Special Issue Proposal

Special issue title (*limit: 100 characters incl. spaces*)	Exploring the Progress of Image Processing through Machine Learning; Current Trends, Obstacles and Prospects, for the Future.
Guest Editor(s) *incl. academic title(s)*. Surname(s) in **BOLD** and CAPITAL letters	Vivekanandan G Assistant Professor, Department of CSE Sri Sairam Institute of Technology Chennai, India vivekanandan.cse@sairamit.edu.in
Possible contributors	Contributors from SRM GROUP OF UNIVERSITY , SAIRAM GROUP and Engineering colleges from other institutes
Aim and Scope	The shift, towards an age, streamlined networks and cutting edge intellige (AI) technologies have deeply intertwined image processing with mach learning (ML) in our everyday lives and future industries. Image proces technology is currently at its peak. As per a study over 80% of businesses projected to incorporate image processing techniques into their operations the year 2023. According to Statist the global revenue from technolog image processing exceeded $50 billion in 2018. Is anticipated to soar to $ billion by 2025. The use of image processing applications has become cru for the functioning of our lives and businesses although there remain hurdle surmount. With the generation of volumes of visual data, on a daily basis their interplay, accuracy and efficiency stand out as significant concerns to The most important factors in establishing trust in image processing syst are concerns about data accuracy and privacy. As a result, it is expected that image processing industry will prioritize accuracy and efficiency to address challenging issues in the forthcoming days. In the future, the indu anticipates an increase in smart devices focused on real-time image anal and the ability to automatically process and interpret visual data. Witho doubt, the integration of AI, ML, and the expanded role of data (big d analytics will eventually result in fantastic and more significant soluti Because of image processing breakthroughs, we are seeing advancement fields such as healthcare, automotive, security, and more. It's crucial to invest more in utilizing technologies, like this one. We need notch image processing frameworks, machine learning algorithms and models to enhance business operations and networks in todays data world. tapping into this tech we can enjoy improved visual data interpretation, effic

	operations, features and increased productivity. Undoubtedly AI and in processing technologies have become parts of our lives enriching experiences. This highlights the importance of introducing an edition to inf researchers, educators and industry professionals about the models algorithms, for achieving successful and optimized image processing syste
Keywords	• Security and surveillance: Advanced image recognition and threat detection • Integration of Computer Vision with IoT • Medical image segmentation and annotation • Applications in Security and Surveillance • Automotive vision systems: Enhancing vehicle safety and automation • Healthcare imaging: AI-driven diagnostics and treatment planning
Conclusion	In summary the combination of machine learning (ML) and artificial intelligence (AI), in image processing is transforming industries, unlocking possibilities in real time applications, healthcare, automotive systems and security. This collaborative progress is driving improvements in precision, productivity and scalability despite facing obstacles like data accuracy, privacy concerns and computational constraints. Upcoming technologies such as quantum computing and 5G offer avenues, for advancement. Upholding standards and ensuring AI usage remain crucial. By tackling these obstacles and dedicating resources to research efforts we can fully leverage the capabilities of ML and AI in image processing to shape an efficient and technologically advanced future.
Estimated number of submissions	100 Articles
Estimated number of publications	40 Articles
Does the special issue focus on any of the Sustainable Development Goals (SDG's)? If yes, which?	 SDG Number 9

Final decisions on manuscripts	Based on the feedback from peer reviewers the corresponding primary guest editor will submit a recommendation on all manuscripts to the editor in chief, who will make the final decisions.