

## IEEE Xplore® Digital Library Continues to be Your Career Partner

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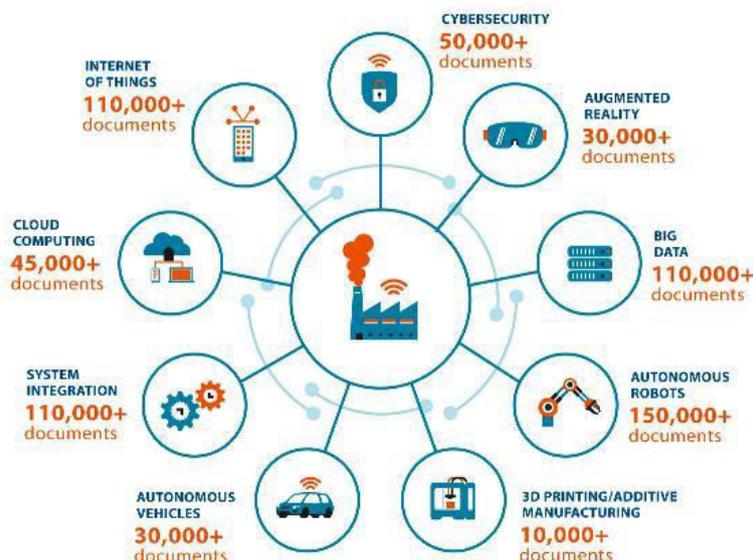
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The world is now undergoing a digital transformation where the use of technology in every field is gaining momentum. The technologies itself are evolving for solving many of today's complex problems. In the era of emerging technologies, the need for highly curated scientific literature and information on patent disclosures are a necessity to address today's challenges and to stay relevant.

IEEE's core purpose is to foster technological innovation and excellence for the benefit of humanity. The Fourth Industrial Revolution (4IR) is coming, and IEEE is at the heart of all of these. Described as a range of new technologies that are fusing the physical, digital, and biological worlds, this revolution is certain to alter the way the human race lives, works, and relates to one another. A number of technological fields will see major advances over the next few years that will affect all disciplines, economies, and industries. These fields include robotics, artificial intelligence, nanotechnology, quantum computing, biotechnology, the Internet of Things, 3D printing, autonomous vehicles, 5G, and more. The World Economic Forum states that due to the Fourth Industrial Revolution, 65% of children starting primary school will eventually work in jobs that do not exist. The 4IR is upon us, and IEEE is leading the way.

Education is key for adapting to the changes 4IR technologies will bring. The employment landscape will undergo a massive shift, making advanced skills increasingly important. IEEE is helping to educate future leaders on their role in fostering innovation and shaping technological breakthroughs.

### Technologies Fueling 4IR in IEEE Xplore



Technical information for education, research or otherwise is available easily at our fingertips on demand. But the problem is the information is enormous, and one may ponder if the available information is reliable or not. So there is a big question mark on the credibility of the available information. This is where the IEEE Xplore® Digital Library plays an important role.

IEEE Xplore® Digital Library is a powerful repository of authoritative content for discovery and access to scientific and technical content published by the IEEE and its publishing partners. In terms of credibility, IEEE peer-reviewed content continues to be the most cited publisher in US and European new technology patents. The authors publish with IEEE because the journals are highly valued in the chosen disciplines, for the heightened visibility, research activity, and industry credibility. Also, the authors find that publishing with IEEE enhances professional development and provides a scholarly platform to showcase their work.

As technologies are evolving, IEEE is continuing to add many new journals and also initiate conferences in new technological areas. Around 20,000 new documents are added to IEEE Xplore® each month. IEEE Xplore® continues to add new publications and published content from its publishing partners. It provides web access to close to five-million full-text documents from some of the world's most highly-cited publications in electrical engineering, computer science,

electronics, and allied fields. The sheer size of the resources makes it even more challenging to provide the user with a way to conveniently access the resources. Hence, the platform plays a crucial role in delivering the content.

IEEE Xplore® has evolved over a period of time. The articles used to be delivered to the institutions, readers in print format. In 2005, IEEE launched IEEE Xplore® and started moving all documents to pdf format. With the advent of technology, HTML articles were introduced. Designed for quick navigation and discovery, the new features in the IEEE Xplore® help users find the content they need. Easier-to-use discovery and search tools, remote access functionality, and other valuable features have been incorporated into this powerful interface.

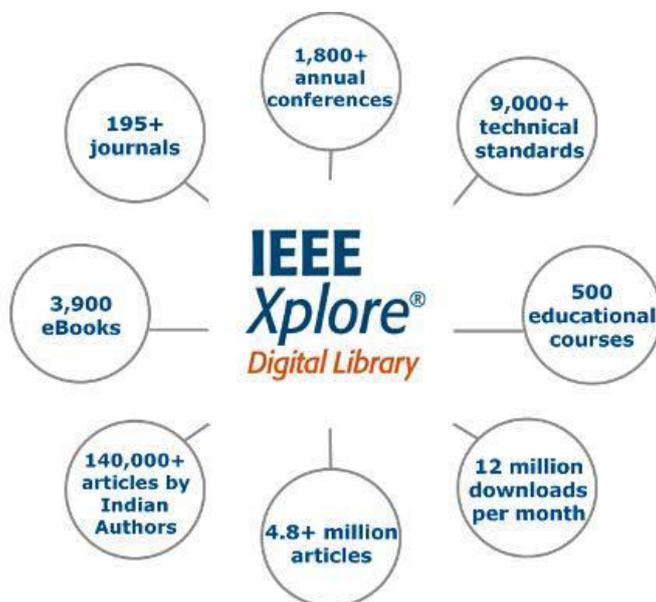


Many options such as multiple pdf downloads, saving a search query, setting an alert in an area of interest, setting alerts to receive new journal issue notifications, an enhanced experience with advanced and command search were also introduced. Interestingly, the users can now download the algorithms associated with an article, with the help of Code Ocean. IEEE and Code Ocean have partnered to enable IEEE authors to upload, share, and run their code on the Code Ocean platform, accessible through IEEE Xplore® to provide a seamless experience.

Another important milestone was the launch of a mobile application for the IEEE Xplore® and stepping into API space. This enables the users to access the content on the move. One can also get notified on the latest research topics in their fields of interest with the help of MyXplore app. Recent enhancements to the mobile app include more search filter options and the ability to perform a custom search, and also view results before saving searches or setting notifications. IEEE Xplore® API provides access to metadata for over 4 million documents from IEEE journals, conference proceedings, and technical standards. One can register for access to the new IEEE Xplore® Metadata API on the new IEEE Xplore® API Portal.

The search engine forms the backbone of the digital library by assisting the user in fetching the data that is needed. The latest IEEE Xplore® search engine upgrade offers users a more integrated search experience. It comes with the ability to include wildcards with phrased searches and search operators via the basic search, optimized search functionality for a variety of file types, and an improved process for saved searches. IEEE Xplore digital library now has enhanced security measures being implemented along with the transition to HTTPS.

IEEE recognizes that the authors are an integral part of the journals and hence it provides users access to more information about the authors in IEEE Xplore® and easily navigates to other documents they have published in the library. Authors can also submit pictures, details of their biography, the number of articles they have published, and more. IEEE Xplore® in a snapshot:



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Dhanukumar Pattanashetti – South and West India – [d.pattanashetti@ieee.org](mailto:d.pattanashetti@ieee.org)  
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#### About the author



Dhanukumar Pattanashetti is the Client Services Manager at IEEE and works at the IEEE India Operations Center in Bangalore. Dhanu works with IEEE Xplore Digital Library subscribing institutions in Sri Lanka, South and Western regions in India. He handles IEEE Xplore learning sessions (both onsite and via webinar) on how IEEE Xplore can benefit the technical community. He works with students/faculty/researchers in academic, government and corporate sectors and advises effective data use for their endeavors. He closely works with libraries in the institutions for internal IEEE promotions to include IEEE content within library web pages, intranets and other work-flow applications. He has published two papers in journals and presented a paper at an international conference in Indonesia. He has a PhD in Library and Information Science from University of Mysore; Master's degree in Library and Information Science and a Bachelor's degree in Engineering.

#### How to Effectively Discover and Use IEEE Information to Further Your Research

In this instructional video, Professor Gaurav Sharma guides an engineering student in India through the research process using the IEEE Xplore Digital Library. Professor Sharma provides essential tips to help users quickly find the relevant information they need, how to evaluate the source and quality of the information they find and save valuable time in the research process. <https://www.youtube.com/watch?v=UQoOtBXsppk>