



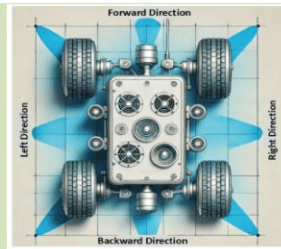
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Development of An Intelligent Mobile Robot System for Object and Obstacle Detection

Hybrid Optimization with Integer Constraints: Modeling and Solving Problems Using Simplex Techniques

It follows that:

$$\sum_{j=1}^n \mu_{ij} x_j \quad \forall i = 1, 2, \dots, n \quad \text{is positive, therefore,}$$

$$\mu_{i1} - \sum_{j=2}^n \mu_{ij} x_j \leq \mu_{i1} < 1 \quad \forall i = 1, 2, \dots, n \quad \text{that is,}$$

$$\mu_{i1} - \sum_{j=2}^n \mu_{ij} x_j \quad \forall i = 1, 2, \dots, n \quad \text{is an integer less than one.}$$

Thus, it is either a zero or a negative integer. Hence,

$$\mu_{i1} - \sum_{j=2}^n \mu_{ij} x_j \leq 0 \quad \text{or} \quad \sum_{j=2}^n \mu_{ij} x_j \leq \mu_{i1} \quad \forall i = 1, 2, \dots, n. \quad 3.3$$

Equation 3.3 is called the Gomory constraint. Applying the non-negative slack variable, we have:



Effect of Board Independence and Ownership Structure of Listed Non-Financial Firms in Nigeria on Audit Pricing

Characterizing Boundedness and Solution Size in Rational Linear Programming and Polyhedrall Optimization

optimize the linear function

$$\text{Optimize } Z = \sum_{i=1}^n c_i x_i \quad \dots (1)$$

subject to the constraints,

$$\sum_{i=1}^n a_{ij} x_i \leq b_j \quad j = 1, 2, \dots, m \quad \dots (2)$$

$c_i > 0$ and some x_i are integers



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