

# cs-techrep

## Technical Reports in Computer Science and Software Engineering

Christoph P. Neumann <cyberpetaneuron@gmail.com>

Version 0.2

### Abstract

The `cs-techrep` class provides a convenient environment for writing technical reports in computer science and software engineering. The style is adopted from IEEE. The `cs-techrep` class requires the `latex/pdflatex` in combination with `bibtex` using a `biber` backend.

## 1 Installation

The `zip` or `tar.gz` file comes with a `cs-techrep.ins` and a `cs-techrep.dtx` file included which contains the  $\LaTeX$  stuff.

To extract the class files call:

```
$ latex cs-techrep.ins
```

This call will extract all  $\LaTeX$  specific files to the current directory. You can either use the files for a single cv project or you can integrate the files into your  $\TeX$  installation.

If you just want to use `cs-techrep` for a single curriculum vitae project, the simplest way is just to copy the generated files to the folder of the project.

If you want to integrate `cs-techrep` into your  $\TeX$  installation, create a directory `tex/latex/cs-techrep` beneath your  $\TeX$  installation (e.g. beneath `/usr/share/texmf`) and copy all files from the current directory there. Now call:

```
$ mktexlsr
```

to update the file-cache of  $\LaTeX$ .

Hint: The `cs-techrep` distribution contains a sample `docstrip` configuration in `docstrip.cfg` via which files can be distributed automatically to their correct positions inside a  $\LaTeX$  installation. Feel free to adapt this file to your environment and afterwards call `latex cs-techrep.ins` to install the package to its right place.

## 2 Templates

For a quick start the `iarla-lite` distribution contains document templates. The templates can be found in the `cs-techrep-example-neumann.zip` file.

## 3 Documentclass

`documentclass cs-techrep` This package provides the documentclass `cs-techrep`. The documentclass supports the following options:

- `conference` Passed to `IEEEtran`
- `a4paper` Passed to `IEEEtran`
- `flushend` Activate `flushend` package
- `pbalance` Activate `pbalance` package

## 4 Requirements

We instrument several other  $\text{L}^{\text{A}}\text{T}_{\text{E}}\text{X}$  packages for different purposes, which must be available under your installation.

- `IEEEtran`
- `acronym`
- `afterpage`
- `babel`
- `biblatex`
- `booktabs`
- `ccicons`
- `cleveref`
- `csquotes`
- `diagbox`
- `etoolbox`
- `extdash`
- `flushend`
- `fontenc`
- `graphicx`

- `hypcap`
- `hyperref`
- `hyperref`
- `inputenc`
- `lipsum`
- `listings`
- `lmodern`
- `lscape`
- `microtype`
- `newtxtt`
- `orcidlink`
- `paralist`
- `pbalance`
- `pdfcomment`
- `pdfscape`
- `siunitx`
- `stfloats`
- `subfig`
- `tcolorbox`
- `times`
- `upquote`
- `url`
- `xcolor`
- `xpatch`
- `xspace`

## 5 The Code

```
1 @echo off
2
3 rem *****
4 rem * author: Christoph P. Neumann
5 rem *****
6 cd /d "%~dp0"
7
8 echo == ..\examples\* ==
9 for /D %%D in (..\examples\*) do (
10  echo == %%D ==
11  xcopy /Y ".\*.cls" "%~D"
12 )
13
14 pause
15
16 % # Copyright (c) 2023 Christoph P. Neumann,
17 % # Copyright (c) 2018-2021 Oliver Kopp
18 % # Reference: https://latextemplates.github.io/
19 % !TeX spellcheck = en-US
20 % LTeX: language=en-US
21 % !TeX encoding = utf8
22 % !TeX program = pdflatex
23 % !BIB program = biblatex / biber
24
25 % Declare that this document class file requires at least LaTeX version 2e.
26 \NeedsTeXFormat{LaTeX2e}
27
28 % Provide the name of your document class, the date it was last updated, and a comment about
29 \ProvidesClass{cs-techrep}[2024/04/10 Technical Reports in Computer Science and Software Engi
30
31 % Define marker counter for options (counter are global in latex):
32 \newcounter{cstechrep@pbalancetracker}
33 \newcounter{cstechrep@flushendtracker}
34
35 % Declare options:
36 \DeclareOption{onecolumn}{\OptionNotUsed} % IEEE option onecolumn will be ignored
37
38 \DeclareOption{pbalance}{
39   \setcounter{cstechrep@pbalancetracker}{1}
40   \typeout{cs-techrep class: pbalance option is set.}
41 }
42 \DeclareOption{flushend}{
43   \setcounter{cstechrep@flushendtracker}{1}
44   \typeout{cs-techrep class: flushend option is set.}
45 }
46
47 % We'll pass any document class options along to the underlying class
48 \DeclareOption*{
49   \PassOptionsToClass{\CurrentOption}{IEEEtran}% recommended IEEE options: conference,a4paper
50 }
51
52 % Now we'll execute any options passed in
```

```

53 \ProcessOptions\relax
54
55 % Instead of defining each and every little detail required to create a new document class,
56 % you can base your class on an existing document class.
57 \LoadClass{IEEEtran}
58
59 % This template has been tested with IEEEtran of 2015.
60
61 % =====
62 % USER PROVIDED VARIABLES
63
64 \makeatletter
65 \newcommand*\DefcstechrepVar[1]{\@namedef{cstechrep#1}##1{\global\@namedef{cstechrep#1}{##1}}}
66 \makeatother
67
68 \DefcstechrepVar{AuthorListTex}
69 \DefcstechrepVar{AuthorListBib} % Use *and* as author separator!
70 \DefcstechrepVar{TitleTex}
71 \DefcstechrepVar{TitleBib}
72 \DefcstechrepVar{Department} % e.g., Department of Electrical Engineering, Media and Computer Science
73 \DefcstechrepVar{Institution} % e.g., Ostbayerische Technische Hochschule Amberg-Weiden
74 \DefcstechrepVar{Address} % e.g., Amberg, Germany
75 \DefcstechrepVar{Series} % e.g., Technical Reports
76 \DefcstechrepVar{Year} % e.g., 2023
77 \DefcstechrepVar{Title}
78 \DefcstechrepVar{Month} % e.g., 6 (for June)
79 \DefcstechrepVar{Number} % e.g., CL-2023-42
80 \DefcstechrepVar{Lang} % e.g., english = en-US (or: ngerman = DE)
81 % =====
82
83 % backticks (‘) are rendered as such in verbatim environments.
84 % See following links for details:
85 % - https://tex.stackexchange.com/a/341057/9075
86 % - https://tex.stackexchange.com/a/47451/9075
87 % - https://tex.stackexchange.com/a/166791/9075
88 \RequirePackage{upquote}
89
90 % Set English as language and allow to write hyphenated"=words
91 %
92 % Even though ‘american’, ‘english’ and ‘usenglish’ are synonyms for babel package (according to the babel manual)
93 % english has to go last to set it as default language
94 \RequirePackage[ngerman,main=english]{babel}
95 %
96 % Hint by http://tex.stackexchange.com/a/321066/9075 -> enable "=" as dashes
97 \addto\extrasenglish{\languageshorthands{ngerman}\usesshorthands{}}
98
99 \RequirePackage{lmodern} % CM variant with scalable font (to prevent "pdfTeX error (font expansion limit exceeded)" error)
100 \RequirePackage{times} % Times New Roman, because IEEE is based on Times (and not CM/lmodern)
101
102 % Links behave as they should. Enables "\url{...}" for URL typesettings.
103 % Allow URL breaks also at a hyphen, even though it might be confusing: Is the "-" part of the URL?
104 % See https://tex.stackexchange.com/a/3034/9075.
105 \RequirePackage[hyphens]{url}
106

```

```

107 % When activated, use text font as url font, not the monospaced one.
108 % For all options see https://tex.stackexchange.com/a/261435/9075.
109 % \urlstyle{same}
110
111 % Improve wrapping of URLs - hint by http://tex.stackexchange.com/a/10419/9075
112 \makeatletter
113 \g@addto@macro{\UrlBreaks}{\UrlOrds}
114 \makeatother
115
116 % nicer // - solution by http://tex.stackexchange.com/a/98470/9075
117 % DO NOT ACTIVATE -> prevents line breaks
118 %\makeatletter
119 %\def\url@twoslashes{\mathchar'\@ifnextchar/{\kern-.2em}{}}
120 \g@addto@macro\url@twoslashes{\do/{\url@twoslashes}}
121 %\makeatother
122
123 % use nicer font for code
124 \RequirePackage[zerostyle=b,scaled=.75]{newtxtt}
125
126 % inputenc must be loaded before biblatex
127 \RequirePackage[utf8]{inputenc}
128
129 % Has to be loaded AFTER any font packages. See https://tex.stackexchange.com/a/2869/9075.
130 \RequirePackage[T1]{fontenc}
131
132
133 % Character protrusion and font expansion. See http://www.ctan.org/tex-archive/macros/latex/
134 \RequirePackage[
135   babel=true, % Enable language-specific kerning. Take language-settings from the language of
136   expansion=alltext,
137   protrusion=alltext-nott, % Ensure that at listings, there is no change at the margin of the
138   nopatch=eqnum, % fix unable to apply patch eqnum
139   final % Always enable microtype, even if in draft mode. This helps finding bad boxes quickly
140   % In the standard configuration, this template is always in the final mode, so this
141 ]{microtype}
142
143 % \texttt{test -- test} keeps the "--" as "--" (and does not convert it to an en dash)
144 \DisableLigatures{encoding = T1, family = tt* }
145
146 %\DeclareMicrotypeSet*[tracking]{my}{ font = */*/*/sc/* }%
147 %\SetTracking{ encoding = *, shape = sc }{ 45 }
148 % Source: http://homepage.ruhr-uni-bochum.de/Georg.Verweyen/pakete.html
149 % Deactivated, because does not look good
150
151 \RequirePackage{graphicx}
152
153 % Creative Commons
154 \RequirePackage{ccicons}
155
156 % Diagonal lines in a table - http://tex.stackexchange.com/questions/17745/diagonal-lines-in-
157 % Slashbox is not available in texlive (due to licensing) and also gives bad results. Thus, w
158 \RequirePackage{diagbox}
159
160 \RequirePackage[cmym, table]{xcolor}

```

```

161
162 \RequirePackage[nolist]{acronym}
163
164 % Code Listings
165 \RequirePackage{listings}
166
167 \definecolor{eclipseStrings}{RGB}{42,0.0,255}
168 \definecolor{eclipseKeywords}{RGB}{127,0,85}
169 \colorlet{numb}{magenta!60!black}
170
171 % JSON definition
172 % Source: https://tex.stackexchange.com/a/433961/9075
173
174 \lstdefinlanguage{json}{
175     basicstyle=\normalfont\ttfamily,
176     commentstyle=\color{eclipseStrings}, % style of comment
177     stringstyle=\color{eclipseKeywords}, % style of strings
178     numbers=left,
179     numberstyle=\scriptsize,
180     stepnumber=1,
181     numbersep=8pt,
182     showstringspaces=false,
183     breaklines=true,
184     frame=lines,
185     % backgroundcolor=\color{gray}, %only if you like
186     string=[s]{"}{"},
187     comment=[l]{:\ },
188     morecomment=[l]{:"},
189     literate=
190     *{0}{{{\color{numb}0}}}{1}
191     {1}{{{\color{numb}1}}}{1}
192     {2}{{{\color{numb}2}}}{1}
193     {3}{{{\color{numb}3}}}{1}
194     {4}{{{\color{numb}4}}}{1}
195     {5}{{{\color{numb}5}}}{1}
196     {6}{{{\color{numb}6}}}{1}
197     {7}{{{\color{numb}7}}}{1}
198     {8}{{{\color{numb}8}}}{1}
199     {9}{{{\color{numb}9}}}{1}
200 }
201
202 \lstset{
203     % everything between (* *) is a latex command
204     escapeinside={(*}{*)},
205     %
206     language=json,
207     %
208     showstringspaces=false,
209     %
210     extendedchars=true,
211     %
212     basicstyle=\footnotesize\ttfamily,
213     %
214     commentstyle=\slshape,

```

```

215 %
216 % default: \rmfamily
217 stringstyle=\ttfamily,
218 %
219 breaklines=true,
220 %
221 breakatwhitespace=true,
222 %
223 % alternative: fixed
224 columns=flexible,
225 %
226 numbers=left,
227 %
228 numberstyle=\tiny,
229 %
230 basewidth=.5em,
231 %
232 xleftmargin=.5cm,
233 %
234 % aboveskip=0mm,
235 %
236 % belowskip=0mm,
237 %
238 captionpos=b
239 }
240
241 % Enable Umlauts when using \lstinputputlisting.
242 % See https://stackoverflow.com/a/29260603/873282 für details.
243 % listingsutf8 did not work in June 2020.
244 \lstset{literate=
245   {á}{\`a}}1 {é}{\`e}}1 {í}{\`i}}1 {ó}{\`o}}1 {ú}{\`u}}1
246   {Á}{\`A}}1 {É}{\`E}}1 {Í}{\`I}}1 {Ó}{\`O}}1 {Ú}{\`U}}1
247   {à}{\`a}}1 {è}{\`e}}1 {ì}{\`i}}1 {ò}{\`o}}1 {ù}{\`u}}1
248   {À}{\`A}}1 {È}{\`E}}1 {Ì}{\`I}}1 {Ò}{\`O}}1 {Û}{\`U}}1
249   {ä}{\`ä}}1 {ë}{\`e}}1 {ï}{\`i}}1 {ö}{\`ö}}1 {ü}{\`u}}1
250   {Ä}{\`Ä}}1 {Ë}{\`E}}1 {Ï}{\`I}}1 {Ö}{\`Ö}}1 {Ü}{\`U}}1
251   {â}{\`a}}1 {ê}{\`e}}1 {î}{\`i}}1 {ô}{\`o}}1 {û}{\`u}}1
252   {Ă}{\`A}}1 {Ě}{\`E}}1 {Ī}{\`I}}1 {Ŏ}{\`O}}1 {Ū}{\`U}}1
253   {Ǻ}{\`A}}1 {ǻ}{\`a}}1 {Ǫ}{\`O}}1 {Ǿ}{\`o}}1
254   {œ}{\`oe}}1 {Œ}{\`OE}}1 {æ}{\`ae}}1 {Æ}{\`AE}}1 {ß}{\`ss}}1
255   {ᵤ}{\`H{u}}1 {ᵁ}{\`H{U}}1 {ᵐ}{\`H{o}}1 {ᵒ}{\`H{O}}1
256   {ç}{\`c c}}1 {Ç}{\`c C}}1 {ø}{\`o}}1 {å}{\`r a}}1 {Å}{\`r A}}1
257 }
258
259 % Nicier tables (\toprule, \midrule, \bottomrule)
260 \RequirePackage{booktabs}
261
262 % Extended enumerate, such as \begin{compactenum}
263 \RequirePackage{paralist}
264
265 % Read: Is there a disadvantage to using natbib=true with biblatex?
266 % https://tex.stackexchange.com/questions/149313/is-there-a-disadvantage-to-using-natbib-true
267 % Substitutions:
268 % Natbib \textcite = biblatex \textcite

```



```

269 % Natbib \citep = biblatex \parencite
270
271 \RequirePackage[
272   defernumbers=true, % required due to self-cite
273   %style=ieee, % english only
274   sorting=none, % nty, nyt, nyvt, anyt, anyvt, ynt, ydnt, none, debug
275   sortcites=false,
276   citestyle=numeric-comp,
277   bibstyle=numeric,
278   backend=biber,
279   bibencoding=utf8, % = auto, utf8, ascii
280   hyperref=true, % activate hyperref support
281   backref=false, % activate backrefs
282   isbn=true,
283   url=true,
284   doi=true,
285   urldate=terse, % = iso, year, short, long, terse
286   maxnames=5, % max number of names in text ??
287   minnames=1, % min number of names in text ??
288   maxbibnames=99, % max number of names in bibliography
289   minbibnames=1, % number of names in bibliography (bevor et al)
290   maxcitenames=99, % max number of names in text ??
291   mincitenames=1, % max number of names in text ??
292   giveninits=false, % abbreviate first names
293   uniquename=init, % otherwise option conflict with firstinits=true
294   autolang=other
295 ]{biblatex}
296
297 % Prevent citations in the references are being numbered as '0' in ArXiv
298 % https://tex.stackexchange.com/questions/463556/all-the-citations-in-the-references-are-bein
299 \makeatletter
300 \let\blx@rerun@biber\relax
301 \makeatother
302
303 \addbibresource{selfref.bib} % selfref.bib needs to be generated, containing a bibentry with
304 \DeclareBibliographyCategory{selfref}
305 \addtocategory{selfref}{selfref}
306 % How to use: \printbibliography[notcategory=selfref]
307
308 % Same fontsize as without natbib
309 \renewcommand{\bibfont}{\normalfont\small}
310
311 % Enable hyperlinked author names in the case of \textcite
312 % Source: https://tex.stackexchange.com/a/76075/9075
313 \RequirePackage{etoolbox}
314 \makeatletter
315 \patchcmd{\NAT@test}{\else \NAT@nm}{\else \NAT@hyper@{\NAT@nm}}{}{}
316 \makeatother
317
318 \makeatletter
319 \DeclareCiteCommand{\citemonth}
320   {\usebibmacro{prenote}}
321   {%
322     \let\oldabx@bibmonth\abx@bibmonth%

```

```

323   \let\abx@bibmonth\blx@imc@biblstring\typeout{CHG: abx@bibmonth \meaning\abx@bibmonth}% f
324   \setkeys{blx@opt@pre}{dateabbrev=false}% nowork
325   \mkbibmonth{\thefield{month}}%
326   \let\abx@bibmonth\oldabx@bibmonth% restore
327 }
328 {\multicitedelim}
329 {\usebibmacro{postnote}}
330 \makeatother
331
332 % Enable nice comments
333 \RequirePackage{pdfcomment}
334
335 \newcommand{\commentontext}[2]{\colorbox{yellow!60}{#1}\pdfcomment[color={0.234 0.867 0.211},
336 \newcommand{\commentatside}[1]{\pdfcomment[color={0.045 0.278 0.643},icon=Note]{#1}}
337
338 % Compatiblity with packages todo, easy-todo, todonotes
339 \newcommand{\todo}[1]{\commentatside{#1}}
340
341 % Compatiblity with package fixmetodonotes
342 \newcommand{\TODO}[1]{\commentatside{#1}}
343
344 % Put footnotes below floats
345 % Source: https://tex.stackexchange.com/a/32993/9075
346 \RequirePackage{stfloats}
347 \fnbelowfloat
348
349 \RequirePackage[group-minimum-digits=4,per-mode=fraction]{siunitx}
350 \addto\extrasgerman{\sisetup{locale = DE}}
351
352 % Enable that parameters of \cref{}, \ref{}, \cite{}, ... are linked so that a reader can cli
353 \RequirePackage{hyperref}
354
355 % Enable hyperref without colors and without bookmarks
356 \hypersetup{
357   hidelinks,
358   colorlinks=true,
359   allcolors=black,
360   pdfstartview=Fit,
361   breaklinks=true
362 }
363
364 % Enable correct jumping to figures when referencing
365 \RequirePackage[all]{hypcap}
366
367 \RequirePackage{orcidlink}
368
369 % For easy quotations: \enquote{text}
370 % This package is very smart when nesting is applied, otherwise textcmds (see below) provides
371 \RequirePackage[autostyle=true]{csquotes}
372
373 % Enable using "quote" - see https://tex.stackexchange.com/a/150954/9075
374 \defineshorthand{"'}{\openautoquote}
375 \defineshorthand{"'"}{\closeautoquote}
376

```

```

377 % amsmath must be loaded before cleveref
378 \usepackage{amsmath,amssymb,amsfonts}
379
380 % Extensions for references inside the document (\cref{fig:sample}, ...)
381 % Enable usage \cref{...} and \Cref{...} instead of \ref: Type of reference included in the l
382 % That means, "Figure 5" is a full link instead of just "5".
383 \RequirePackage[capitalise,nameinlink,noabbrev]{cleveref}
384
385 \crefname{listing}{Listing}{Listings}
386 \Crefname{listing}{Listing}{Listings}
387 \crefname{lstlisting}{Listing}{Listings}
388 \Crefname{lstlisting}{Listing}{Listings}
389
390 \RequirePackage{lipsum}
391
392 \RequirePackage{tcolorbox}
393 \tcbuselibrary{listings}
394
395 %introduce \powerset - hint by http://matheplanet.com/matheplanet/nuke/html/viewtopic.php?top
396 \DeclareFontFamily{U}{MnSymbolC}{}
397 \DeclareSymbolFont{MnSyC}{U}{MnSymbolC}{m}{n}
398 \DeclareFontShape{U}{MnSymbolC}{m}{n}{
399   <-6> MnSymbolC5
400   <6-7> MnSymbolC6
401   <7-8> MnSymbolC7
402   <8-9> MnSymbolC8
403   <9-10> MnSymbolC9
404   <10-12> MnSymbolC10
405   <12-> MnSymbolC12%
406 }{}
407 \DeclareMathSymbol{\powerset}{\mathord}{MnSyC}{180}
408
409 \RequirePackage{xspace}
410 %\newcommand{\eg}{e.\,g.\,xspace}
411 %\newcommand{\ie}{i.\,e.\,xspace}
412 \newcommand{\eg}{e.\,g.,\ }
413 \newcommand{\ie}{i.\,e.,\ }
414
415 % Enable hyphenation at other places as the dash.
416 % Example: applicaiton\hydash specific
417 \makeatletter
418 \newcommand{\hydash}{\penalty\@M-\hskip\z@skip}
419 % Definition of "=" taken from http://mirror.ctan.org/macros/latex/contrib/babel-contrib/germa
420 \makeatother
421
422 % Add manual adapted hyphenation of English words
423 % See https://ctan.org/pkg/hyphenex and https://tex.stackexchange.com/a/22892/9075 for detail
424 % Does not work on MiKTeX, therefore disabled - issue reported at https://github.com/MiKTeX/m
425 % \input{ushyphex}
426
427 % Enable copy and paste of text from the PDF
428 % Only required for pdflatex. It "just works" in the case of lualatex.
429 % Alternative: cmap or mmap package
430 % mmap enables mathematical symbols, but does not work with the newtx font set

```

```

431 % See: https://tex.stackexchange.com/a/64457/9075
432 % Other solutions outlined at http://goemonx.blogspot.de/2012/01/pdflatex-ligaturen-und-copyr
433 % Trouble shooting outlined at https://tex.stackexchange.com/a/100618/9075
434 %
435 % According to https://tex.stackexchange.com/q/451235/9075 this is the way to go
436 \input glyphtounicode
437 \pdfgentounicode=1
438
439 \RequirePackage{lscape}
440 \RequirePackage{pdfscape}
441 \RequirePackage{afterpage}
442
443 % Allows to hyphenate a word that contains a dash:
444 % https://stackoverflow.com/questions/2193307/how-do-i-get-latex-to-hyphenate-a-word-that-con
445 \RequirePackage[shortcuts]{extdash} % Use \-/ for a breakable dash that does not prevent the
446
447 % Improve wrapping of URLs - hint by http://tex.stackexchange.com/a/10419/9075
448 \makeatletter
449 \def\ps@IEEEtitlepagestyle{
450   \def\@oddfont{\mycopyrightnotice}
451   \def\@evenfont{}
452 }
453 \def\mycopyrightnotice{
454   {\footnotesize
455     \begin{minipage}{0.8\textwidth}
456       \centering
457       % Creative Commons / Open Access:
458       \href{https://creativecommons.org/licenses/by/4.0/}{\ccby} This work is licensed under a
459       % Citation advice:
460       \\Please cite as: \fullcite{selfref}.
461     \end{minipage}
462   }
463 }
464 \makeatother
465
466 \makeatletter
467 % allows for forcing command expansion inside a filecontents* environment
468 % (cf. https://tex.stackexchange.com/questions/534035/macros-commands-inside-a-filecontents-e)
469 \def\filecontentsForceExpansion#1#2#3{
470   \global\let\ltxspecials\dospecials
471   \gdef\dospecials{\ltxspecials
472     \catcode'#1=0
473     \catcode'#2=1
474     \catcode'#3=2
475   \global\let\dospecials\ltxspecials
476   }
477 }
478 \makeatother
479
480 \title{\cstechrepTitleTex}
481
482 \author{
483 \IEEEauthorblockN{\cstechrepAuthorListTex}
484 \IEEEauthorblockA{%

```

```

485 \cstechrepDepartment\\
486 \cstechrepInstitution\\
487 \cstechrepAddress
488 }}
489
490 \IEEEspecialpapernotice{\cstechrepSeries: \cstechrepNumber, \citemonth{selfref} \cstechrepYear}
491
492 % Balance/level columns at the last page / in bibliography
493 % DISCLAIMER: No solution is a 100%/perfect one!
494 % Mainstream option: pbalance (see https://ctan.org/pkg/pbalance)
495 % BUT: incompatible with arxiv automated process (!)
496 \ifnum\value{cstechrep@pbalance} = 1
497   \typeout{cs-techrep class: load pbalance package.}
498   \RequirePackage{pbalance}
499 \fi
500 % Flushend => works with arxiv, but major incompatibility with lineno (and, thus, also with m
501 \ifnum\value{cstechrep@flushend} = 1
502   \typeout{cs-techrep class: load flushend package.}
503   \RequirePackage{flushend}
504 \fi
505
506 % Finally, we'll use \endinput to indicate that LaTeX can stop reading this file. LaTeX will
507 \endinput

```