant Professor
Department: Computer Science
Research Area ICT in Education, Software Engineering, System
Keywords: Analysis, Big Data, Hadoop, Artificial Intelligence, Digital Image Processing

LinkedIn: https://www.linkedin.com/in/dr-mrs-madhuri-prashant-pant-10904464/
Google Scholar: https://scholar.google.co.in/citations?view_op=list_works&hl=en&hl=en&user=KINTI_cAAAAJ

Research Summary:

Myself Dr. Mrs. Madhuri Pant having Research Interest in area like ICT in Education, Software Engineering, System Analysis, Big Data, Hadoop, Open source web Technologies Artificial Intelligence, Digital Image Processin.g My Phd. Title was “Evaluation of Online Admission Systems and Design of Optimized Framework with reference to Professional Programmes”. Research approach wass hybrid research includes Survey and Design and Creation. Researcher has concentrated on Evaluation Standardization and Optimization throughout the research work. • The contribution and outcomes of research includes Structured documentation of all process diagrams for Online Admissions will help all stakeholders to understand the admission process easily • Identified evaluation steps will guide in evaluation of any online admission system. • Suggested Process Optimization will definitely be helpful in achieving cost, time and memory saving of a software system. Design of Optimized framework for Online Admission Systems using UML will be beneficial in requirements modeling, design and development of online admission system. • Design patterns for Online Admission System provides a general solution which can be applied according to specific requirements of customer and gives shared vocabulary with other developers. This will help in building easily understandable, maintainable and extensible system for stakeholders. • The system analysis part is the most important part for collecting requirements of the system, Expert System designed for online admission system will help system designer to collect requirements from organization which wants to develop online admission system and suggest the system according to their needs with cost estimation. • Prepared a detail checklist for collecting requirements for online admission system. • Scientific approach used to evaluate online admission systems and to design an optimized framework can be applied to any other system where ICT is used.

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Name of the Faculty: Dr. Sonali Powar
Designation: Assistant Professor
Department: Computer Science
Research Area Keywords: Image Processing, Machine learning, Artificial Intelligence

LinkedIn: https://www.linkedin.com/in/dr-sonali-powar-net-qualified-com-sci-ph-d-23697226
Google Scholar: https://scholar.google.com/citations?user=emF3h3MAAAAJ

Research Summary:

The research topic for Ph.D. was “Design And Implementation Of Image Steganography Algorithm With Reference To Region Of Interest”. The purpose is to develop a new image steganography algorithm that will find the Region of interest (ROI) from the image, increasing embedding efficiency and decreasing embedding distortion. Embedding efficiency can be increased by increasing the pixels in the ROI space to embed data. In the proposed method skin tone area is used as an ROI. The embedding capacity of ROI is increased by increasing the number of bits per pixel in the hiding process and also by using a 7-bit representation of secret data. Distortion can be decreased by embedding data in the color plane of the image which contributes less to the region of interest in the image. The 2k correction is also used to reduce distortion.

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Name of the Supervisor:	Dr. Anupriya Kamble
Designation:	Assistant Professor
Department:	Computer Science
Faculty:	Science and Technology
Research Area Keywords:	Pattern Recognition, Expert Systems, Machine Learning, Digital Image Processing

LinkedIn:	www.linkedin.com/in/anupriya-kamble-b374bb209
Google Scholar (URL):	Anupriya Kamble - Google Scholar : https://scholar.google.com.my/citations?user=tRw3VM0AAAAJ&hl=en

Research Summary:

Has completed Ph. D. in Computer Science and Information Technology (2021), M.Phil in Computer Science (2017) and M.Sc. in Information Technology (2015). She is presently working as an Assistant Professor, Vishwakarma University, Pune. Worked as a Senior Faculty IT at iNurture Edu. Sol. Pvt. Ltd. ADYPU. Worked as an Assistant Professor, School of Computer and Systems Sciences, Jaipur National University, Jaipur, She has worked as an Assistant Professor (CHB) in Department of Digital and Cyber Forensic, Government Institute of Forensic Science, Aurangabad (MS) India and as an IT Assistant to the Hon'ble Vice-Chancellor Prof. (Dr.) K. V. S. Sarma, Maharashtra National Law University, Aurangabad (MS) India. She has worked as a Research Scholar under the guidance of Prof. (Dr.) Ramesh R. Manza, Bio-Medical Image Processing Laboratory, Department of Computer Science and Information Technology, Dr. Babasaheb Ambedkar Marathwada University, Aurangabad (MS) India. Her area of specialization includes Pattern Recognition, Expert Systems, Machine Learning and Digital Image Processing. She is an awardee of Rajiv Gandhi National Fellowship. She has attended a summer school 2019 held at International Level at Tokushima University, Tokushima, Japan. She has worked as an additional reviewer in Recent Trends in Image Processing and Pattern Recognition, Second International Conference, RTIP2R 2018 Solapur, India, December 21-22, 2018; as a subreveiwer for ICECCME 2021. She has been recognized for her contribution in Data Collection, Data Feeding and Data Compilation process during NAAC Assessment & Accreditation Process in 2019 of Dr. Babasaheb Ambedkar Marathwada University, Aurangabad (M.S.), India. She is a Life Member of ISCA and IAENG. Annual Member of AACST. She has published around Thirteen papers in International Publications. She has published Six books at National Level.

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Name of the Supervisor:	Dr. Mayur P. Deshmukh
Designation:	Assistant Professor
Department:	Computer Science
Faculty:	Science & Technology
Research Area Keywords:	Image processing, Biometric, Signal Processing, Geo-spatial Remote sensing, Natural Language Processing, HCI,Internet of Things (IoT) , Agriculture Challenges, Security(Cloud Computing)

LinkedIn:	https://www.linkedin.com/in/dr-mayur-deshmukh-35ba4161/
Google Scholar (URL):	https://scholar.google.com/citations?user=mT88ELYAAAAJ&hl=enAAJ&hl=en
Research Gate:	https://www.researchgate.net/profile/Mayur-Deshmukh
ORCID ID:	0009-0007-5017-8471

Research Summary:

Dr. Mayur Deshmukh is a Assistant Professor at the Department of Computer Science, Faculty of Science & Technology,, Vishwakarma University, Pune. He possesses Bachelor's Degree in Science and Post-Graduate in Computer Science from Dr. Babsaheb Ambedkar Marathwada, University of Chatrapati SambhajiNagar (MS) India. He holds a Doctorate (PhD.) in Computer Science and IT from Dr. Babsaheb Ambedkar Marathwada, University, Chatrapati SambhajiNagar (MS) India. He has more than 21 Years of experience of Teaching Science, Management Graduate and Postgraduate students, teachers and corporate professionals and Administrative Experience. He have more than 17 Research Papers in Scopus indexed, UGC Care Listed and Peer reviewed Journals at National and International Seminars, Conferences, Journals on BIG Data and Medical Imaging, Bio metrics, GIS, Higher Education with ICT tools and Improvements in Teaching Learning Processes.

His Research interest focuses on Image Processing, Biometric, Signal Processing, GIS, Natural Language Processing, HCI, Internet of Things (IoT), Agriculture Challenges, Cyber security.

He was an Advisory Board Member of Community College, Scheme approved by UGC Courses designed and Conducted in college for students (2018- 2020). BOS Member – BOS Member Of Computer Maintenance 2007 to 2009 of Dr. Babasaheb Ambedkar Marathwada University, Chatrpati Sambhaji Nagar (MS) India. 2017.

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Department: Statistics

Name of the Faculty: Dr. Nazia Wahid
Designation: Assistant Professor
Department: Mathematics & Statistics
Research Area Keywords: Ordered random variables, Generalized Order Statistics, Data Analytics, Sampling, Biostatistics

LinkedIn: https://www.linkedin.com/in/nazia-wahid
Google Scholar: https://scholar.google.co.in/citations?user=Zur9G8IAAAAJ&hl=en

Research Summary: Dr. Nazia Wahid is from core Statistics background and her primary research focus on ordered random variables generalized order statistics, records etc. and her doctorate topic is "Characterizations of probability distribution and its moments through ordered random variables. She has worked on moments of different lifetime distributions like Lindley, Weibull, Topp-Leone etc. She has presented and published 15+ National &International Research Papers in reputed journals. She has worked in collaboration with foreign universities on biostatistics related projects and published research papers based on mitral stenosis: A severe heart disease. She has a keen interest in Data analytics field and contributed as well. She also has published 2+ patent 'An IOT and Machine Learning-Based Methodology Spectrum Sensing of Cognitive Radio Systems Using Cluster-Based Procedure' and 'An automated implantable cardiac monitoring device for detecting arrhythmia'.
Her vision of making a difference in society using statistics, data analytics to integrate welfare & quality research across.

Name of the Faculty: Dr. Mahfooz Alam
Designation: Assistant Professor
Department: Statistics
Research Area Keywords: Statistical Inference, Generalized Order Statistics, Dual Generalized Order Statistics

LinkedIn: https://www.linkedin.com/in/mahfooz-alam-282692a2/
Google Scholar: https://scholar.google.com/citations?hl=en&user=7W-qh68AAAAJ&view_op=list_works&gmla=AJsN-F7q0VlQnkE

Research Summary: Dr. Mahfooz Alam is an assistant professor at Vishwakarma University in Pune, India, in the department of mathematics and statistics. His current work is concerned with investigating moment properties in ordered random variates; this includes dual generalized order statistics, generalized order statistics, and the characterizations of continuous probability distributions. Dr. Alam makes a substantial contribution to the development of statistical theory and its practical applications by his tireless attempts to uncover the complexities present in these statistical events. The fact that he has published multiple research papers in prestigious national and international publications attests to his scholarly achievements and demonstrates his depth of knowledge and dedication to the field's advancement. Dr. Alam aims to guide and encourage future statisticians and mathematicians by his twin roles as an educator and researcher, therefore encouraging creativity.

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Department: Mathematics

Name of the Supervisor:	Dr. Jagadish Tawade
Designation:	Associate Professor
Department:	Mathematics and Statistics
Faculty:	Science and Technology
Research Area Keywords:	Computational Fluid Dynamics (CFD) and Numerical Methods, Solving Boundary layer flow, Data Science and Machine Learning
LinkedIn:	https://www.researchgate.net/profile/Jagadish-Tawade
Google Scholar (URL):	https://scholar.google.com/citations?user=Z600OfoAAAAJ

Research Summary:

"Computational fluid dynamics and numerical methods play a crucial role in the analysis and prediction of boundary layer flow behavior. Recent advancements have significantly enhanced the capabilities of CFD simulations, leading to broader applications in engineering and scientific research. Boundary layer flow analysis is particularly important for understanding the behavior of fluid near solid surfaces, influencing drag, heat transfer, and other critical factors in various industrial processes and equipment. Continued research efforts are focused on overcoming remaining challenges and further advancing the field. CFD is extensively used in the aerospace industry. It helps in studying heat transfer mechanisms, analyzing airflow around vehicles, designing efficient cooling systems for engines, and analyzing coolant flow and heat transfer within nuclear reactors, ensuring safe and efficient operation."

"Data science and machine learning involve the extraction of insights and knowledge from large datasets using various techniques, algorithms, and statistical methods. Data science and machine learning are vast and diverse, spanning industries such as healthcare, finance, marketing, e-commerce, telecommunications, and more. Researchers in this field continuously develop and refine techniques and algorithms to extract meaningful insights from data. The future of data science and machine learning is promising, with ongoing research focusing on areas such as explainable AI, federated learning, automated machine learning (AutoML), quantum machine learning, and AI ethics and fairness. Interdisciplinary approaches that integrate insights from computer science, statistics, mathematics, and domain-specific knowledge will be crucial for advancing the field and addressing emerging challenges."

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Name of the Supervisor:	**Dr. Sandhya Tapadia**
Designation:	Assistant Professor
Department:	Mathematics
Faculty:	Science and Technology
Research Area	Graph Theory, Ordered Structures, Discrete
Keywords:	Mathematics, Algebra
LinkedIn:	https://www.linkedin.com/in/sandhya-tapadia-2a84697b/
Google Scholar:	https://scholar.google.com/citations?user=ollgD68AAAAJ&hl=en

Research Summary:

Dr. Sandhya Tapadia, an Assistant Professor in the Department of Mathematics at the Faculty of Science and Technology, specializes in Cycle Decomposition of Hypercubes and Related Aspects, as evidenced by her completed Ph.D. My research is majorly in the area of decomposition of hypercubes. I also work on ordered structures involving algebraic and graph theoretic aspects. Another branch of research, in which I am interested is line graphs and its generalizations. On broader note, my research areas include hyoercubes, line graphs, graph decomposition and algebraic properties of graphs.