Image Processing using Graphs

2nd Semester of 2004

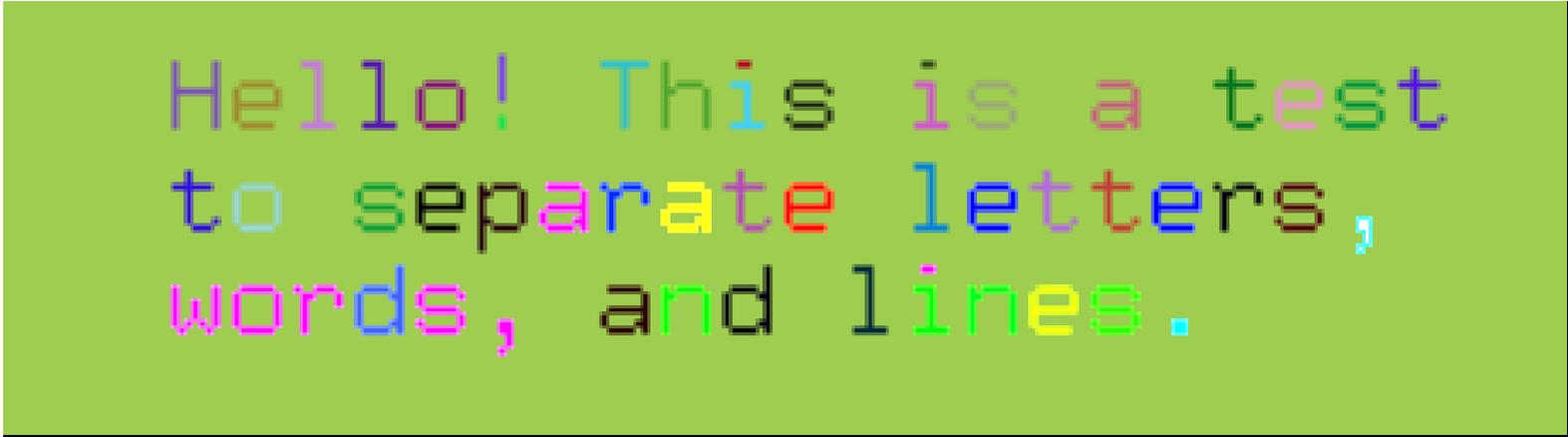Alexandre Xavier Falcão

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Labeling of components

Hello! This is a test
to separate letters,
words, and lines.

Labeling of components

For example, consider Circular relation with $\rho = 2$ for labeling letters of a binary text;

Labeling of components

Circular relation with $\rho = 25$ for labeling words of a text; and

Labeling of components

Rectangular relation with $a = 30$ and $b = 5$ for labeling lines of a text.

Labeling of components

Consider now $(p, q) \in A$ if $(x_q - x_p)^2 + (y_q - y_p)^2 \leq 100$ and $|I(q) - I(R(p))| \leq 100$, where $R(p)$ is the initial pixel of the first path that reached p.