

Emerging technologies: An online reading list from the IET Library

These ebooks and ejournals, available via the <u>IET Virtual Library</u>, focus on the topic of emerging technologies covering artificial intelligence, blockchain and smart technology.

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Ebooks (provided by EBSCO)

Artificial Intelligence and Machine Learning Applications in Civil, Mechanical, and Industrial Engineering, Bekdas, Nigdeli and Yücel. (2019). A collection of innovative research on the methods and implementation of machine learning and AI in multiple facets of engineering, highlighting topics including control devices, geotechnology, and artificial neural networks.

<u>AI for Cars, Josep Aulinas and Hanky Sjafrie. (2022).</u> This book provides a brief guided tour through many different AI landscapes including robotics, image and speech processing, recommender systems and onto deep learning, all within the automobile world.

<u>Practical Java Programming for IoT, AI, and Blockchain, Xiao.</u> (2019). This book looks at using Java in the contexts of IoT, AI, Cybersecurity, Blockchain, as well as how Java can be used for connected home devices, healthcare, the cloud, and other applications.

<u>Artificial Intelligence in IoT, Al-Turjman. (2019).</u> This book provides an insight into IoT intelligence in terms of applications and algorithmic challenges and addresses the major challenges in realizing the artificial intelligence in IoT-based applications.

The Future of Work: Robots, AI, and Automation, West. (2018). This book looks at artificial intelligence, automation and innovative technologies will transform the world of work, presenting a number of proposals to help people deal with the transition from an industrial to a digital economy.

Al in Healthcare: How Artificial Intelligence Is Changing IT

Operations and Infrastructure Services, Robert Shimonski. (2021). Written by a leading technology executive specializing in health care IT, this book provides concrete examples and practical advice on how to deploy artificial intelligence solutions in your health care environment.

<u>Green and Smart Technologies for Smart Cities, Pradeep Tomar</u> <u>and Gurjit Kaur. (2020).</u> The book starts with an overview of the role of cities in climate change and environmental pollution worldwide, followed by the concept description of smart cities and their expected features, focusing on green technology innovation.

Biometric Data in Smart Cities: Methods and Models of Collective Behavior, Bilan et al. (2021). This book is intended for undergraduate, graduate students and specialists working and conducting research in the field of biometric information processing, as well as in the development and construction of distributed intelligent systems.

Handbook of Research on Developing Smart Cities Based on Digital Twins, Matteo Del Giudice and Anna Osello. (2021). The book presents a valid medium for disseminating innovative data management methods related to smart city topics, highlighting topics such as data visualization, a web-based ICT platform, and datasharing methods.

Machine Learning and AI for Healthcare: Big Data for Improved Health Outcomes, Arjun Panesar. (2021). This book is for health care professionals interested in how machine learning can be used to develop health intelligence, with the aim of improving patient health, population health and facilitating significant care-payer cost savings.

Ejournals (provided by EBSCO)

Advanced Robotics. Interdisciplinary journal which integrates publication of all aspects of research on robotics science and engineering.

<u>Artificial Intelligence Review.</u> Includes research reports and critical evaluations of applications, techniques and algorithms in artificial intelligence, cognitive science and related disciplines.

Applied Artificial Intelligence. Addresses concerns in applied research and applications of artificial intelligence.

<u>Computational Intelligence.</u> Covers research in the field of artificial intelligence. Publication of both experimental and theoretical research, as well as surveys and impact studies.

<u>Future Studies Research Journal: Trends and Strategy.</u> Features theoretical and empirical articles in the future studies and strategy fields. <u>Transactions on Emerging Telecommunications Technologies.</u> Covers development and innovation in telecommunications.

Journal of Experimental & Theoretical Artificial Intelligence. Aims to advance scientific research in artificial intelligence.

Al Communications: The European Journal on Artificial Intelligence. Aims to enhance contacts and information exchange between Al researchers and developers.

Journal of Ambient Intelligence and Smart Environments. This journal covers enabling technologies such as multi-modal sensing and vision processing, as well as contributions from the fields of robotics, networking, HCI, mobile, collaborative and pervasive computing.

<u>Expert Systems.</u> Aimed at engineers, artificial intelligence researchers, project managers, computer scientists and managers. Devoted to all aspects of artificial intelligence and advanced computing.

Further resources from the IET

- Communities and Networks
- Factfiles
- IET Digital Library
- Technical Webinars

Help and contacts

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IET members can access the Virtual Library via the single signon (SSO) service. If you are experiencing difficulties logging in via the SSO please contact the membership services team at membership@theiet.org.

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