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Titolo	Assessing and Improving Prediction and Classification : Theory and Algorithms in C++ / / by Timothy Masters
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Descrizione fisica	1 online resource (XX, 517 p. 26 illus., 8 illus. in color.)
Disciplina	005.133
Soggetti	Big data Artificial intelligence Mathematical statistics Statistics Big Data Artificial Intelligence Probability and Statistics in Computer Science Statistics, general
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	1. Assessment of Numeric Predictions -- 2. Assessment of Class Predictions -- 3. Resampling for Assessing Parameter Estimates -- 4. Resampling for Assessing Prediction and Classification -- 5. Miscellaneous Resampling Techniques -- 6. Combining Numeric Predictions -- 7. Combining Classification Models -- 8. Gaiting Methods -- 9. Information and Entropy -- References.
Sommario/riassunto	Carry out practical, real-life assessments of the performance of prediction and classification models written in C++. This book discusses techniques for improving the performance of such models by intelligent resampling of training/testing data, combining multiple models into sophisticated committees, and making use of exogenous information to dynamically choose modeling methodologies. Rigorous statistical techniques for computing confidence in predictions and decisions receive extensive treatment. Finally, the last part of the book

is devoted to the use of information theory in evaluating and selecting useful predictors. Special attention is paid to Schreiber's Information Transfer, a recent generalization of Grainger Causality. Well commented C++ code is given for every algorithm and technique. You will: Discover the hidden pitfalls that lurk in the model development process Work with some of the most powerful model enhancement algorithms that have emerged recently Effectively use and incorporate the C++ code in your own data analysis projects Combine classification models to enhance your projects.