

1. Record Nr.	UNINA9910793956903321
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Titolo	A Primer on Machine Learning Applications in Civil Engineering [[electronic resource]]
Pubbl/distr/stampa	Milton, : CRC Press LLC, 2019
ISBN	1-5231-4690-7 0-429-83666-X 0-429-83665-1 0-429-45142-3
Descrizione fisica	1 online resource (281 pages)
Disciplina	624
Soggetti	Civil engineering
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Description based upon print version of record.
Sommario/riassunto	Machine learning has undergone rapid growth in diversification and practicality, and the repertoire of techniques has evolved and expanded. The aim of this book is to provide a broad overview of the available machine-learning techniques that can be utilized for solving civil engineering problems. The fundamentals of both theoretical and practical aspects are discussed in the domains of water resources/hydrological modeling, geotechnical engineering, construction engineering and management, and coastal/marine engineering. Complex civil engineering problems such as drought forecasting, river flow forecasting, modeling evaporation, estimation of dew point temperature, modeling compressive strength of concrete, ground water level forecasting, and significant wave height forecasting are also included. Features Exclusive information on machine learning and data analytics applications with respect to civil engineering Includes many machine learning techniques in numerous civil engineering disciplines Provides ideas on how and where to apply machine learning techniques for problem solving Covers water resources and hydrological modeling, geotechnical engineering, construction engineering and management, coastal and marine

engineering, and geographical information systems Includes MATLAB
exercises
