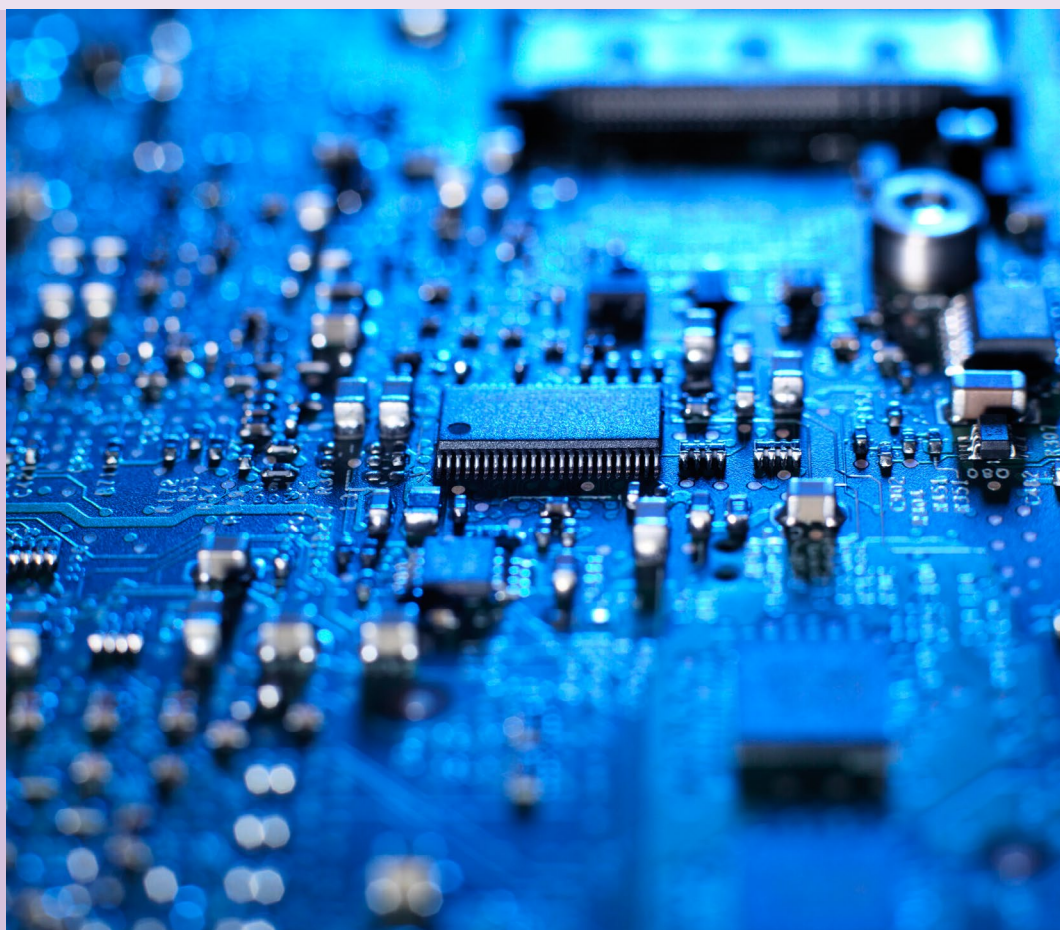# IET The Institution of Engineering and Technology

Computing:

An online reading list from the IET Library

These eBooks and ejournals, available via the **IET Library**, have been selected on the subject of computing. They cover topics such as coding, networks and quantum computing.

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IET resources

– **Communities and Networks**
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– **Technical Webinars**

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Contents

eBooks

Coding and programming

GitHub Actions Cookbook : A Practical Guide to Automating Repetitive Tasks and Streamlining Your Development Process, Michael Kaufmann. (2024). This book shows you how to leverage the power of the community-driven GitHub Actions workflow platform to automate repetitive engineering tasks.

Build Your Own Programming Language : A Programmer's Guide to Designing Compilers, Interpreters, and DSLs for Modern Computing Problems, Clinton L. Jeffery. (2024). Learn to design your own programming language in a hands-on way.

ChatGPT and the Future of AI : The Deep Language Revolution, Terrence J. Sejnowski. (2024). An insightful exploration of Chat GPT and other advanced AI systems— how we got here, where we're headed, and what it means for how we interact with the world.

General computing

Computer Organization, Design, and Architecture, Sajjan G. Shiva. (2025). This unique and classroom-proven text provides a hands-on introduction to the design of computer systems.

Semantic Intelligent Computing and Applications, Mangesh M. Ghonge et al. (2024). This book integrates AI, machine learning, and natural language processing with semantic web technologies.

Interfaceless : Conscious Design for Spatial Computing with Generative AI, Diana Olynick. (2024). Explore the possibilities spatial computing and its integration with AI can provide beyond the confines of a traditional user interface.

Networks
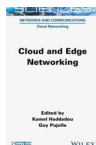
Cloud and Edge Networking, Kamel Haddadou and Guy Pujolle. (2024). In this book, the authors present a new generation of networks that are based in the Cloud.

Securing the AWS Cloud : A Guide for Learning to Secure AWS Infrastructure, Brandon Carroll. (2025). A comprehensive guide crafted for those eager to fortify their Amazon Web Services (AWS) deployments.

Secure Continuous Delivery on Google Cloud : Implement an Automated and Secure Software Delivery Pipeline on Google Cloud Using Native Services, Galloro et al. (2024). By the end of this book, you'll be able to build a secure software delivery pipeline from development to production.

Metaverse Communication and Computing Networks : Applications, Technologies, and Approaches, Dinh Thai Hoang et al. (2024). Provides a comprehensive treatment of Metaverse theory and the relevant technologies.

Cloud Security : Concepts, Applications and Practices, Jamuna S. Murthy et al. (2024). This comprehensive work surveys the challenges, best practices in the industry, and the latest developments and technologies in cloud security.
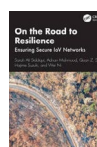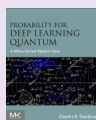
On the Road to Resilience : Ensuring Secure IoV Networks, Sarah Ali Siddiqui et al. (2024). This book delves into the critical realm of trust management within IoV networks.

Quantum computing

Quantum Process Algebra, Yong Wang. (2025). Introduces readers to the algebraic properties and laws for quantum computing.

Quantum Machine Learning : Thinking and Exploration in Neural Network Models for Quantum Science and Quantum Computing, Claudio Conti. (2024). This book presents a new way of thinking about quantum mechanics and machine learning by merging the two.
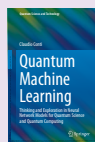
Probability for Deep Learning Quantum : A Many-Sorted Algebra View, Charles R. Giardina. (2025). Addresses probabilistic methods in the deep learning environment and the quantum technological area simultaneously.

Quantum Networks : Introduction and Applications, Ming-Xing Luo. (2024). This book provides a comprehensive overview of the rapidly advancing research in quantum networks, both in theory and application.

Quantum Communication and Quantum Internet Applications, Daniel Minoli and Benedict Occhiogrosso. (2025). A basic introduction to quantum computing that presents the emerging foundations of quantum communications and applications.

Introduction to Quantum Algorithms, Johannes A. Buchmann. (2024). Offers a mathematically precise exploration of quantum concepts.

Quantum Software : Aspects of Theory and System Design, Iaakov Exman et al. (2024). This book explains the state of the art in quantum software engineering and design.
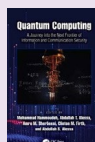
Quantum Computing : A Journey into the Next Frontier of Information and Communication Security, Mohammad Hammoudeh et al. (2025). This book explores the exciting world of quantum computing, from its theoretical foundations to its practical applications.

Software engineering
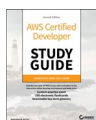
AWS Certified Developer Study Guide : Associate (DVA-C02) Exam, Brandon Rich. (2025). Covering the exam objectives, this invaluable resource provides expert guidance, clear explanations, and the wisdom of experience with AWS best practices.

Analysis and Design of Next-Generation Software Architectures, Arthur M. Langer. (2025). Provides a comprehensive background in generative models and the impact on software design.

A Concise Introduction to Software Engineering, Pankaj Jalote. (2025). This book introduces a carefully curated set of concepts and practices essential for key tasks in software projects.

Ethical and Legal Aspects of Computing : A Professional Perspective from Software Engineering, Gerard O'Regan. (2024). This textbook presents an overview of the critically important ethical and legal issues that arise in the computing field.

eJournals

Computing. (Presents the latest research results from computer science and numerical computation.)

Information & Security. (Covers scientific, technological, organizational, and policy issues related to national, international, and societal security in the Information age.)

International Journal of Information Security. (Provides technical work in information security, whether theoretical, applicable, or related to implementation.)

Computer Animation & Virtual Worlds. (Includes topics that range from scenario making to postproduction for those who apply animation techniques to science and art.)