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Data Driven Mathematical Modeling in Agriculture

Tools and Technologies

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The research in this book looks at the likelihood and level of use of implemented technological components with regard to the adoption of different precision agricultural technologies. To identify the variables affecting farmers' choices to embrace more precise technology, zero-inflated Poisson and negative binomial count data regression models are utilized. Outcomes from the count data analysis of a random sample of various farm operators show that various aspects, including farm dimension, farmer demographics, soil texture, urban impacts, farmer position of liabilities, and position of the farm in a state, were significantly associated with the approval severity and likelihood of precision farming technologies.

Technical topics discussed in the book include:

- Precision agriculture
- Machine learning
- Wireless sensor networks
- IoT
- Deep learning.

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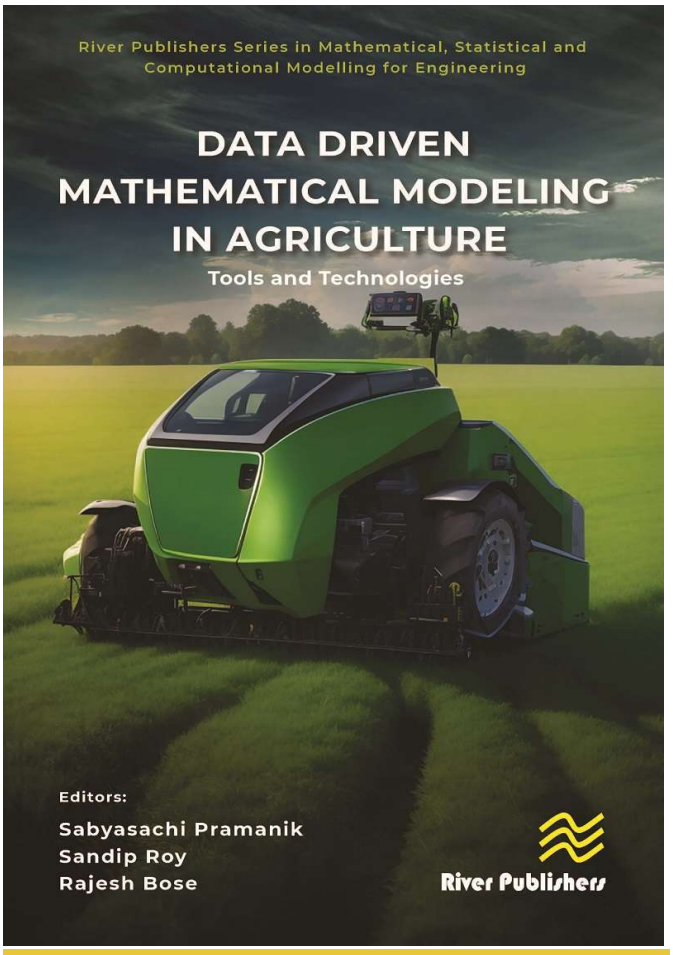

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