

March 2025



Artificial Intelligence:



An online reading list from the IET Library



These eBooks and ejournals, available to IET members via the IET Library, have been selected on the topic of artificial intelligence (AI). They cover topics such as ethics, generative AI and AI in health care.



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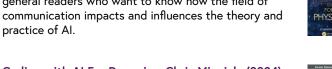
- Transport

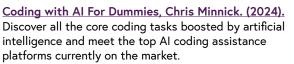
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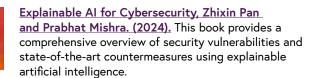
Understanding Al

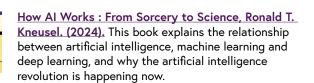


Al for Communication, David J. Gunkel. (2025). The book is designed for students, teachers, and general readers who want to know how the field of











Al 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.



Al 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.



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 Al.

Digital Twins



<u>Digital Twins: Internet of Things, Machine Learning,</u> and Smart Manufacturing, Yogini Borole et al. (2023). This book explores the significance, challenges, and benefits of digital twin technologies.



<u>Digital Twin Technologies in Transportation</u> 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.

Ethics



<u>Artificial Intelligence and Ethics : A Field Guide for</u> Stakeholders, Tarnveer Singh. (2025). The book will be of particular interest to business stakeholders, including executives, scientists, ethicists, and policymakers, considering the complexities of AI and how to navigate these.





Al 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.



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Generative Al



Generative AI: Navigating the Course to the Artificial General Intelligence Future, Martin Musiol. (2024). Explores the short but eventful history of generative artificial intelligence, what it has achieved so far, and how it's likely to evolve in the future.



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



Generative Artificial Intelligence: What Everyone Needs to Know®, Jerry Kaplan. (2024). Equips readers with the knowledge to answer pressing questions around generative AI including topics such as ethics, effects on industries and professions, and potential dangers.

Transport



Al 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 Al in a transport context.

Healthcare



Advances in Computational Intelligence for the Healthcare Industry 4.0, Imdad Ali Shah and Quratulain Sial. (2024). This book offers a holistic perspective, shaping the future of healthcare through the lens of computational intelligence.



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

eJournals

<u>Journal of Experimental & Theoretical Artificial Intelligence.</u>
(Aims to advance scientific research in artificial intelligence.)

<u>Journal of Intelligent Information Systems.</u> (Focuses on the creation of intelligent information systems and their application in database management processes.)

<u>Computational Intelligence in Electrical Engineering.</u> (Covers advances and research in computational intelligence in an engineering context.)

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

<u>Applied Artificial Intelligence.</u> (Addresses concerns in applications of artificial intelligence.)

<u>Computational Intelligence.</u> (Covers research in the field of artificial intelligence.)

<u>Al Communications.</u> (A forum for information exchange between Al researchers and developers.)