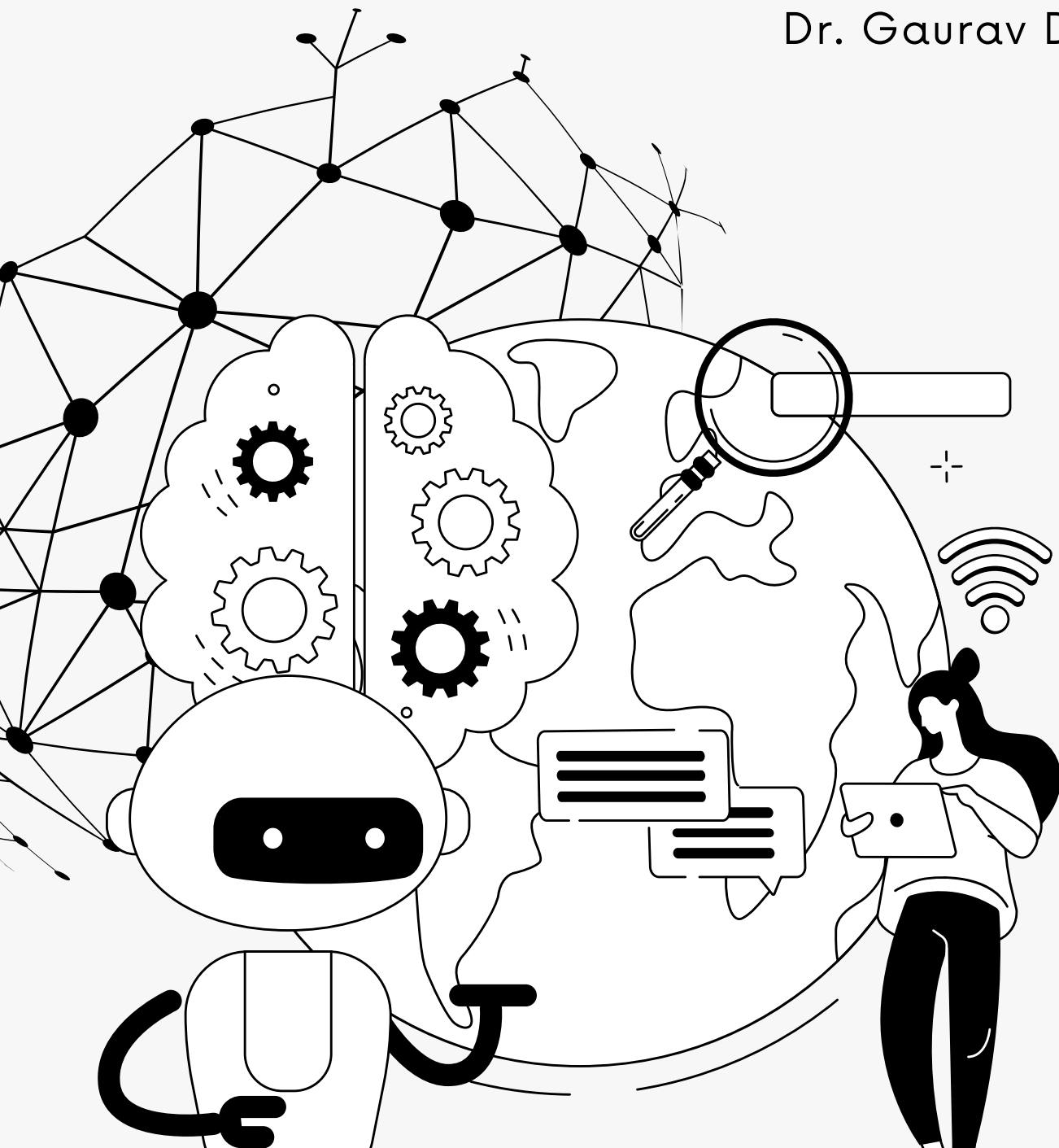


THE INTELLIGENT WEB: AI and IoT Revolutionizing Connectivity

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The Intelligent Web: AI and IoT Revolutionizing Connectivity



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The Intelligent Web: AI and IoT Revolutionizing Connectivity

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Preface

The Internet of Things (IoT) and artificial intelligence (AI) are altering the fundamental fabric of our digital world as a result of the fast expansion of technology. In **The Intelligent Web: AI and IoT Revolutionising Connectivity**, we examine how two game-changing technologies are combining to make the world more intelligent, connected, and efficient. Redefining human experiences, revolutionising industries, and offering answers to some of the world's most urgent problems are all possible outcomes of the confluence of AI and IoT.

Our study, analysis, and enthusiasm for comprehending how AI and IoT are influencing contemporary connection have culminated in this book. Our goal is to present a thorough analysis of these technologies, emphasising their advantages, disadvantages, and potential future developments. We explore practical uses, talking about how this revolution is influencing smart cities, driverless cars, medical advancements, and industrial automation.

As we move towards a more connected future, we hope that this book will encourage people to think about the ethical and societal ramifications in addition to appreciating the potential of new technologies. The intelligent web is now a reality in progress rather than a sci-fi fantasy. By providing insights to both experts and hobbyists, this book aims to demystify that reality.

Acknowledgment

Without the help and encouragement of several people and organisations that supported and motivated us during the writing process, this book would not have been possible. First and foremost, we would want to sincerely thank our family and friends for their unfailing understanding, patience, and support. We were able to realise this idea because of their faith in our vision.

We also like to thank our academic mentors and colleagues for their efforts, which ensured the correctness and applicability of our work by offering insightful criticism. Their advice enabled us to successfully negotiate the intricacies of AI, IoT, and how they interact to shape contemporary connection. We are especially grateful to the numerous technology and innovation specialists whose state-of-the-art studies and real-world experience significantly influenced our comprehension of these quickly developing disciplines.

We appreciate the publishing team's expertise, commitment, and meticulousness. We are pleased to present our manuscript to the world as a coherent and captivating book thanks to your hard work.

Lastly, we owe a debt of gratitude to our readers, whose insatiable curiosity and need for information inspire us to research and write about such significant subjects. It is our goal that this book will provoke thought-provoking discussions and encourage more research into the intelligent web and its transformative possibilities.

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v

About the Authors



Dr. Manoj Kumar received the B.Tech. degree in computer science and engineering from Punjab Technical University, Jalandhar, India, in 2005, the master degree from Guru Nanak Dev Engineering College (GNDEC), Punjab Technical University, Jalandhar, in 2010, the Ph.D. degree in computer science and engineering from Department of Computer Science and Engineering, Punjabi University, Patiala, India, in 2022. He is working as an Assistant Professor with the Department of Computer Science and Engineering, YDOE, Punjabi University Patiala Guru Kashi Campus Talwandi Sabo, Bathinda, India. He has guided 22 students of M.Tech in CSE under his supervision and he has published more than 35 research articles in various reputed international journals and conference proceedings. His research interests include scheduling, distributed computing, and MANETs.



Dr. Navdeep Singh holds a Ph.D. in Computer Engineering from Punjabi University, Patiala, India, and a Master of Engineering degree from Thapar University, India. With over 15 years of teaching experience, he has been serving as an Assistant Professor (Senior Scale) at Punjabi University since 2011. His research areas span Machine Learning, Deep Learning, Natural Language Processing (NLP), Computer Vision, and Generative AI, reflecting a commitment to exploring diverse facets of artificial

intelligence. Dr. Navdeep has contributed significantly to academia, with a portfolio boasting over 20 published papers, showcasing their expertise and dedication to advancing knowledge in these fields.



DR. Rajinder Kumar has completed MCA, M.Sc. (Math), and Ph.D. degrees, M.A Psychology (Pursuing) and is working as a "Registrar and Associate Professor cum Vice Principal" at Fateh College, Rampura Phul, Bathinda, Punjab, India (Affiliated with Punjabi University, Patiala). He received his Ph.D. under the topic "To study the area of data mining using privacy preserving (PPDM)." He has more than 13 years of experience in teaching and administration. He has authored 09 books in the fields of computer science, mathematics, and education. He has more than 27 papers published in national and international journals of repute. He has presented many papers in seminars and attended many faculty development programmes. He has held various administrative post like Vice-Principal, Registrar, Dean Academic, etc. He visited various colleges and universities as an external examiner.



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ABOUT THE BOOK

The intriguing intersection between artificial intelligence and the Internet of Things is examined in **The Intelligent Web: AI and IoT Revolutionising Connectivity**. This book looks at how these two technologies are making systems smarter and more efficient, which is changing industries and our daily lives. The book addresses the difficulties and moral dilemmas of a society that is becoming more linked while delving deeply into practical applications, from smart cities to healthcare advancements. It acts as a manual for experts and amateurs to comprehend the possibilities and future course of AI and IoT in influencing contemporary networking.



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