Support for the Spark OpenType fonts
–

v. 0.05

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1 Introduction

A sparkline is a very small line chart, typically drawn without axes or coordinates. It presents the general shape of the variation (typically over time) in some measurement, such as temperature or stock market price, in a simple and highly condensed way. Sparklines are small enough to be embedded in text, or several sparklines may be grouped together as elements of a small multiple. Whereas the typical chart is designed to show as much data as possible, and is set off from the flow of text, sparklines are intended to be succinct, memorable, and located where they are discussed.

2 The fonts

The fonts are available from https://github.com/aftertheflood/spark and should be saved either in Library/fonts/ (MAC OSX), c:\Windows\Fonts (Windows) or /usr/local/share/fonts (Linux) or any other location where the fonts will be found by the system.

Sparks-Bar-Extranarrow.otf
Sparks-Bar-Extrawide.otf
Sparks-Bar-Medium.otf
Sparks-Bar-Narrow.otf
Sparks-Bar-Wide.otf
Sparks-Dot-Extralarge.otf
Sparks-Dot-Extrasmall.otf
Sparks-Dot-Large.otf
Sparks-Dot-Medium.otf
Sparks-Dot-Small.otf
Sparks-Dotline-Extrathick.otf
Sparks-Dotline-Extrathin.otf
Sparks-Dotline-Medium.otf
Sparks-Dotline-Thick.otf
Sparks-Dotline-Thin.otf

The package defines the following font macros (using symbol names):

\newfontface\sparkBarMedium{Spark-Bar-Medium}[RawFeature=+calt,\spark@DefaultFeatures]
\newfontface\sparkBarNarrow{Spark-Bar-Narrow}[RawFeature=+calt,\spark@DefaultFeatures]
\newfontface\sparkBarExtranarrow{Spark-Bar-Extranarrow}[RawFeature=+calt,\spark@DefaultFeatures]
\newfontface\sparkBarWide{Spark-Bar-Wide}[RawFeature=+calt,\spark@DefaultFeatures]
\newfontface\sparkBarExtrawide{Spark-Bar-Extrawide}[RawFeature=+calt,\spark@DefaultFeatures]
%
\newfontface\sparkDotLineMedium{Spark-Dotline-Medium}[RawFeature=+calt,\spark@DefaultFeatures]
\newfontface\sparkDotLineThick{Spark-Dotline-Thick}[RawFeature=+calt,\spark@DefaultFeatures]
\newfontface\sparkDotLineExtrathick{Spark-Dotline-Extrathick}[RawFeature=+calt,\spark@DefaultFeatures]
\newfontface\sparkDotLineThin{Spark-Dotline-Thin}[RawFeature=+calt,\spark@DefaultFeatures]
%
\newfontface\sparkDotMedium{Spark-Dot-Medium}[RawFeature=+calt,\spark@DefaultFeatures]
\newfontface\sparkDotSmall{Spark-Dot-Small}[RawFeature=+calt,\spark@DefaultFeatures]
\newfontface\sparkDotExtralarge{Spark-Dot-Extralarge}[RawFeature=+calt,\spark@DefaultFeatures]
\newfontface\sparkDotExtrasmall{Spark-Dot-Extrasmall}[RawFeature=+calt,\spark@DefaultFeatures]
3 The macros

\sparkBar[<Type>][<No>]{values}[<No>]
\sparkDot[<Type>][<No>]{values}[<No>]
\sparkDotline[<Type>][<No>]{values}[<No>]
\sparkBar*[<Type>][<No>]{values}[<No>]
\sparkDot*[<Type>][<No>]{values}[<No>]
\sparkDotline*[<Type>][<No>]{values}[<No>]
\sparkBar[<Type>]{{value,values,...,!value}}
\sparkDot[<Type>]{{value,values,...,!value}}
\sparkDotline[<Type>]{{value,values,...,!value}}
\sparkBar*[<Type>]{{value,values,...,!value}}
\sparkDot*[<Type>]{{value,values,...,!value}}
\sparkDotline*[<Type>]{{value,values,...,!value}}

If [<Type>] is missing, Medium is assumed. The type is mandatory if you use the first [<No>] argument! The star versions are only valid for LuaLaTeX where the values can be of any interval. They will be changed to the allowed interval:

- for \sparkDotline: [0, 9]
- for all other: [0, 100]

Instead of using the optional arguments for printing the first and/or last value you can use the !-notation, then the first and/or last listed value are printed. There is no difference in using the optional arguments; it saves only some keystrokes if the printed values are the same as in the list.

4 Text examples

4.1 Bars

4.1.1 Bar-Medium

1 Text \sparkBar{14,95,68,9,19,41,91,1,81,97,79,45,96,76,17,65,8,92} Text
2 Text \sparkBar[Medium]{14,95,68,9,19,41,91,1,81,97,79,45,96,76,17,65,8,92} Text
3 Text \sparkBar[Medium][14]{14,95,68,9,19,41,91,1,81,97,79,45,96,76,17,65,8,92} Text
4 Text \sparkBar[14,95,68,9,19,41,91,1,81,97,79,45,96,76,17,65,8,92] Text
4.1.2 Bar-Narrow

Text \sparkBar[Narrow]{19,32,93,4,95,46,13,23,50,86,94,68,58,41,89,57,74,8} Text
Text \sparkBar[Narrow]{19}{19,32,93,4,95,46,13,23,50,86,94,68,58,41,89,57,74,8} Text
Text \sparkBar[Narrow]{!19,32,93,4,95,46,13,23,50,86,94,68,58,41,89,57,74,8} Text

4.1.3 Bar-Extranarrow

Text \sparkBar[Extranarrow]{19,32,93,4,95,46,13,23,50,86,94,68,58,41,89,57,74,8} Text
Text \sparkBar[Extranarrow]{19}{19,32,93,4,95,46,13,23,50,86,94,68,58,41,89,57,74,8} Text
Text \sparkBar[Extranarrow]{!19,32,93,4,95,46,13,23,50,86,94,68,58,41,89,57,74,8} Text

4.1.4 Bar-Wide

Text \sparkBar[Wide]{13,15,59,73,42,1,41,51,4,97,35,55,37,24,89,21,30,22} Text
Text \sparkBar[Wide]{13}{13,15,59,73,42,1,41,51,4,97,35,55,37,24,89,21,30,22} Text
Text \sparkBar[Wide]{!13,15,59,73,42,1,41,51,4,97,35,55,37,24,89,21,30,22} Text
Text \sparkBar[Wide]{!13,15,59,73,42,1,41,51,4,97,35,55,37,24,89,21,30,22} Text

4.1.5 Bar-Extrawide

Text \sparkBar[Extrawide]{13,15,59,73,42,1,41,51,4,97,35,55,37,24,89,21,30,22} Text
Text \sparkBar[Extrawide]{13}{13,15,59,73,42,1,41,51,4,97,35,55,37,24,89,21,30,22} Text
Text \sparkBar[Extrawide]{!13,15,59,73,42,1,41,51,4,97,35,55,37,24,89,21,30,22} Text
Text \sparkBar[Extrawide]{!13,15,59,73,42,1,41,51,4,97,35,55,37,24,89,21,30,22} Text
4.2 Dots

4.2.1 Dot-Medium – the default

<table>
<thead>
<tr>
<th>Text \sparkDot{54,39,26,65,29,58,36,99,16,56,76,69,71,77,7,40,79,1} Text</th>
</tr>
</thead>
<tbody>
<tr>
<td>Text \sparkDot[Medium][54][54,39,26,65,29,58,36,99,16,56,76,69,71,77,7,40,79,1][1] Text</td>
</tr>
<tr>
<td>Text \sparkDot{[54,39,26,65,29,58,36,99,16,56,76,69,71,77,7,40,79,1]} Text</td>
</tr>
</tbody>
</table>

4.2.2 Dot-Small

<table>
<thead>
<tr>
<th>Text \sparkDot{1,79,88,46,54,77,91,24,70,22,27,29,40,33,31,95,26,76} Text</th>
</tr>
</thead>
<tbody>
<tr>
<td>Text \sparkDot[Small][1,79,88,46,54,77,91,24,70,22,27,29,40,33,31,95,26,76][1] Text</td>
</tr>
<tr>
<td>Text \sparkDot{!1,79,88,46,54,77,91,24,70,22,27,29,40,33,31,95,26,76} Text</td>
</tr>
</tbody>
</table>

4.2.3 Dot-Extrasmall

<table>
<thead>
<tr>
<th>Text \sparkDot{1,79,88,46,54,77,91,24,70,22,27,29,40,33,31,95,26,76} Text</th>
</tr>
</thead>
<tbody>
<tr>
<td>Text \sparkDot[Extrasmall][1,79,88,46,54,77,91,24,70,22,27,29,40,33,31,95,26,76][1] Text</td>
</tr>
<tr>
<td>Text \sparkDot{!1,79,88,46,54,77,91,24,70,22,27,29,40,33,31,95,26,76} Text</td>
</tr>
</tbody>
</table>

4.2.4 Dot-Extralarge

<table>
<thead>
<tr>
<th>Text \sparkDot{1,79,88,46,54,77,91,24,70,22,27,29,40,33,31,95,26,76} Text</th>
</tr>
</thead>
<tbody>
<tr>
<td>Text \sparkDot[Extralarge][1,79,88,46,54,77,91,24,70,22,27,29,40,33,31,95,26,76][1] Text</td>
</tr>
<tr>
<td>Text \sparkDot{!1,79,88,46,54,77,91,24,70,22,27,29,40,33,31,95,26,76} Text</td>
</tr>
</tbody>
</table>
4.3 Dotline

4.3.1 Dotline-Thin

```
Text \sparkDotline[Thin]{1,79,88,46,54,77,91,24,70,22,27,29,40,33,31,95,26,76} Text
```

4.3.2 Dotline-Extrathin

```
Text \sparkDotline[Extrathin]{1,79,88,46,54,77,91,24,70,22,27,29,40,33,31,95,26,76} Text
```

4.3.3 Dotline-Medium – the default

```
Text \sparkDotline[Medium]{1,79,88,46,54,77,91,24,70,22,27,29,40,33,31,95,26,76} Text
```

4.3.4 Dotline-Thick

```
Text \sparkDotline[Thick]{1,79,88,46,54,77,91,24,70,22,27,29,40,33,31,95,26,76} Text
```
5 Examples for Lua\LaTeX{}

4.3.5 Dotline-Extrathick

```
\text{Text \textbackslash sparkDotline[Extrathick]{1,79,88,46,54,77,91,24,70,22,27,29,40,33,31,95,26,76} Text}
\text{Text \textbackslash sparkDotline[Extrathick]{1}[1,79,88,46,54,77,91,24,70,22,27,29,40,33,31,95,26,76][76] Text}
\text{Text \textbackslash sparkDotline[Extrathick]{!!1,79,88,46,54,77,91,24,70,22,27,29,40,33,31,95,26,!76} Text}
```

5 Examples for Lua\LaTeX{}

The current version of \texttt{spark-otf} supports only star versions for Lua\LaTeX{}.

5.1 Bars

```
\text{Text \textbackslash sparkBar*{1,79,88,46,54,77,91,24,70,22,27,29,40,33,31,95,26,76} Text}
\text{Text \textbackslash sparkBar*{9,4,2,1,6,7,3,8,3,7,1,4,9,2,8,5,1,8} Text}
\text{Text \textbackslash sparkBar*{\texttt{Narrow}}{111,179,188,146,154,177,191,124,170,122,127,129,140,133,131,195,126,176} Text}
```

5.2 Dots

```
\text{Text \textbackslash sparkDotline*{1,79,88,46,54,77,91,24,70,22,27,29,40,33,31,95,26,76} Text}
\text{Text \textbackslash sparkDotline*[9,4,2,1,6,7,3,8,3,7,1,4,9,2,8,5,1,8] Text}
\text{Text \textbackslash sparkDotline+[9,4,2,1,6,7,3,8,3,7,1,4,9,2,8,5,1,8] Text}
\text{Text \textbackslash sparkDotline*[\texttt{Medium}]{19}{19,114,12,111,16,17,113,118,113,67,61,74,39,52,38,55,111,88][88] Text}
\text{Text \textbackslash sparkDotlines*[\texttt{Medium}]{111}{111,179,188,146,154,177,191,124,170,122,127,129,140,133,131,195,126,176} Text}
```

6 Using color

It is possible to mark single or some values with a specific color, which must be given in binary notation, e.g. \texttt{ff0000} for red (R-G-B). The macro \texttt{\setSparkColor} should include the (last) comma after the value:
7 The charsets

Coloring does not work for the star version of the macro and not for \sparkdotline.

7 The charsets

7.1 Spark-BarMedium

\begin{verbatim}
32: !"#$%\&'()*+,-./0123456789:;<=>?@ABCDEFGHIJKLMNOPQRSTUVWXYZ\_\^\`abcdefghijklmnopqrstuvwxyz{|}~
82: RSTUVWXYZ\[\]^_`abcdefghijklmnopqrstuvwxyz{|}~
132: ¡¢£¤¥¦§¨©ª«¬-®¯°±²³´
182: ¶·¸¹º»¼½¾¿ÀÁÂÃÄÅÆÇÈÉÊËÌÍÎÏÐÑÒÓÔÕÖרÙÚÛÜÝÞßàáâãäåæçèéêëìíîïðñòóôõö÷øùúûüýþÿ
232: èéêëìíîïðñòóôõö÷øùúûüýþÿ
332: Œœ
532: Ƀ
682: ˆˇ ˘˙˚
732: ˜˝
932: μ
8182: –— '' ""
8232: ‹›
8332: €
8582: ←↑→↓ ↖↗↘↙
57582: 
61432:  
983032: 
983082:  
983132:  
\end{verbatim}

Spark-BarNarrow

\begin{verbatim}
32: !"#$%\&'()*+,-./0123456789:;<=>?@ABCDEFGHIJKLMNOPQRSTUVWXYZ\_\^\`abcdefghijklmnopqrstuvwxyz{|}~
82: RSTUVWXYZ\[\]^_`abcdefghijklmnopqrstuvwxyz{|}~
132: ¡¢£¤¥¦§¨©ª«¬-®¯°±²³´
182: ¶·¸¹º»¼½¾¿ÀÁÂÃÄÅÆÇÈÉÊËÌÍÎÏÐÑÒÓÔÕÖרÙÚÛÜÝÞßàáâãäåæçèéêëìíîïðñòóôõö÷øùúûüýþÿ
232: èéêëìíîïðñòóôõö÷øùúûüýþÿ
332: Œœ
532: Ƀ
682: ˆˇ ˘˙˚
732: ˜˝
932: μ
8182: –— '' ""
8232: ‹›
8332: €
8582: ←↑→↓ ↖↗↘↙
57582: 
61432:  
983032: 
983082:  
983132:  
\end{verbatim}
References


