The \texttt{stealcaps} package\textsuperscript{*}

Ruben Giannotti\textsuperscript{†}

November 7, 2022

This little package is mainly meant to be used when there is a (TrueType or OpenType) font that does not provide real small capitals. Some tend to use uppercased letters as a workaround — it is a bad workaround! In fact, I consider it better practice to borrow, or steal, the small capitals from another font. And this is exactly what the package does. This might also be useful in the rare case that someone does not like the present small capitals, and wants to change them, or likes those from another font better.

However, to achieve the borrowing one does only need to load the package and specify the name of the target font via the \texttt{from} option:

\begin{verbatim}
\usepackage[from=⟨font name⟩]{stealcaps}
\end{verbatim}

It works with both pdf\TeX and its successors Xe\TeX and Lua\TeX. In the first case you have to make sure the font name is NFSS compliant. Otherwise, it has to be \texttt{fontspec} compliant.

As for v1.1 in Xe\TeX and Lua\TeX you are able to use

\begin{verbatim}
\renewcaps{⟨font name⟩}
\end{verbatim}

to override \texttt{\scshape} altogether. This is mainly meant to be used if you have a single purpose font that provides only small capitals, e.g.:

\begin{verbatim}
\renewcaps{Cormorant SC}
\end{verbatim}

The implementation is rather simple and straightforward.

As usual, we start by loading what is required:

\begin{verbatim}
1 \RequirePackage{pgfopts}
2 \RequirePackage{iftex}
3 \ifPDFTeX\else
4 \RequirePackage{fontspec}
5 \fi
\end{verbatim}

\textsuperscript{*}This document corresponds to \texttt{stealcaps} v1.1, dated 2022/11/07.
\textsuperscript{†}ruben dot giannotti at gmx dot net
Then we set up the only package option and commence its processing.

\begin{verbatim}
6 \pgfkeys{
7 /stc/.cd,
8 from/.store in=\fontfromstc
9 }
10 \ProcessPgfOptions{/stc}
\end{verbatim}

To distinguish between the operating engines there are two macros to select the replacement font (one for \texttt{fontspec} powered ones and one for good old pdf\TeX), which then are \texttt{\let} to \texttt{\fontstc} according to the engine in use.

\begin{verbatim}
11 \def\fontxeorluastc{\fontspec}
12 \def\fontpdfstc{\fontfamily}
13 \def\selectfontorrelaxstc{\relax}
14 \ifPDFTeX
15 \let\fontstc\fontpdfstc
16 \let\selectfontorrelaxstc\selectfont
17 \else
18 \let\fontstc\fontxeorluastc
19 \fi
\end{verbatim}

The replacement font is loaded by employing \texttt{\fontstc} inside a group and substituting the small captials fonts employing \texttt{\DeclareFontShape} with 'ssub'.

\begin{verbatim}
20 \begingroup
21 \ifx\fontfromstc\@empty\else
22 \fontstc\fontfromstc\selectfontorrelaxstc
23 \DeclareFontShape{\f@encoding}{\rmdefault}{m}{sc}{%<-> ssub * \f@family/m/sc
24 }{}
25 \DeclareFontShape{\f@encoding}{\rmdefault}{bx}{sc}{%<-> ssub * \f@family/bx/sc
26 }{}
27 \fi
28 \endgroup
\end{verbatim}

At last there is a user macro for Xe\TeX and Lua\TeX environments to renew \texttt{\scshape} to a dedicated only small capitals TrueType or OpenType font, e.g. \texttt{\renewcaps\{Cormorant SC\}}.

\begin{verbatim}
31 \newcommand*\renewcaps[1]{%\%
32 \ifPDFTeX
33 \typeout{\%
34 You tried to use \textbackslash \renewcaps in pdf\LaTeX,\n35 which isn’t needed.\n36 Or did you mean to use Xe\LaTeX or Lua\LaTeX?\n37 }\else
38 \providefontfamily\scshape{#1}%
39 \renewfontfamily\scshape{#1}%
40 \fi
41 }
42 \end{verbatim}