

Studies in Computational Intelligence

Volume 960

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Monica Bianchini · Milan Simic · Ankush Ghosh ·
Rabindra Nath Shaw
Editors

Machine Learning for Robotics Applications

 Springer

Editors

Monica Bianchini
Department of Information Engineering
and Mathematics
University of Siena
Siena, Italy

Ankush Ghosh
Robotics Engineering
The Neotia University
Sarisha, West Bengal, India

Milan Simic
School of Engineering
RMIT University
Melbourne, VIC, Australia

Rabindra Nath Shaw
School of Electrical, Electronic
and Communication
Galgotias University
Greater Noida, India

ISSN 1860-949X

ISSN 1860-9503 (electronic)

Studies in Computational Intelligence

ISBN 978-981-16-0597-0

ISBN 978-981-16-0598-7 (eBook)

<https://doi.org/10.1007/978-981-16-0598-7>

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The registered company address is: 152 Beach Road, #21-01/04 Gateway East, Singapore 189721, Singapore

Preface

Machine learning has become one of the most prevalent topics in recent years. The application of machine learning we see today is a tip of the iceberg. The machine learning revolution has just started to roll out. It is becoming an integral part of all modern electronic devices. Applications in automation areas like automotive, security and surveillance, augmented reality, smart home, retail automation and health care are few of them. Robotics is also rising to dominate the automated world. The future applications of machine learning in the robotics area are still undiscovered to the common readers. We are, therefore, putting an effort to write this edited book on the future applications of machine learning on robotics where several applications have been included in separate chapters. The content of the book is technical. It has been tried to cover all possible application areas of robotics using machine learning.

This book will provide the future vision on the unexplored areas of applications of robotics using machine learning. The ideas to be presented in this book are backed up by original research results. The chapter provided here in-depth look with all necessary theory and mathematical calculations. It will be perfect for laymen and developers as it will combine both advanced and introductory materials to form an argument for what machine learning could achieve in the future. It will provide a vision on future areas of application and their approach in detail. Therefore, this book will be immensely beneficial for the academicians, researchers and industry project managers to develop their new project and thereby beneficial for mankind.

Siena, Italy
Melbourne, Australia
Sarisha, India
Greater Noida, India

Monica Bianchini
Milan Simic
Ankush Ghosh
Rabindra Nath Shaw

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Editors and Contributors

About the Editors

Monica Bianchini received the Laurea degree cum laude in Applied Mathematics in 1989 and the Ph.D. degree in Computer Science and Control Systems in 1995 from the University of Florence. She is currently an Associate Professor at the Department of Information Engineering and Mathematics of the University of Siena. Her main research interests are in the field of machine learning, with emphasis on neural networks for structured data and deep learning, approximation theory, bioinformatics, and image processing. M. Bianchini has authored more than one hundred papers and has been the editor of books and special issues on international journals in her research field. She has been involved in the organization of several scientific events, including the NATO Advanced Workshop on Limitations and Future Trends in Neural Computation (2001), the 8th AI*IA Conference (2002), GIRPR 2012, the 25th International Based Program Synthesis and Transformation, and the ACM International Conference on Computing Frontiers 2017. Prof. Bianchini served/serves as an Associate Editor for IEEE Transactions on Neural Networks (2003–2009), Neurocomputing (from 2003), and International Journal of Computers in Healthcare (from 2010). She is a permanent member of the Editorial Board of IJCNN, ICANN, ICPR, ICPRAM, ESANN, ANNPR and KES.—Symposium on Logic.

Milan Simic is a Senior Lecturer at RMIT University, School of Engineering, Melbourne, Australia and Visiting Professor at The University Nikola Tesla, Belgrade, Serbia. He is also an Associate Director for the Australia-India Research Centre for Automation Software Engineering (AIRCAUSE). AIRCAUSE is a joint initiative of RMIT University, State Government of Victoria and ABB Group (India and Australia). He completed his B.E., M.E. and Ph.D. from RMIT University Melbourne, Australia. He has published over 125 peer-reviewed publications, with 493 citations in the last 5 years. He has developed fast 3D metal printing technology, won an international award in Germany. For his contributions, Dr. Simic has also received other prestigious awards and recognitions: Two for the research and development from Honeywell and two RMIT University awards for excellence in teaching

and the provision of education to the community. As a KES Journal General Editor, Dr. Simic is processing around 400 papers per year, with the support of more than 70 Associate Editors and 600 reviewers. KES is a worldwide association involving about 5000 professionals, engineers, academics, students and managers.

Ankush Ghosh is Associate Professor in the School of Engineering and Applied Sciences, The Neotia University, India and Visiting Faculty at Jadavpur University, Kolkata, India. He has more than 15 years of experience in Teaching, research as well as industry. He has outstanding research experiences and published more than 60 research papers in International Journal and Conferences. He was a research fellow of the Advanced Technology Cell-DRDO, Government of India. He was awarded National Scholarship by HRD, Government of India. He received his Ph.D. (Engineering) Degree from Jadavpur University, Kolkata, India in 2010. His UG and PG teaching assignments include Microprocessor and microcontroller, AI, IOT, Embedded and real time systems etc. He has delivered Invited lecture in a number of international seminar/conferences, refreshers courses, and FDPs. He has guided a large number of M.Tech. and Ph.D. students. He is Editorial Board Member of seven International Journals.

Rabindra Nath Shaw is a Senior Member of IEEE (USA), currently holding the post of Director, International Relations, Galgotias University India. He is an alumnus of the applied physics department, University of Calcutta, India. He has more than eleven years teaching experience in leading institutes like Motilal Nehru National Institute of Technology Allahabad, India, Jadavpur University and others in UG and PG level. He has successfully organised more than 15 International Conferences as Conference Chair, Publication Chair and Editor. He has published more than fifty Scopus/WoS/ISI indexed research papers in International Journals and conference Proceedings. He is the editor of several Springer and Elsevier books. His primary area of research is optimization algorithms and machine learning techniques for power systems, IoT Application, Renewable Energy, and power Electronics converters. He also worked as University Examination Coordinator, University MOOC's Coordinator, University Conference Coordinator and Faculty In-Charge, Centre of Excellence for Power Engineering and Clean Energy Integration.

Contributors

K. Amritha Ashok Jyothi Engineering College, Thrissur, Kerala, India

Monica Bianchini Department of Computer Science, University of Siena, Siena, Italy

Swagatam Biswas School of Engineering and Applied Sciences, The Neotia University, Sarisha, West Bengal, India

Abhijit Chandra Department of Instrumentation and Electronics Engineering, Jadavpur University, Kolkata, India

Prajwal Chauhan Department of Information Technology, JDCOEM, Nagpur, India

Dharamvir Dharmacharya DIT University, Dehradun, Uttarakhand, India

Rajeev Kumar Garg CSIR-Central Road Research Institute, New Delhi, India

Seema Garg Department of Electronics and Communication Engineering, Ajay Kumar Garg Engineering College, Ghaziabad, India

Jyoti Gautam JSS Academy of Technical Education, Noida, India

Ankush Ghosh School of Engineering and Applied Sciences, The Neotia University, Sarisha, Kolkata, West Bengal, India

Bharat Gupta Department of Computer Science & Engineering and Information Technology, Jaypee Institute of Information Technology (JIIT), Noida, India

Sheikh Rafiul Islam Department of Information Technology, Indian Institute of Engineering Science and Technology, Shibpur, West Bengal, India

Md. Kamaruzzaman Department of Instrumentation and Electronics Engineering, Jadavpur University, Kolkata, India

Pankaj Koche Department of Information Technology, JDCOEM, Nagpur, India

Milan Kumar SRM Institute of Science and Technology, Chennai, India

Vinod Mahor Department of Computer Science and Engineering, Gwalior Engineering College, Gwalior, India

Nitima Malsa Banasthali Vidyapith, Banasthali, India;
SRM Institute of Science and Technology, Chennai, India

Amrindra Pal DIT University, Dehradun, Uttarakhand, India

Anand Singh Rajawat Department of Computer Science Engineering, Shri Vaishnav Vidyapeeth Vishwavidyalaya Indore, Indore, India

Romil Rawat Department of Computer Science Engineering, Shri Vaishnav Vidyapeeth Vishwavidyalaya Indore, Indore, India

Anitta Savy Jyothi Engineering College, Thrissur, Kerala, India

Rabindra Nath Shaw Department of Electrical, Electronics and Communication Engineering, Galgotias University, Greater Noida, Uttar Pradesh, India

V. M. Shenbagaraman SRM Institute of Science and Technology, Chennai, India

V. Shijoh Jyothi Engineering College, Thrissur, Kerala, India

Pratiksha Singh Department of Information Technology, JDCOEM, Nagpur, India

Pratima Singh Department of Computer Science and Engineering, Ajay Kumar Garg Engineering College, Ghaziabad, India

Shrikant V. Sonekar Department of Information Technology, JDCOEM, Nagpur, India

Abhishek Soni DIT University, Dehradun, Uttarakhand, India

Vivek Kumar Srivastava DIT University, Dehradun, Uttarakhand, India

Vaibhav Vyas Banasthali Vidyapith, Banasthali, India;
SRM Institute of Science and Technology, Chennai, India