

neural-sketch-decorations.sty

Simple decoration system for neural-sketch

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```
implementation                                     ||| i*packagej
1 \ExplSyntaxOn
2
3
4 % ~~~~~
5 % Main nsk / Decoration Primitive
6 % ~~~~~ <<<
7 \keys_define:nn { nsk / decoratepath }
8 {
9   start .fp_set:N = \l_nsk_decoratepath_start_fp,
10  start .initial:n = { 0 },
11  start .default:n = { 0 },
12
13  at .tl_set:N = \l_nsk_decoratepath_at_tl,
14  at .initial:n = { },
15  at .default:n = { },
16
17  end .fp_set:N = \l_nsk_decoratepath_end_fp,
18  end .initial:n = { 1 },
19  end .default:n = { 1 },
20
21  step .dim_set:N = \l_nsk_decoratepath_step_dim,
22  step .initial:n = {10mm},
23  step .default:n = {10mm},
24
25  % Users might want to pick a color or line width, etc.
26  % You can define more keys if you wish, for example:
27  color .tl_set:N = \l_nsk_decoratepath_color_tl,
28  color .initial:n = {c_nsk_principal},
29  color .default:n = {c_nsk_principal},
30
31  % skips ~~~~~ <<<
32  path-width .dim_set:N = \l_nsk_decoratepath_path_width_dim,
33  path-width .initial:n = {0pt},
34
35  skip-first .bool_set:N = \l_nsk_decoratepath_skip_first_bool,
36  skip-first .initial:n = {false},
37  skip-last .bool_set:N = \l_nsk_decoratepath_skip_last_bool,
38  skip-last .initial:n = {false},
```

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39
40 % unknown keys => throw error or ignore
41 unknown .code:n =
42 {
43   \msg_warning:nn {nsk-decoratepath}
44   { Unrecognized~key~'\l_keys_key_tl'~will~be~ignored. }
45 },
46 }
47
48 \cs_new_protected_nopar:Npn \nsk__decorate_path_skips:
49 {
50
51   \dim_compare:nNnT { \l_nsk_decoratepath_path_width_dim } > { Opt }
52   {
53     \bool_if:NT \l_nsk_decoratepath_skip_first_bool
54     {
55       \fp_set:Nn \l_tmpa_fp
56       {
57         { \dim_to_fp:n
58           { \l_nsk_decoratepath_step_dim } / \dim_to_fp:n
59           { \l_nsk_decoratepath_path_width_dim } }
60       }
61       \fp_add:Nn \l_nsk_decoratepath_start_fp { \l_tmpa_fp }
62     }
63
64     \bool_if:NT \l_nsk_decoratepath_skip_last_bool
65     {
66       \fp_set:Nn \l_tmpa_fp
67       { \dim_to_fp:n { \l_nsk_decoratepath_step_dim } / \dim_to_fp:n
68         { \l_nsk_decoratepath_path_width_dim } }
69       \fp_add:Nn \l_nsk_decoratepath_end_fp { -\l_tmpa_fp }
70     }
71   }
72 }
73
74 % ~~~~~~
75 % Public Interface
76 % - (user-facing)
77 % ~~~~~~ <<<
78 \NewDocumentCommand \nskMarkPath { O{} m m }
79 {
80   \group_begin:
81   % 1) Parse the optional key=value list
82   \keys_set:nn { nsk / decoratepath } {#1}
83
84   % path skips
85   \nsk__decorate_path_skips:
86
87   % 2) Draw the \phantom" path
88   %   using the user-supplied #2 (the path),
89   %   and injecting #3 inside 'mark=... with { ... }'
90   \tl_if_head_eq_charcode:nNTF {#2} (
91   {
92     % TODO: refactor this spaghetti stuff

```

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93  \tl_if_empty:VTF \l_nsk_decoratepath_at_tl
94  {
95    % -True
96    \draw[
97      draw=none,
98      postaction=decorate,
99      decoration={
100        markings,
101        mark=
102        between~positions
103        \fp_use:N \l_nsk_decoratepath_start_fp
104        and
105        \fp_use:N \l_nsk_decoratepath_end_fp
106        step
107        \dim_use:N \l_nsk_decoratepath_step_dim
108        with
109        {
110          #3
111        }
112      }
113    ] #2;
114
115  }
116  {
117    % -False
118    \draw[
119      draw=none,
120      postaction=decorate,
121      decoration={
122        markings,
123        mark=
124        at~position
125        \tl_use:N \l_nsk_decoratepath_at_tl
126        with
127        {
128          #3
129        }
130      }
131    ] #2;
132
133  }
134
135 }{
136
137 % TODO: refactor this spaghetti stuff
138 \tl_if_empty:VTF \l_nsk_decoratepath_at_tl
139 {
140   % true
141   \draw[
142     draw=none,
143     spath/use=#2,
144     postaction=decorate,
145     decoration={
146       markings,

```

```

147     mark=between~positions
148     \fp_use:N \l_nsk_decoratepath_start_fp
149     and
150     \fp_use:N \l_nsk_decoratepath_end_fp
151     step
152     \dim_use:N \l_nsk_decoratepath_step_dim
153     with
154     {
155         #3
156     }
157 }
158 ] ;
159 }
160 {
161     % false
162     \draw[
163         draw=none,
164         spath/use=#2,
165         postaction=decorate,
166         decoration={
167             markings,
168             mark=at~position
169             \tl_use:N \l_nsk_decoratepath_at_tl
170             with
171             {
172                 #3
173             }
174         }
175     ] ;
176 }
177
178 }
179
180 \group_end:
181 }
182
183 \ExplSyntaxOff
i/*package;

```