

Artificial Intelligence for Academic Libraries, Clifford B. Anderson and Douglas H. Fisher, Routledge, 2025. 236 pp. Softcover, \$51.99. 9781032680354.



Artificial Intelligence for Academic Libraries is an insightful examination of the literature on artificial intelligence (AI) in academic libraries and as applied to information science. Instead of presenting AI as merely a technical development, the authors place it within the broader intellectual, ethical, and professional landscape of academic librarianship. The perspective presented in this book distinguishes it from many publications on AI, which mostly treat it as a technological breakthrough.

Anderson and Fisher provide an in-depth, comprehensive review of AI within library services, scientific communication, and information literacy. The book introduces deliberative AI as a historically dominant paradigm relevant to future AI development, expanding a discourse often limited to large language models and generative models. It also examines the relationship between AI and academic scientific practices, particularly regarding issues of citation, intellectual honesty, and academic norms; it also highlights the limitations of AI systems in recognizing intellectual influence. Additionally, the authors address the broader social implications of AI, including responsible practices, environmental dimensions, and libraries' roles in its responsible use.

The authors balance their arguments between academic authority and accessibility, making it suitable for a wide audience without requiring specialized expertise in artificial intelligence. To support readers, the authors deliberately present the material in depth while avoiding excessive technicality. The authors also provide clear explanations of concepts—such as machine learning, neural networks, and various paradigms—supported by references to prior and recent research. Their interdisciplinary expertise bridges library science and computer science, enabling explanations of technical issues and addressing professional concerns in academic libraries.

Anderson and Fisher situate AI within a broader academic framework and present different views on AI's development and impact. The authors track AI's historical evolution, showing how deliberative and connectionist paradigms emerged, competed, and changed over time. This historical perspective helps readers see AI's development as a long intellectual journey rather than a sudden leap. The book addresses philosophical debates about artificial intelligence, covering questions of machine intelligence, cognition, and the limits of computational reasoning. Including these perspectives encourages readers to assess AI claims critically. The book also covers contemporary controversies, including algorithmic bias, misinformation, copyright concerns, and environmental impacts. Through these examinations, the authors present both the opportunities and risks of AI, framing it as a powerful innovation that needs careful consideration.

This book is structured in a systematic progression that guides readers from basic theory to more advanced applications and future perspectives of artificial intelligence in academic libraries. This book is divided into 10 chapters that collectively provide a thorough understanding of artificial intelligence and machine learning within academic librarianship. The structure of this book emphasizes not only the technological aspects of AI but also the philosophical, ethical, and professional implications for library and information science practitioners.

Additionally, each chapter concludes with a section titled “Points for Reflection and Discussion,” designed to stimulate critical engagement and further exploration of the issues.

The first three chapters of the book discuss the foundational aspects of AI and introduce the historical, theoretical, and conceptual basics. Chapter 1 provides an overview of artificial intelligence, tracing its evolution and distinguishing major AI paradigms. It explains categories such as narrow, general, and mid-level AI, as well as operational approaches like deliberative, reflexive, and hybrid systems. Chapter 2 focuses on deliberative AI, emphasizing symbolic systems, expert systems, general reasoning, and the rise of machine learning. Chapter 3 shifts to connectionist approaches, highlighting neural networks, deep learning, and the evolution of language models, including Word2Vec, word embeddings, and large language models.

The middle chapters outline the ethical and social considerations of AI. Chapter 4 introduces major philosophical debates, including the Turing Test and the Chinese Room argument, to encourage critical assessment of machine intelligence and clarify common misconceptions. Building on this, Chapter 5 addresses the conscientious applications and social implications of AI—such as security, algorithmic bias, misinformation, disinformation, and the environmental impact of large-scale computing—as well as librarians’ responsibilities when interacting with AI. Chapter 6 explores intellectual property issues, including copyright, plagiarism, academic standards, and collaboration between humans and AI in the production of academic knowledge.

The final section shifts to advanced developments and AI’s future in academic libraries. Chapter 7 introduces the concept of hybrid AI systems combining reflective and deliberative capabilities, suggesting these may shape future AI. It also considers reasoning, intersystem communication, retrieval-augmented generation, and layered AI architecture. Chapter 8 details robust conversational AI, covering open-domain questions, query bias detection, contextual learning, and advanced retrieval mechanisms. Chapter 9 addresses professional development for librarians, emphasizing new competencies such as AI collaboration, safety and alignment, grant-supported research, and programming and math skills. Chapter 10 completes the book with a forward-looking perspective on AI integration in libraries, proposing future scenarios in technology, social adaptation, and the evolving role of libraries as knowledge curators in an AI-driven environment.

Through comprehensive consideration of AI, this book is highly relevant and suitable for academic librarians and students in library and information science programs. With a strong conceptual orientation and an emphasis on professional reflection, this book helps readers understand the technological, ethical, and professional implications of developments in artificial intelligence in the academic environment. Additionally, observations on the responsible use of AI, scientific communication, and information literacy make the book valuable to interdisciplinary researchers, including those in information science, digital humanities, and technology studies. Thus, this book serves not only as an academic resource, but also as a professional development reference for librarians and researchers who wish to deepen their understanding of artificial intelligence, as well as its potential applications in library services and broader scholarly practices. — *Arya Wijaya Pramodha Wardhana, Lecturer, Universitas Airlangga, Indonesia* (ORCID <https://orcid.org/0000-0002-7189-5978>)