

1. Record Nr.	UNINA9910881089203321
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Titolo	Machine Learning and Other Soft Computing Techniques: Biomedical and Related Applications // edited by Nguyen Hoang Phuong, Nguyen Thi Huyen Chau, Vladik Kreinovich
Pubbl/distr/stampa	Cham : , : Springer Nature Switzerland : , : Imprint : Springer, , 2024
ISBN	9783031639296 9783031639289
Edizione	[1st ed. 2024.]
Descrizione fisica	1 online resource (254 pages)
Collana	Studies in Systems, Decision and Control, , 2198-4190 ; ; 543
Altri autori (Persone)	Huyen Chau Nguyen Thi Kreinovich Vladik
Disciplina	621.3
Soggetti	Electrical engineering Machine learning Biomedical engineering Electrical and Electronic Engineering Machine Learning Biomedical Engineering and Bioengineering
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di contenuto	How to Estimate Unknown Unknowns From Cosmic Light to Election Polls -- Why Bump Reward Function Works Well In Training Insulin Delivery Systems -- How to Best Retrain a Neural Network If We Added One More Input Variable -- Towards a Psychologically Natural Relation Between Colors and Fuzzy Degrees.
Sommario/riassunto	This book contains applications to various health-related problems, from designing and maintaining a proper diet to enhancing hygiene to analysis of mammograms and left-right brain activity to treating diseases such as diabetes and drug addictions. Health issues are very important. So naturally whatever new data processing technique appears, researchers try to apply it to health issues as well. From this viewpoint, Artificial Intelligence (AI) and Computational Intelligence (CI) techniques are no exception: they have been successfully applied to medicine, and more promising applications are on the way. Applications of AI and CI techniques to health issues are the main focus

of this book. Health issues are also very delicate, because human bodies are complex organisms. No matter how interesting and promising are new ideas and new techniques, there is always a possibility of unexpected side effects. Because of this, we cannot apply untested methods to patients, and we first need to test these methods on other less critical applications. Several book chapters describe such applications—whose success paves the way for these methods to be used in biomedical situations. These applications range from human/face detection to predicting student success to predicting election results to explaining the observed intensity of space light. We hope that this book helps practitioners and researchers to learn more about computational intelligence techniques and their biomedical applications—and to further develop this important research direction.

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