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| 1. Record Nr.           | UNINA9911001467503321                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| Autore                  | Awange Joseph L. <1969->                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| Titolo                  | Hybrid Imaging and Visualization : Employing Machine Learning with Mathematica - Python / / by Joseph Awange, Béla Paláncz, Lajos Völgyesi                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| Pubbl/distr/stampa      | Cham : , : Springer Nature Switzerland : , : Imprint : Springer, , 2025                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| ISBN                    | 3-031-72817-3                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| Edizione                | [2nd ed. 2025.]                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| Descrizione fisica      | 1 online resource (471 pages)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| Disciplina              | 006.37                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| Soggetti                | Geographic information systems<br>Image processing - Digital techniques<br>Computer vision<br>Geophysics<br>Solar system<br>Geographical Information System<br>Computer Imaging, Vision, Pattern Recognition and Graphics<br>Space Physics                                                                                                                                                                                                                                                                                                                                                                                                            |
| Lingua di pubblicazione | Inglese                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| Formato                 | Materiale a stampa                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| Livello bibliografico   | Monografia                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| Nota di bibliografia    | Includes bibliographical references.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| Nota di contenuto       | Chapter 1. Dimension Reduction -- Chapter 2. Classification -- Chapter 3. Clustering -- Chapter 4. Regression -- Chapter 5. Neural Networks -- Chapter 6. Optimizing Hyperparameters -- Chapter 7. ChatGPT.                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| Sommario/riassunto      | This second edition of the book that targets those in computer algebra and artificial intelligence introduces Black Hole algorithm that is essential for optimizing hyperparameters, an important task in machine learning where mostly, stochastic global methods are used as well as ChatGPT, a novel and in the last few years, very popular Generative AI technology. In addition, fisher discriminant, a linear discriminant that can provide an optimal separation of objects, and the conversion of time series into images thereby making it possible to employ convolution neural network to classify time series effectively are presented. |

