

cs-techrep

Technical Reports in Computer Science and Software Engineering

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Version 0.4

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 `biblatex` 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 `iaria-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`
- `subfig` Loads `subfig` package with custom style settings
- `subcaption` Loads `subcaption` package with custom style settings
- `flushend` Activate `flushend` package (compatible with arXiv build process)
- `pbalance` Activate `pbalance` package (incompatible with arXiv build process)

A Remark about two-column document balancing on the last page: The `flushend` package is recommended, because it works within the arXiv automated build process. However, `flushend` has a major incompatibility with package `lineno`, which is, e.g., transitively loaded by package `mindflow`. Thus, in case when `flushend` does not have any effect, check whether one of your packages loads `lineno`. Usually you are stuck with your packages and, thus, will instead be forced to switch from `flushend` to `pbalance`. Please be aware that `pbalance` works great and has high compatibility, but unfortunately it will not have any effect within the arXiv automated build process. In case of both, a somehow needed `lineno` package and an intended arXiv upload, I recommend to do without two-column balancing on the last page and just to stay away from both `flushend` and `pbalance`, in order to ensure that your paper is layouted identically in any initial publication and a later arXiv upload. I hope this remark proves helpful, it took me some nerve to find out.

There is also another important difference between `flushend` and `pbalance`: the handling of footnotes on the last page. `Flushend` provides a decent result, but the result of `pbalance` is incomprehensible. I strongly recommend avoiding footnotes on the last page. If you absolutely need footnotes on the last page, consider staying away from two-column balancing on the last page.

About subfigures: Both well-known packages `subfig` and `subcaption` can be used. However, they are not compatible with each other and we can either load one or the other. The document class provides options to load them for you with some customized style settings.

4 Requirements

We instrument several other \LaTeX packages for different purposes, which must be available under your installation.

- IEEEtran
- acronym
- afterpage
- babel
- biblatex
- booktabs
- ccicons
- cleveref
- csquotes
- diagbox
- doclicense
- etoolbox
- extdash
- flushend
- fontenc
- graphicx
- hypcap
- hyperref
- hyperref
- inputenc
- lipsum
- listings
- lmodern
- lscape
- microtype
- newtxtt
- orcidlink

- paralist
- pbalance
- pdfcomment
- pdfscape
- siunitx
- stfloats
- subcaption
- 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 %# Copyright (c) 2023 Christoph P. Neumann,
16 %# Copyright (c) 2018-2021 Oliver Kopp
17 %# Reference: https://latextemplates.github.io/
18
19 % !TeX spellcheck = en-US
20 % !TeX 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}[2024/09/16 Technical Reports in Computer Science and Software Engi
30
31 % Define marker counter for options (counter are global in latex):
32 \newcounter{cstechrep@subfigtracker}
33 \newcounter{cstechrep@subcaptiontracker}
34 \newcounter{cstechrep@pbalancetracker}
35 \newcounter{cstechrep@flushendtracker}
36
37 % Declare options:
38
39 \DeclareOption{subfig}{
40   \setcounter{cstechrep@subfigtracker}{1}
41   \typeout{cs-techrep class: subfig option is set (use subfloat command).}
42 }
43 \DeclareOption{subcaption}{
44   \setcounter{cstechrep@subcaptiontracker}{1}
45   \typeout{cs-techrep class: subcaption option is set (use subfigure command).}
46 }
47
48 \DeclareOption{onecolumn}{\OptionNotUsed} % IEEE option onecolumn will be ignored
49
50 \DeclareOption{pbalance}{
51   \setcounter{cstechrep@pbalancetracker}{1}
52   \typeout{cs-techrep class: pbalance option is set.}
53 }
54 \DeclareOption{flushend}{
55   \setcounter{cstechrep@flushendtracker}{1}
56   \typeout{cs-techrep class: flushend option is set.}
57 }
58
59 % We'll pass any document class options along to the underlying class
60 \DeclareOption*{%
61   \PassOptionsToClass{\CurrentOption}{IEEEtran}% recommended IEEE options: conference,a4paper
62 }
63
64 % Now we'll execute any options passed in
65 \ProcessOptions\relax
66
67 % Instead of defining each and every little detail required to create a new document class,
68 % you can base your class on an existing document class.
69 \LoadClass{IEEEtran}
70
71 % This template has been tested with IEEEtran of 2015.
72
73 % =====
74 % USER PROVIDED VARIABLES
75
76 \makeatletter
77 \newcommand*\DefcstechrepVar[1]{\@namedef{cstechrep#1}##1{\global\@namedef{cstechrep#1}{##1}}}

```

```

78 \makeatother
79
80 \DefcstechrepVar{AuthorListTex}
81 \DefcstechrepVar{AuthorListBib} % Use *and* as author separator!
82 \DefcstechrepVar{TitleTex}
83 \DefcstechrepVar{TitleBib}
84 \DefcstechrepVar{Department} % e.g., Department of Electrical Engineering, Media and Comput
85 \DefcstechrepVar{Institution} % e.g., Ostbayerische Technische Hochschule Amberg-Weiden
86 \DefcstechrepVar{Address} % e.g., Amberg, Germany
87 \DefcstechrepVar{Type} % e.g., Technical Report
88 \DefcstechrepVar{Year} % e.g., 2023
89 \DefcstechrepVar{Title}
90 \DefcstechrepVar{Month} % e.g., 6 (for June)
91 \DefcstechrepVar{Number} % e.g., CL-2023-42
92 \DefcstechrepVar{Lang} % e.g., english = en-US (or: ngerman = DE)
93 % =====
94
95 % backticks (‘) are rendered as such in verbatim environments.
96 % See following links for details:
97 % - https://tex.stackexchange.com/a/341057/9075
98 % - https://tex.stackexchange.com/a/47451/9075
99 % - https://tex.stackexchange.com/a/166791/9075
100 \RequirePackage{upquote}
101
102 % Set English as language and allow to write hyphenated"=words
103 %
104 % Even though ‘american‘, ‘english‘ and ‘usenglish‘ are synonyms for babel package (according
105 % english has to go last to set it as default language
106 \RequirePackage[ngerman,main=english]{babel}
107 %
108 % Hint by http://tex.stackexchange.com/a/321066/9075 -> enable "= as dashes
109 \addto\extrasenglish{\languageshorthands{ngerman}\usesshorthands{}}
110
111 \RequirePackage{lmodern} % CM variant with scalable font (to prevent "pdfTeX error (font expa
112 \RequirePackage{times} % Times New Roman, because IEEE is based on Times (and not CM/lmodern)
113
114 % Links behave as they should. Enables "\url{...}" for URL typesettings.
115 % Allow URL breaks also at a hyphen, even though it might be confusing: Is the "-" part of th
116 % See https://tex.stackexchange.com/a/3034/9075.
117 \RequirePackage[hyphens]{url}
118
119 % When activated, use text font as url font, not the monospaced one.
120 % For all options see https://tex.stackexchange.com/a/261435/9075.
121 % \urlstyle{same}
122
123 % Improve wrapping of URLs - hint by http://tex.stackexchange.com/a/10419/9075
124 \makeatletter
125 \g@addto@macro{\UrlBreaks}{\UrlOrds}
126 \makeatother
127
128 % nicer // - solution by http://tex.stackexchange.com/a/98470/9075
129 % DO NOT ACTIVATE -> prevents line breaks
130 \makeatletter
131 %\def\Utl@twoslashes{\mathchar‘\/\@ifnextchar/{\kern-.2em}{}}

```

```

132 %\g@addto@macro\UrlSpecials{\do\/{\Url@twoslashes}}
133 %\makeatother
134
135 % use nicer font for code
136 \RequirePackage[zerostyle=b,scaled=.75]{newtxtt}
137
138 % inputenc must be loaded before biblalex
139 \RequirePackage[utf8]{inputenc}
140
141 % Has to be loaded AFTER any font packages. See https://tex.stackexchange.com/a/2869/9075.
142 \RequirePackage[T1]{fontenc}
143
144
145 % Character protrusion and font expansion. See http://www.ctan.org/tex-archive/macros/latex/
146 \RequirePackage[
147   babel=true, % Enable language-specific kerning. Take language-settings from the language of
148   expansion=alltext,
149   protrusion=alltext-nott, % Ensure that at listings, there is no change at the margin of the
150   nopatch=eqnum, % fix unable to apply patch eqnum
151   final % Always enable microtype, even if in draft mode. This helps finding bad boxes quickl
152   % In the standard configuration, this template is always in the final mode, so this c
153 ]{microtype}
154
155 % \texttt{test -- test} keeps the "---" as "--" (and does not convert it to an en dash)
156 \DisableLigatures{encoding = T1, family = tt* }
157
158 %\DeclareMicrotypeSet*[tracking]{my}{ font = */*/*/sc/* }%
159 %\SetTracking{ encoding = *, shape = sc }{ 45 }
160 % Source: http://homepage.ruhr-uni-bochum.de/Georg.Verweyen/pakete.html
161 % Deactivated, because does not look good
162
163 \RequirePackage{graphicx}
164
165 % Creative Commons
166 \RequirePackage{ccicons}
167
168 % Diagonal lines in a table - http://tex.stackexchange.com/questions/17745/diagonal-lines-in-
169 % Slashbox is not available in texlive (due to licensing) and also gives bad results. Thus, w
170 \RequirePackage{diagbox}
171
172 \RequirePackage[cmym, table]{xcolor}
173
174 \RequirePackage[nolist,smaller]{acronym}
175
176 % Code Listings
177 \RequirePackage{listings}
178
179 \definecolor{eclipseStrings}{RGB}{42,0.0,255}
180 \definecolor{eclipseKeywords}{RGB}{127,0,85}
181 \colorlet{numb}{magenta!60!black}
182
183 % JSON definition
184 % Source: https://tex.stackexchange.com/a/433961/9075
185

```

```

186 \lstdefinlanguage{json}{
187     basicstyle=\normalfont\ttfamily,
188     commentstyle=\color{eclipseStrings}, % style of comment
189     stringstyle=\color{eclipseKeywords}, % style of strings
190     numbers=left,
191     numberstyle=\scriptsize,
192     stepnumber=1,
193     numbersep=8pt,
194     showstringspaces=false,
195     breaklines=true,
196     frame=lines,
197     % backgroundcolor=\color{gray}, %only if you like
198     string=[s]{"}{"},
199     comment=[l]{\ },
200     morecomment=[l]{:"},
201     literate=
202         *{0}{{{ \color{numb}0}}}{1}
203         {1}{{{ \color{numb}1}}}{1}
204         {2}{{{ \color{numb}2}}}{1}
205         {3}{{{ \color{numb}3}}}{1}
206         {4}{{{ \color{numb}4}}}{1}
207         {5}{{{ \color{numb}5}}}{1}
208         {6}{{{ \color{numb}6}}}{1}
209         {7}{{{ \color{numb}7}}}{1}
210         {8}{{{ \color{numb}8}}}{1}
211         {9}{{{ \color{numb}9}}}{1}
212 }
213
214 \lstset{
215     % everything between (* *) is a latex command
216     escapeinside={(*}{*)},
217     %
218     language=json,
219     %
220     showstringspaces=false,
221     %
222     extendedchars=true,
223     %
224     basicstyle=\footnotesize\ttfamily,
225     %
226     commentstyle=\slshape,
227     %
228     % default: \rmfamily
229     stringstyle=\ttfamily,
230     %
231     breaklines=true,
232     %
233     breakatwhitespace=true,
234     %
235     % alternative: fixed
236     columns=flexible,
237     %
238     numbers=left,
239     %

```



```

240 numberstyle=\tiny,
241 %
242 basewidth=.5em,
243 %
244 xleftmargin=.5cm,
245 %
246 % aboveskip=0mm,
247 %
248 % belowskip=0mm,
249 %
250 captionpos=b
251 }
252
253 % Enable Umlauts when using \lstinputputlisting.
254 % See https://stackoverflow.com/a/29260603/873282 für details.
255 % listingsutf8 did not work in June 2020.
256 \lstset{literate=
257   {á}{\`a}}1 {é}{\`e}}1 {í}{\`i}}1 {ó}{\`o}}1 {ú}{\`u}}1
258   {Á}{\`A}}1 {É}{\`E}}1 {Í}{\`I}}1 {Ó}{\`O}}1 {Ú}{\`U}}1
259   {à}{\`a}}1 {è}{\`e}}1 {ì}{\`i}}1 {ò}{\`o}}1 {ù}{\`u}}1
260   {À}{\`A}}1 {È}{\`E}}1 {Ì}{\`I}}1 {Ò}{\`O}}1 {Ù}{\`U}}1
261   {ä}{\`a}}1 {ë}{\`e}}1 {ï}{\`i}}1 {ö}{\`o}}1 {ü}{\`u}}1
262   {Ä}{\`A}}1 {Ë}{\`E}}1 {Ï}{\`I}}1 {Ö}{\`O}}1 {Ü}{\`U}}1
263   {â}{\`a}}1 {ê}{\`e}}1 {î}{\`i}}1 {ô}{\`o}}1 {û}{\`u}}1
264   {Ã}{\`A}}1 {Ê}{\`E}}1 {Î}{\`I}}1 {Ï}{\`O}}1 {Û}{\`U}}1
265   {Ä}{\`A}}1 {Å}{\`a}}1 {Ö}{\`O}}1 {Ø}{\`o}}1
266   {œ}{\`oe}}1 {E}{\`OE}}1 {æ}{\`ae}}1 {E}{\`AE}}1 {ß}{\`ss}}1
267   {h}{\`H}}1 {Ø}{\`H}}1 {ø}{\`H}}1 {Ø}{\`H}}1
268   {ç}{\`c}}1 {Ç}{\`C}}1 {ø}{\`o}}1 {ä}{\`r a}}1 {Ä}{\`r A}}1
269 }
270
271 % Nicier tables (\toprule, \midrule, \bottomrule)
272 \RequirePackage{booktabs}
273
274 % Extended enumerate, such as \begin{compactenum}
275 \RequirePackage[alwaysadjust]{paralist}
276
277 % Read: Is there a disadvantage to using natbib=true with biblatex?
278 % https://tex.stackexchange.com/questions/149313/is-there-a-disadvantage-to-using-natbib-true
279 % Substitutions:
280 % Natbib \textcite = biblatex \textcite
281 % Natbib \citep = biblatex \parencite
282
283 \RequirePackage[
284   defernumbers=true, % required due to self-cite
285   %style=ieee, % english only
286   sorting=none, % nty, nyt, nyvt, anyt, anyvt, ynt, ydnt, none, debug
287   sortcites=false,
288   citestyle=numeric-comp,
289   bibstyle=numeric,
290   backend=biber,
291   bibencoding=utf8, % = auto, utf8, ascii
292   hyperref=true, % activate hyperref support
293   backref=false, % activate backrefs

```

```

294     isbn=true,
295     url=true,
296     doi=true,
297     urldate=terse,      % = iso, year, short, long, terse
298     maxnames=5,        % max number of names in text ??
299     minnames=1,        % min number of names in text ??
300     maxbibnames=99,    % max number of names in bibliography
301     minbibnames=1,     % number of names in bibliography (bevor et al)
302     maxcitenames=99,   % max number of names in text ??
303     mincitenames=1,    % max number of names in text ??
304     giveninits=false,  % abbreviate first names
305     uniquename=init,   % otherwise option conflict with firstinits=true
306     autolang=other
307 ]{biblatex}
308
309 % Due to applied option defernumbers=true:
310 % Prevent citations in the references are being numbered as '0' in ArXiv
311 % https://tex.stackexchange.com/questions/463556/all-the-citations-in-the-references-are-bein
312 \makeatletter
313 \let\blx@rerun@biber\relax
314 \makeatother
315
316 \addbibresource{selfref.bib} % selfref.bib needs to be generated, containing a bibentry with
317 \DeclareBibliographyCategory{selfref}
318 \addtocategory{selfref}{selfref}
319 % How to use: \printbibliography[notcategory=selfref]
320
321 % Same fontsize as without natbib
322 \renewcommand{\bibfont}{\normalfont\small}
323
324 % Enable hyperlinked author names in the case of \textcite
325 % Source: https://tex.stackexchange.com/a/76075/9075
326 \RequirePackage{etoolbox}
327 \makeatletter
328 \patchcmd{\NAT@test}{\else \NAT@nm}{\else \NAT@hyper@{\NAT@nm}}{-}{-}
329 \makeatother
330
331 \makeatletter
332 \DeclareCiteCommand{\citemonth}
333   {\usebibmacro{prenote}}
334   {%
335     \let\oldabx@bibmonth\abx@bibmonth%
336     %\let\abx@bibmonth\blx@imc@biblstring\typeout{CHG: abx@bibmonth \meaning\abx@bibmonth}% f
337     \setkeys{blx@opt@pre}{dateabbrev=false}% nowork
338     \mkbibmonth{\thefield{month}}%
339     \let\abx@bibmonth\oldabx@bibmonth% restore
340   }
341   {\multicitedelim}
342   {\usebibmacro{postnote}}
343 \makeatother
344
345 % Enable nice comments
346 \RequirePackage{pdfcomment}
347

```

```

348 \newcommand{\commentontext}[2]{\colorbox{yellow!60}{#1}\pdfcomment[color={0.234 0.867 0.211},
349 \newcommand{\commentatside}[1]{\pdfcomment[color={0.045 0.278 0.643},icon=Note]{#1}}
350
351 % Compatibility with packages todo, easy-todo, todonotes
352 \newcommand{\todo}[1]{\commentatside{#1}}
353
354 % Compatiblity with package fixmetodonotes
355 \newcommand{\TODO}[1]{\commentatside{#1}}
356
357 % Put footnotes below floats
358 % Source: https://tex.stackexchange.com/a/32993/9075
359 \RequirePackage{stfloats}
360 \fnbelowfloat
361
362 \RequirePackage[group-minimum-digits=4,per-mode=fraction]{siunitx}
363 \addto\extrasgerman{\sisetup{locale = DE}}
364
365 % Enable that parameters of \cref{}, \ref{}, \cite{}, ... are linked so that a reader can click
366 \RequirePackage{hyperref}
367
368 % Enable hyperref without colors and without bookmarks
369 \hypersetup{
370   hidelinks,
371   colorlinks=true,
372   allcolors=black,
373   pdfstartview=Fit,
374   breaklinks=true
375 }
376
377 % Enable correct jumping to figures when referencing
378 \RequirePackage[all]{hypcap}
379
380 \RequirePackage{orcidlink}
381
382 % For easy quotations: \enquote{text}
383 % This package is very smart when nesting is applied, otherwise textcmds (see below) provides
384 \RequirePackage[autostyle=true]{csquotes}
385
386 % Enable using "'quote'" - see https://tex.stackexchange.com/a/150954/9075
387 \defineshorthand{"'}{\openautoquote}
388 \defineshorthand{"'"}{\closeautoquote}
389
390 % amsmath must be loaded before cleveref
391 \usepackage{amsmath,amssymb,amsfonts}
392
393 % Extensions for references inside the document (\cref{fig:sample}, ...)
394 % Enable usage \cref{...} and \Cref{...} instead of \ref: Type of reference included in the l
395 % That means, "Figure 5" is a full link instead of just "5".
396 \RequirePackage[capitalise,nameinlink,noabbrev]{cleveref}
397
398 \crefname{listing}{Listing}{Listings}
399 \Crefname{listing}{Listing}{Listings}
400 \crefname{lstlisting}{Listing}{Listings}
401 \Crefname{lstlisting}{Listing}{Listings}

```

```

402
403 \RequirePackage{lipsum}
404
405 \RequirePackage{tcolorbox}
406 \tcbuselibrary{listings}
407
408 %introduce \powerset - hint by http://matheplanet.com/matheplanet/nuke/html/viewtopic.php?top
409 \DeclareFontFamily{U}{MnSymbolC}{}
410 \DeclareSymbolFont{MnSyC}{U}{MnSymbolC}{m}{n}
411 \DeclareFontShape{U}{MnSymbolC}{m}{n}{
412 <-6> MnSymbolC5
413 <6-7> MnSymbolC6
414 <7-8> MnSymbolC7
415 <8-9> MnSymbolC8
416 <9-10> MnSymbolC9
417 <10-12> MnSymbolC10
418 <12-> MnSymbolC12%
419 }{}
420 \DeclareMathSymbol{\powerset}{\mathord}{MnSyC}{180}
421
422 \RequirePackage{xspace}
423 %\newcommand{\eg}{e.\,g.\,xspace}
424 %\newcommand{\ie}{i.\,e.\,xspace}
425 \newcommand{\eg}{e.\,g.,\ }
426 \newcommand{\ie}{i.\,e.,\ }
427
428 % Enable hyphenation at other places as the dash.
429 % Example: applicaiton\hydash specific
430 \makeatletter
431 \newcommand{\hydash}{\penalty\@M-\hskip\z@skip}
432 % Definition of "=" taken from http://mirror.ctan.org/macros/latex/contrib/babel-contrib/germa
433 \makeatother
434
435 % Add manual adapted hyphenation of English words
436 % See https://ctan.org/pkg/hyphenex and https://tex.stackexchange.com/a/22892/9075 for detail
437 % Does not work on MiKTeX, therefore disabled - issue reported at https://github.com/MiKTeX/m
438 % \input{ushyphex}
439
440 % Enable copy and paste of text from the PDF
441 % Only required for pdflatex. It "just works" in the case of lualatex.
442 % Alternative: cmap or mmap package
443 % mmap enables mathematical symbols, but does not work with the newtx font set
444 % See: https://tex.stackexchange.com/a/64457/9075
445 % Other solutions outlined at http://goemonx.blogspot.de/2012/01/pdflatex-ligaturen-und-copyr
446 % Trouble shooting outlined at https://tex.stackexchange.com/a/100618/9075
447 %
448 % According to https://tex.stackexchange.com/q/451235/9075 this is the way to go
449 \input glyphtounicode
450 \pdfgentounicode=1
451
452 \RequirePackage{lscapex}
453 \RequirePackage{pdfscape}
454 \RequirePackage{afterpage}
455

```

```

456 % requires, e.g., \PassOptionsToPackage{
457 % type=CC,modifier=by,version=4.0}{doclicense} before \documentclass
458 \RequirePackage[hyperxmp=false,lang=English]{doclicense}
459
460 % Improve wrapping of URLs - hint by http://tex.stackexchange.com/a/10419/9075
461 \makeatletter
462 \def\ps@IEEEtitlepagestyle{
463   \def\@oddfont{\mycopyrightnotice}
464   \def\@evenfont{}
465 }
466 \def\mycopyrightnotice{
467   {\footnotesize
468     \begin{minipage}{0.8\textwidth}
469     \centering
470     % Creative Commons / Open Access:
471     %\href{https://creativecommons.org/licenses/by/4.0/}{\ccby} This work is %licensed under
472     % License based on doclicense package:
473     \href{\doclicenseURL}{\doclicenseIcon} This work is licensed under a \doclicenseLongName
474     % Citation advice:
475     \Please cite as: \fullcite{selfref}.
476   \end{minipage}
477 }
478 }
479 \makeatother
480
481 \makeatletter
482 % allows for forcing command expansion inside a filecontents* environment
483 % (cf. https://tex.stackexchange.com/questions/534035/macros-commands-inside-a-filecontents-e
484 \def\filecontentsForceExpansion#1#2#3{
485   \global\let\ltxspecials\dospecials
486   \gdef\dospecials{\ltxspecials
487     \catcode'#1=0
488     \catcode'#2=1
489     \catcode'#3=2
490   \global\let\dospecials\ltxspecials
491 }
492 }
493 \makeatother
494
495 \title{\cstechrepTitleTex}
496
497 \author{
498 \IEEEauthorblockN{\cstechrepAuthorListTex}
499 \IEEEauthorblockA{%
500 \cstechrepDepartment\\
501 \cstechrepInstitution\\
502 \cstechrepAddress
503 }}
504
505 \IEEEspecialpapernotice{\cstechrepType: \cstechrepNumber, \citemonth{selfref} \cstechrepYear}
506
507 % subfigure captions with parentheses and footnotesize:
508 \ifnum\value{cstechrep@subfigtracker}=1
509 \typeout{cs-techrep class: load subfig package (use subfloat command).}

```

```

510 \RequirePackage[caption=false,font=footnotesize]{subfig}
511 \fi
512 \ifnum\value{cstechrep@subcaptiontracker}=1
513 \typeout{cs-techrep class: load subcaption package (use subfigure command).}
514 \RequirePackage{subcaption}
515 \captionsetup[subfigure]{labelformat=parens,font=footnotesize}
516 \fi
517
518 % Balance/level columns at the last page / in bibliography
519 % DISCLAIMER: No solution is a 100%/perfect one!
520 % Mainstream option: pbalance (see https://ctan.org/pkg/pbalance)
521 % BUT: incompatible with arxiv automated process (!)
522 \ifnum\value{cstechrep@pbalancectracker}=1
523 \typeout{cs-techrep class: load pbalance package.}
524 \RequirePackage{pbalance}
525 \fi
526 % Flushend => works with arxiv, but major incompatibility with lineno (and, thus, also with m
527 \ifnum\value{cstechrep@flushendtracker}=1
528 \typeout{cs-techrep class: load flushend package.}
529 \RequirePackage{flushend}
530 \fi
531
532 % =====
533 % Packages that need to be loaded last:
534
535 % Allows to hyphenate a word that contains a dash:
536 % https://stackoverflow.com/questions/2193307/how-do-i-get-latex-to-hyphenate-a-word-that-con
537 \RequirePackage[shortcuts]{extdash} % Use \-/ for a breakable dash that does not prevent the
538 % =====
539
540 % Finally, we'll use \endinput to indicate that LaTeX can stop reading this file. LaTeX will
541 \endinput

```