#### **NAME**

edgepaint - edge coloring to disambiguate crossing edges

## **SYNOPSIS**

```
[ options ] [ -o outfile ] [ files ]
```

## DESCRIPTION

**edgepaint** takes as input a graph in DOT format with node position information (the *pos* attribute) and colors the edges in a manner making it easier to tell them apart.

## **OPTIONS**

The following options are supported:

#### --accuracy=e

Accuracy with which to find the maximally different coloring for each node with regard to its neighbors. Default e = 0.01.

## --angle=a

Color two edges differently if their incidence angle is less than a degrees. Default a = 15.

## --random seed=s

Random seed to use. s must be an integer. If s is negative, we do |s| iterations with different seeds and pick the best.

# --lightness=l1, l2

Only applies for the "lab" color scheme: l1 and l2 must integers, with  $0 \le l1 \le l2 \le 100$ . By default, we use "0,70".

# --share\_endpoint

If this option is specified, edges that share a node are not considered in conflict if they are close to parallel but are on the opposite sides of the node (around 180 degree).

**-o** *f* Write output to file *f* (default: stdout).

# $--color\_scheme=c$

Specifies the color scheme. This can be "rgb", "gray", "lab" (default); or a comma-separated list of RGB colors in hex (e.g., "#ff0000,#aabbed,#eeffaa") representing a palette; or a string specifying a Brewer color scheme (e.g., "accent7"; see https://graphviz.org/doc/info/colors.html#brewer).

**-v** Turns on verbose mode.

-? Print usage and exit.

## **BUGS**

At present, **edgepaint** does not handle graphs with loops or directed multiedges. So, a graph with edges  $a \rightarrow b$  and  $b \rightarrow a$  is acceptable, but not if it has edges  $a \rightarrow b$  and  $a \rightarrow b$  or  $a \rightarrow b$  and  $a \rightarrow b$ . Ports are ignored in this analysis, so having  $a.x \rightarrow b$  and  $a.y \rightarrow b$  is also not supported.

# **AUTHOR**

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## **SEE ALSO**

gvmap(1), sfdp(1), neato (1), dot(1)