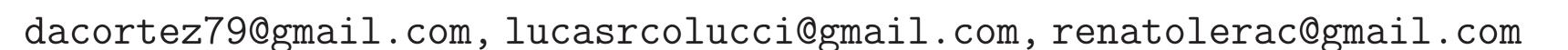


Otimização de Viagens em Companhias Aéreas Brasileiras

Daniel Augusto Cortez, Lucas Rodrigues Colucci e Renato Lerac Corrêa de Sá





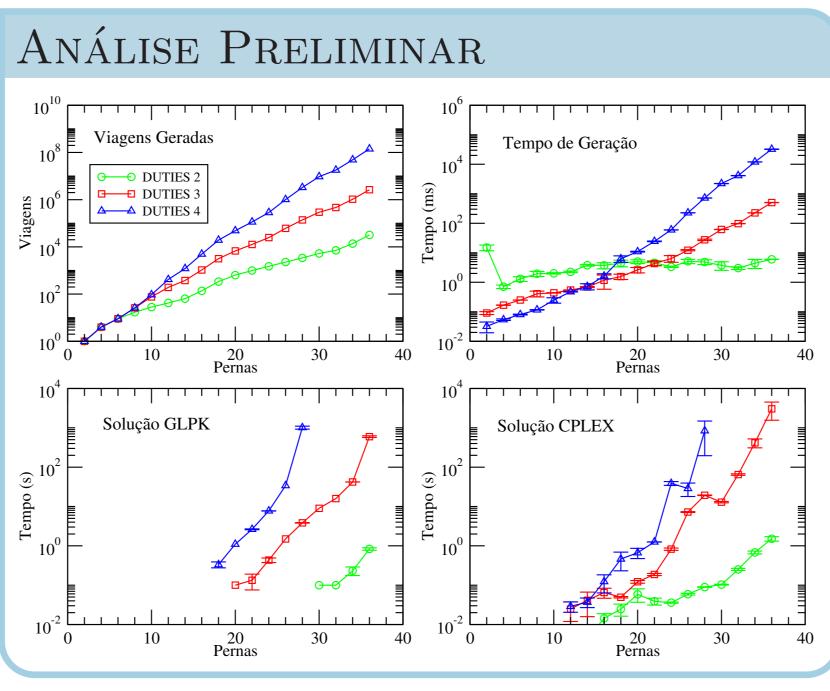
Introdução

FORMULAÇÃO

Geração de Viagens

REFERENCIAS

[1]



$\begin{array}{|c|c|c|c|} \textbf{Busca Local} \\ \hline \textbf{for } \textit{Blur and regularisation values } \textbf{do} \\ \hline & \textbf{Initialize } q, q_{\text{best}} \text{ and } \kappa \\ \hline & \textbf{repeat} \\ \hline & \textbf{Calculate } \Delta p \tilde{F}(q,0), F(q) \\ \hline & \textbf{if } F(q) < F(q_{best}) \textbf{ then} \\ \hline & q_{\text{best}} \leftarrow q \\ \hline & \textbf{Increase } \kappa \\ \hline & \textbf{else} \\ \hline & \textbf{if } \kappa \textit{ smaller than threshold then} \\ \hline & \bot \textit{ return} \\ \hline & \texttt{decrease } \kappa \\ \hline \end{array}$

 $q \leftarrow C \circ q, p$

until converged

Calculate p from $\Delta p \tilde{F}(q_{best}, p)$ and κ

$\begin{array}{c|c} \textbf{ALGORITMO GENÉTICO} \\ \hline \textbf{for } \textit{Blur and regularisation values } \textbf{do} \\ \hline & \text{Initialize } q, q_{\text{best}} \text{ and } \kappa \\ \hline \textbf{repeat} \\ \hline & \text{Calculate } \Delta p \tilde{F}(q,0), F(q) \\ \hline & \textbf{if } F(q) < F(q_{best}) \textbf{ then} \\ \hline & q_{\text{best}} \leftarrow q \\ \hline & \text{Increase } \kappa \\ \hline & \textbf{else} \\ \hline & \textbf{if } \kappa \textit{ smaller than threshold } \textbf{then} \\ \hline & \bot \text{ return} \\ \hline & \bot \text{ decrease } \kappa \\ \hline & \text{Calculate } p \text{ from } \Delta p \tilde{F}(q_{best}, p) \text{ and } \kappa \\ \hline & q \leftarrow C \circ q, p \end{array}$

until converged

$\begin{array}{c|c} \textbf{Geração de Colunas} \\ \textbf{for } \textit{Blur and regularisation values do} \\ & \textbf{Initialize } q, q_{\text{best}} \text{ and } \kappa \\ \textbf{repeat} \\ & \textbf{Calculate } \Delta p \tilde{F}(q,0), F(q) \\ & \textbf{if } F(q) < F(q_{best}) \textbf{ then} \\ & q_{\text{best}} \leftarrow q \\ & \textbf{Increase } \kappa \\ & \textbf{else} \\ & \textbf{if } \kappa \textit{ smaller than threshold then} \\ & \bot \textit{ return} \\ & \bot \textit{ decrease } \kappa \\ & \textbf{Calculate } p \textit{ from } \Delta p \tilde{F}(q_{best}, p) \textit{ and } \kappa \\ & q \leftarrow C \circ q, p \\ & \textbf{until } \textit{ converged} \\ \end{array}$

```
RESULTADOS
0,6
0,4
0,2
                            0,4 0,6
                                                0,4 0,6
0,8
                                                             0,6
                                                                                 0,6
0,6
                                        0,6
                   ┥0,2 ┝
0,2
    0,2 0,4 0,6 0,8 1 0 0,2 0,4 0,6 0,8 1 0 0,2 0,4 0,6 0,8 1 0
                                                                 0,2 0,4 0,6 0,8
0.8 +
0.6
0,4
0.2
    0,2 0,4 0,6 0,8 1 0 0,2 0,4 0,6 0,8 1 0 0,2 0,4 0,6 0,8 1 0 0,2 0,4 0,6 0,8
```

Conclusões