

AI Literacy Fundamentals: Helping You Join the AI Conversation

(by Ben Jones, Data Literacy Press (Paperback), Bellevue, Washington, USA, 2024)

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Artificial Intelligence (AI) is undoubtedly one of the most significant and far-reaching digital age phenomena that influences various areas like education, economy, media, and governance. In a similar way to information and media literacy, AI literacy is now considered the basic necessary skill that helps the users to understand, evaluate, and participate in the world that is mediated by intelligent machines. In his book, *AI Literacy Fundamentals: Helping You Join the AI Conversation*, Ben Jones explains in an easy-going, brief, and balanced way in terms of concepts the rapidly changing field to those who are new to the topic.

The author is known for his work as a data educator and the founder of Data Literacy Press. He has been very involved in providing the general public with data competence through which he is able to achieve the goal of his mission. His earlier contributions, such as *Avoiding Data Pitfalls* and *Communicating Data with Tableau*, show his approach of breaking down difficult technical concepts for the readers. In this book, Jones goes even further to the field of artificial intelligence and gives an opening presentation that links AI literacy with data literacy as two complementary skills that are indispensable in the 21st century.

The book is broadly divided into three parts containing six chapters in total. The author follows a pedagogically sound journey in presenting the content i.e., from basic understanding to technology and finally social and ethical issues. The gist of each chapter

is presented in a few sentences at the end of the chapter, thus, the book being a whole, it is structurally sound.

The first part, Introduction to AI, contains two chapters: "What is AI?" and "A Brief History of AI." The main aim of the first chapter is to get the readers acquainted with one of the most puzzling aspects of the field of artificial intelligence, that is, the formulation of its definition, by citing the works of many different authorities, among them John McCarthy, the Oxford English Dictionary, and the U.S. National AI Initiative Act. The text discusses such things as Strong AI and Weak AI together with the newly coined term General Purpose AI (GPAI) in the European Union's AI Act, thus offering not only scientific but also policy points of view for the present-day discourse. The heading also tackles the "AI Effect," a term indicating the tendency of those technologies that have just been considered intelligent to be quickly taken for granted.

Chapter two provides a concise yet engaging historical summary of artificial intelligence, tracing its conceptual roots back to ancient automata legends and advancing to contemporary breakthroughs in machine learning and generative AI. These narratives highlight humanity's long-standing aspiration to endow machines with human-like intellect, while landmarks like the Turing Test, the Dartmouth Conference, so-called "AI winters," and the resurgence tied to neural networks and large language models are woven into the discussion.

The following segment, AI Technologies, comprises two chapters examining the technical underpinnings of machine intelligence. Chapter three, labelled "Machine Learning Basics," acquaints readers with the foundational idea of instructing computers through data instead of explicit commands. Here, core learning approaches—supervised, unsupervised, and reinforcement learning—are outlined clearly yet accurately. Proceeding further, chapter four, "A Primer on Deep Learning," expands upon earlier topics by introducing neural networks and elucidating their layered structure. The author employs analogies drawn from biological neurons to demystify intricate concepts for a broader readership.

Shifting focus from technicalities, the subsequent part, Important Considerations in AI, consists of two chapters probing the societal and ethical dimensions of AI. Firstly, "AI Benefits and Concerns" explores transformative applications in fields like healthcare, education, and governance, while cautioning against potential hazards such as job displacement, privacy violations, and algorithmic biases. Striking a measured tone, neither excessively hopeful nor unduly pessimistic, the text advocates for ethically guided AI deployment and equitable development. Following this, "AI Myths and Truths" dispels widespread misconceptions, clarifying that AI lacks sentience, operates without true autonomy, and remains prone to errors. By showing the gap between media fabrications and scientific reality, the writer helps the readers to develop their own viewpoints based on evidence.

Apart from that, each chapter is illustrated with relatable examples such as recommendation systems, spam filters, machine translation, facial recognition, and generative AI platforms like ChatGPT. These cases that are

derived from people's everyday digital experiences help them to understand what once seemed to be abstract concepts. Further, the inclusion of a glossary and appendices makes the book more valuable as a teaching aid.

Jones' style is quite conversational, yet he doesn't lose his scholarly tone. In the preface, he uses a very catchy metaphor where AI is compared to ocean waves - inviting readers to "swim toward the wave" instead of running away from it. The language used is very clear and crisp and at the same time, the author is able to do away with technical jargon without compromising on the correctness of the statements. This definitely makes the book quite appropriate for students, teachers, and professionals who are looking for an easy way to enter into the AI discourse.

Though the book manages to cover the topic in a manner which is not too difficult for the general audience, a small section on Suggested Readings or annotated references would have made it a richer resource for advanced learners. Still, its brevity proves advantageous for clarity and pertinence, particularly for individuals who may harbour apprehensions toward artificial intelligence as an intricate and daunting domain.

In summary, *AI Literacy Fundamentals: Helping You Join the AI Conversation* represents a deliberate and opportune contribution to the expanding corpus of literature on AI education. The volume strikes a balance, being succinct yet thorough, explanatory but not uncritical, foundational while still offering depth, thereby serving as a conduit between technical experts and non-specialist readers. By situating AI literacy within the broader framework of data and media literacies, Ben Jones achieves the notable task of transforming his work into a pragmatic manual for thoughtful

and conscientious interaction with artificial intelligence.

Consequently, this text holds significant value for educators, learners, and

casual readers seeking to cultivate a fundamental grasp of AI and engage more substantively in contemporary digital discourse.