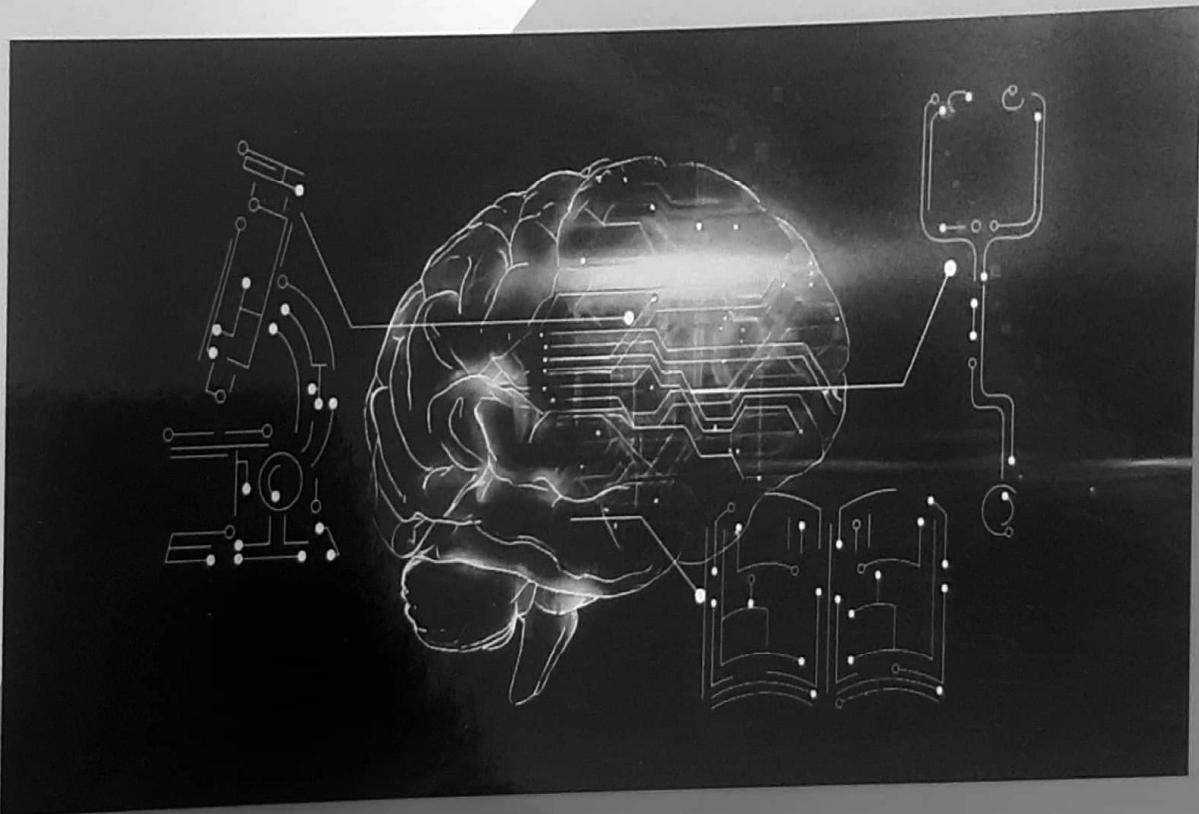


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Preface ...

"Artificial Intelligence" is a fundamental subject of Computer Science which is designed to understand Artificial Intelligence concepts using various tasks. Due to this student can easily solve problems using searching strategies in AI. It is our pleasure to present book on this subject for **MSc. (Computer Science): Semester-I as per updated syllabus at 2023 pattern (Under NEP)**.

To make the subject very interesting, lot of examples and code samples for various algorithms are mentioned in the book. Each chapter contains simple language for explanation and short code or examples are given with suitable diagrams. This book covers various search strategies for AI Problem Solving, also covers Multi-agent Environment, Knowledge Representation and Reasoning Mechanisms as well as Fundamentals of Game Theory such as Logical Inference, Future Scope and Recent Trends in AI. At the end of each chapter, Multiple Choice Questions, Short answer questions and Long answer questions are provided for practice.

I, Dipali Mali dedicate my work to my parents, all my B.C.S. and M.C.A. teachers, Husband and My daughter Swara.

I, Dipali Mali thankful to my parents Dipti and Deepak Mali, my husband Shailesh Mahajan and my teachers and guide Dr. S.N. Shinde, Dr. Vilas Wani and Dr. Prashant Mulay, for their support and inspiration.

I Monica Dhotre thankful to my mother Mrs. Meera Deshmane, My Husband Sagar Dhotre, my son Smaran, my whole family members, my friends, colleagues who are constant source of inspiration.

I express my sincere thanks to our former principal Dr. Ganesh Raut sir, Dr. Gulab Gugale sir (Chemistry dept H.V.Desai College Pune) for their support in writing book.

Our sincere thanks to Shri. Dineshbhai Furia, Mr. Jignesh Furia for trusting and giving this opportunity to work with them.

We also thank to Mrs. Anita Panajkar, Ms. Madhuri Gabale, Mr. Malik Shaikh, and Ms. Chaitali Takale for their excellent co-operation.

We also thank to Nirali Prakashan for bringing out the book in market within a short period of time.

Any suggestions and improvements in contents of book will be appreciated and accordingly modifications can be done in later editions.

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ABOUT THE AUTHORS



Asst. Prof. Dipali Deepak Mali (Dipali Shaillesh Mahajan) is a faculty member in the Department of Computer Science, Annasaheb Magar College, Pune since 2007. She has been teaching for more than 16 years. She has completed her M.C.A. (Science) from Annasaheb Magar Mahavidyalaya, Pune and B.C.S. from K.T.H.M. College, Nasik under Savitribai Phule Pune University. She has qualified CBSE-UGC NET in June 2015. She has teaching experience at under-graduation and post-graduation level. Till now, she has taught Computer subjects to M.C.A. (Science), B.Sc. (Computer Science), M.Sc. (Computer Science), B.C.A. (Science) and B. Voc. (Software Development). She works as a visiting faculty in some colleges. She has participated in syllabus restructuring, many state, national and international level workshops, seminars, Faculty development program (FDP), webinars & conferences. Currently, she is pursuing Ph.D. under SPPU's center MVP's CMCS College.

Her Books-

- Advanced Operating System, M.Sc. (CS) : Sem.-I (2023 pattern as per NEP)
- Principles of Programming Languages M.Sc. (CS) : Sem.-I (2023 pattern as per NEP)
- Artificial Intelligence M.Sc. (CS) : Sem.-I (2023 pattern as per NEP)
- Software Project Management, M.Sc. (CS) : Sem.-III (2019 pattern as per CBCS)
- Advanced Operating System, M.Sc. (CS) : Sem.-II (2019 pattern as per CBCS)
- Paradigm of Programming Languages, M.Sc. (CS) : Sem.-I (2019 pattern as per CBCS)
- Database Management System, MCA: Sem.-I (2019 pattern as per CBCS)
- Database Management System, MCA : Sem.-I (2015 pattern)
- Database Management System, MCA : Sem.-II (2012 pattern)
- Database Management System, Mewar University
- Network Technology, MCM-Sem.-IV.



Asst. Prof. Monica Rajesh Deshmane (Monica Sagar Dhotre) has earned her MCS from Annasaheb Magar Mahavidyalaya under Savitribai Phule Pune University in 2011. She qualified for the UGC NET in June 2012 on her first attempt. She has worked in numerous reputable colleges under universities for a total of 12 years Commerce, and Science. She has undergraduate and post graduate-level academic experience. She has previously taught computer subjects to students majoring in MSc.(CS), BSc.(CS), MCA(Science), MCA(Commerce), BBA (CA), BCA (Science), and MSc. (Computer Application). She has organized many activities, events, and competitions at college level. Also she has published research paper on Fuzzy Logic Theory. She has participated many state, national and international level workshops, seminars, FDP, webinars, conferences etc. Currently, she is pursuing Ph.D. under KBCNMU.

Her Books-

M.Sc.(Computer Science) : Sem.-I

- Design and Analysis of an Algorithms (2019 pattern)
- Paradigm of Programming Languages (2019 pattern)
- Principles of Programming Languages (2023 pattern as per NEP)
- Artificial Intelligence (2023 pattern as per NEP)

M.Sc. (Computer Science):Sem. - II

- Mobile Technologies (2019 pattern)

M.Sc. (Computer Science) Sem. - III

- Web Frameworks (2019 pattern)

M.Sc. (Computer Applications) : Sem. - I

- Design and Analysis of Algorithms (2019 pattern)

M.Sc. (Computer Applications) : Sem. - III


- Mobile Application Development Using Android (2019 pattern)

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