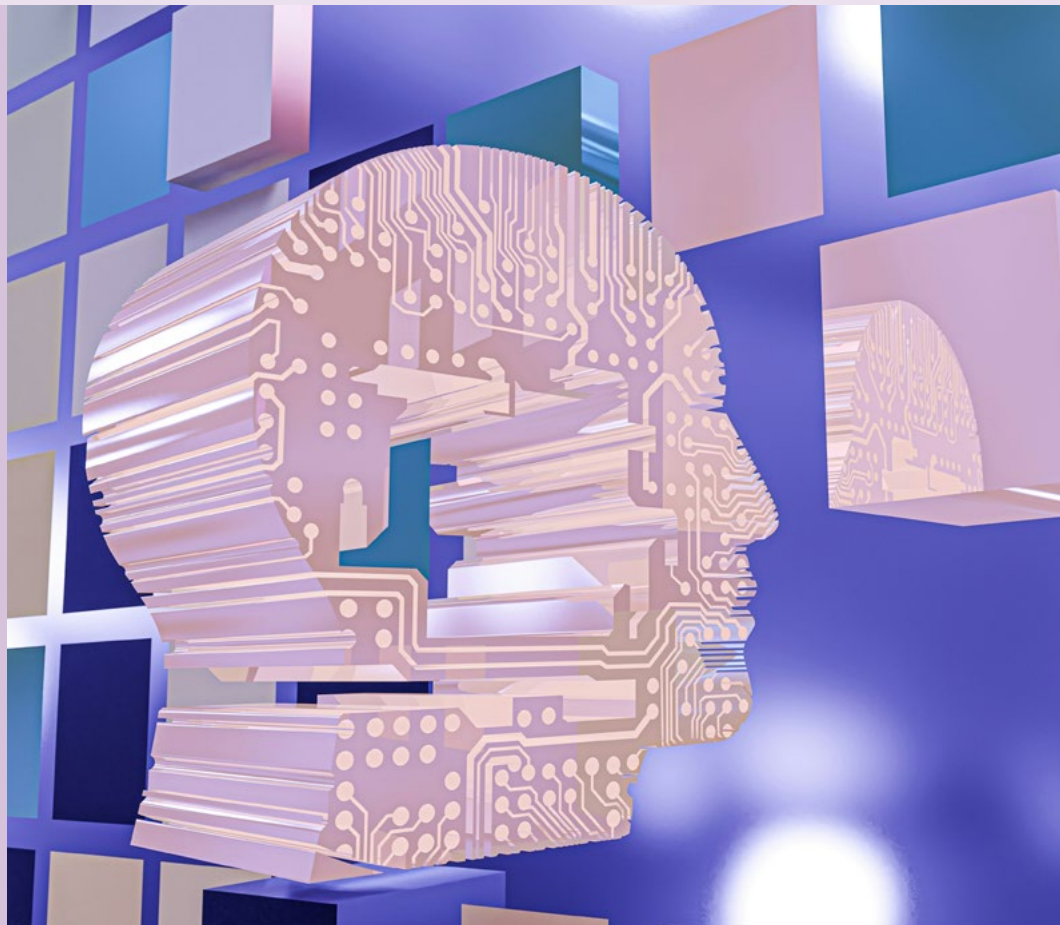


Artificial Intelligence: An online reading list from the IET Library



These eBooks and ejournals, available to IET members via the [Virtual Library](#), have been selected on the topic of artificial intelligence (AI). They cover topics such as digital twins, robotics, and smart cities.



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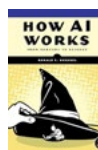
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Ebooks

Understanding AI



[How AI Works : From Sorcery to Science, Ronald T. Kneusel. \(2024\).](#) This book explains the relationship between artificial intelligence, machine learning and deep learning, and why the artificial intelligence revolution is happening now.



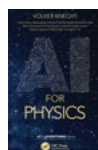
[Generative AI Tools for Developers: A Practical Guide, Timi Omoiyeni. \(2023\).](#) This book explores some practical examples of how we can integrate AI into our day-to-day workflow and how to use AI tools professionally.



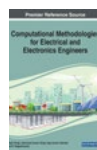
[AI Assurance : Towards Trustworthy, Explainable, Safe, and Ethical AI, Feras A. Batarseh and Laura Freeman. \(2023\).](#) Presents techniques for efficient and secure development of intelligent systems in a variety of contexts.



[The Hitchhiker's Guide to AI : A Handbook for All, Arthur Goldstuck. \(2023\).](#) As generative AI becomes a household phrase this guide offers an invaluable overview of the past, present and future of AI.



[AI for Physics, Volker Knecht. \(2023\).](#) The book covers such applications as the search for new particles and the detection of gravitational waves from the merging of black holes and concludes by discussing what the future may hold.



[Computational Methodologies for Electrical and Electronics Engineers, Rajiv Singh et al. \(2021\).](#) This book is a collection of innovative research that provides a complete insight and overview of the application of intelligent computational techniques.



[AI Techniques for Renewable Source Integration and Battery Charging Methods in Electric Vehicle Applications, S. Angalaeswari et al. \(2023\).](#) Covering key topics such as deep learning, artificial intelligence, and smart solar energy, this reference source is ideal for engineers.



[Learn Robotics Programming : Build and Control AI-enabled Autonomous Robots Using the Raspberry Pi and Python, Danny Staple. \(2021\).](#) This book is for programmers and developers who want to develop a robot using AI.

Digital Twins

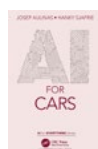


[Digital Twin Technologies in Transportation Infrastructure Management, Wenjuan Wang et al. \(2023\).](#) This book reveals the power of digital twin technologies in terms of optimizing the performance and maintenance of infrastructure assets.



[Digital Twins : Internet of Things, Machine Learning, and Smart Manufacturing, Yogini Borole et al. \(2023\).](#) This book explores the significance, challenges and benefits of digital twin technologies.

Transport



[AI for Cars, Josep Aulinas and Hanky Sjafrie. \(2022\).](#) From pedestrian detection to driver monitoring to recommendation engines, the book discusses the background, research, and progress of AI in a transport context.

Healthcare



AI for Healthcare Robotics, Eduard Fosch-Villaronga and Hadassah Drukarch. (2022). This book explains what healthcare robots are and how AI empowers them in achieving the goals of contemporary medicine.



Machine Learning and AI for Healthcare : Big Data for Improved Health Outcomes, Arjun Panesar. (2021). This book is for professionals interested in how machine learning can be used to develop health intelligence.

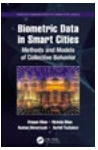


AI in Healthcare : How Artificial Intelligence Is Changing IT Operations and Infrastructure Services, Robert Shimonski. (2021). This book provides in-depth coverage of all the most important and central topics in the healthcare applications of artificial intelligence.



Robotic Technologies in Biomedical and Healthcare Engineering, Deepak Gupta et al. (2021). This book lays a good foundation for the core concepts and principles of robotics in biomedical and healthcare engineering.

Smart Cities



Biometric Data in Smart Cities : Methods and Models of Collective Behavior, Stepan Bilan et al. (2022). This book is for anyone working and conducting research in the field of biometric information processing, as well as in distributed intelligent systems.



The Rise of Autonomous Smart Cities : Technology, Economic Performance and Climate Resilience, Zaheer Allam. (2021). The book discusses the automation of select urban dimensions for increased efficiency and performance.



Handbook of Research on Developing Smart Cities Based on Digital Twins, Matteo Del Giudice and Anna Osello. (2021). This book contains in-depth research focused on the description of methods and tools that can be adopted to achieve smart city goals.

Ejournals

Artificial Intelligence Review. (Includes research reports and critical evaluations of applications, techniques, and algorithms in artificial intelligence.)

Applied Artificial Intelligence. (Addresses concerns in applications of artificial intelligence.)

Computational Intelligence. (Covers research in the field of artificial intelligence.)

AI Communications. (A forum for information exchange between AI researchers and developers.)

IET Smart Cities. (Publishes original multi-disciplinary research on the latest advances in Smart Cities.)

IET Blockchain. (Publishing research papers focusing on the latest advances in blockchain.)

IET Intelligent Transport Systems. (A journal devoted to research into the practical applications of intelligent transport systems and infrastructures.)