

Heurísticas Greedy: Localización de Servicios

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Resumen

[TODO]

6. SET-COVERING PROBLEM

[TODO]

$$\begin{aligned} \text{Minimizar} \quad & \sum_{j=1}^n c_j x_j \\ \text{sujeto a} \quad & \sum_{j=1}^n a_{ij} x_j \geq 1, \quad i = 1, \dots, m \\ & x_j \in \{0, 1\}, \quad j = 1, \dots, n \end{aligned} \tag{1}$$

Equación 1: *Formulación de Set-Covering Problem.*

7. MAX-COVERING PROBLEM

[TODO]

$$\begin{aligned} \text{Maximizar} \quad & \sum_{i=1}^m h_i z_i \\ \text{sujeto a} \quad & \sum_{j \in N_i} x_j \geq z_i, \quad i = 1, \dots, m \\ & \sum_{j=1}^n x_j \leq p, \\ & x_j \in \{0, 1\}, \quad j = 1, \dots, n \\ & z_i \in \{0, 1\}, \quad i = 1, \dots, m \end{aligned} \tag{2}$$

Equación 2: *Formulación de Max-Covering Problem.*

8. P-MEDIAN PROBLEM

[TODO]

$$\begin{aligned}
 &\text{Minimizar} && \sum_{i=1}^m \sum_{j=1}^n h_i d_{ij} y_{ij} \\
 &\text{sujeto a} && \sum_{j=1}^n y_{ij} = 1, && i = 1, \dots, m \\
 &&& y_{ij} \leq x_j, && i = 1, \dots, m, j = 1, \dots, n \\
 &&& \sum_{j=1}^n x_j = p, \\
 &&& x_j \in \{0, 1\}, && j = 1, \dots, n \\
 &&& y_{ij} \in \{0, 1\}, && i = 1, \dots, m, j = 1, \dots, n
 \end{aligned} \tag{3}$$

Equación 3: *Formulación de P-Median Problem.*

REFERENCIAS

- [1] AGUADO, J. S. Modelos de Investigación Operativa, 2016/17.
- [2] GARCÍA PRADO, S. Mosel Examples. <https://github.com/garciparedes/mosel-examples>.