# The nacv class \*

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#### **Abstract**

The *nacv* document class provides four basic features: a column for dates, bulleted items without the environment, some commands for listing publications from a *BibT<sub>E</sub>X* file, and some commands for listing contact info using *fontawesome* icons.

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 $<sup>^*</sup> vo.2.1 \, [2023/07/16], \quad {\tt ctan.org/pkg/nacv}, \quad {\tt github.com/jessexknight/nacv}$ 

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### 1 Usage

\documentclass[<options>]{nacv}

### 1.1 Options

```
Default options are denoted like (this).

Options from the parent article class are also available.
```

<itemsep=\*> (0ex) Vertical space added between most elements using \addvspace.

```
<datesep=*> (--) Symbol between two dates.
```

<datewid=\*> (4em) Standard width of a single date.

<dategap=\*> (1em) Horizontal space between the date(s) and content.

<margin=\*> (35mm) The page margins.

<bibnamebold=\*> (true) Whether the CV author's name is be bolded in \publications.

#### 1.2 Commands

Optional and mandatory arguments are denoted like [this] and {this}. Commands from the parent *article* class are also available, including \section, etc.

#### 1.2.1 Dates Column

The dates column is implemented using pairs of top-aligned \parbox, separated horizontally by <dategap>. The width of the *date* box is defined based on the most recent \\*date command as follows:

```
\twodate Sets date box width to: 2*<datewid>+\widthof{<datesep>} (default)
```

\onedate Sets date box width to: <datewid>

\nodate Sets date box width to: -<dategap>

The width of the *content* box is defined to be the remaining \linewidth. The width definitions are processed in \AtBeginDocument so that any font changes are reflected in \widthof{<datesep>}.

\dated [topsep]{from}{to}{content} The workhorse macro for dated elements: creates the two \parbox. Users can/should create content-specific commands using \dated (e.g., \education, \award, etc.), which nacv avoids doing to allow maximum flexibility.

- [topsep] can be used to override the default space (<itemsep>) between elements.
- If {from} is non-empty, the date box will contain: {from}\hfill<datesep>\hfill{to}.
- If {from} is empty, the date box will contain: \hfill{to} (right justified).
- The *content* box will of course contain {content}.

\bullet [topsep] The workhorse macro for itemized content: skips the date column and adds <bulletsymbol>. Similar to \item, the content is not an argument. Unlike \item, there is no surrounding environment or extra space. The downside is that wrapping content (longer than one line) does not align.

#### 1.2.2 Name & Contact

 $\mbox{\normalfont states} \$  Stores the name of the CV author for  $\mbox{\normalfont maketitle}$  and  $\mbox{\normalfont publications}$ .

\title {title} Stores the title and/or affiliation of the CV author for \maketitle.

\contact [href]{icon}{label} Adds an item of contact info to an internal list for \maketitle.

- If [href] is non-empty, the item will link to "[href]{label}" (e.g. [href]=mailto: and {label}=first.last@mail.com will link to "mailto:first.last@mail.com").
- If [href] is empty (default), no link will be created.
- If {icon} is non-empty, that fontawesome icon will be added to the right of the text.
- If {icon} is empty, no icon will be added.
- {label} is the text added to the left of the icon.

\maketitle Creates the author block, comprising the name and title left left-aligned, and the list of contact info right-aligned. Each side is added in a \parbox that is \textwidth wide, so users should check for overlapping content.

#### 1.2.3 Publications

\publications [bibids]{bibargs} A glorified wrapper for \printbibliography with helpful defaults and two ways to select a subset of references:

- [bibids] can be passed to \nocite to manually select references.
- {bibargs} are passed to \printbibliography to filter references by attributes (e.g., type=article, keyword=oral, etc.). Users must add \nocite{\*} first with this approach.

#### 1.2.4 Style Hooks

The following style hooks support customization of some elements, with default values denoted like (this).

```
\datestyle {arg} (\strut#1) Styles dates in \dated.
```

\contentstyle {arg} (\strut#1) Styles content in \dated.

\namestyle {arg} (\huge#1) Styles the name in \maketitle.

\titlestyle {arg} (#1) Styles title name in \maketitle.

\contactstyle {arg} (#1) Styles contact information in \maketitle.

\bulletsymbol (\textbullet) The symbol used in \bullet.

# 2 Implementation

```
1% TODO: documentation
2% options
3 \RequirePackage{kvoptions}
4\SetupKeyvalOptions{family=nacv,prefix=nacv@}
5 \DeclareStringOption[0ex]{itemsep}
6 \DeclareStringOption[--]{datesep}
7 \DeclareStringOption[4em]{datewid}
8 \DeclareStringOption[1em]{dategap}
9 \DeclareStringOption[35mm]{margin}
10 \DeclareBoolOption[true]{bibnamebold}
11 \DeclareOption*{\PassOptionsToClass{\CurrentOption}{article}}
12 \ExecuteOptions{}
13 \ProcessKeyvalOptions*
14 \ProcessOptions\relax
15 \LoadClass{article}
16% packages
17 \RequirePackage[nomarginpar,margin=\nacv@margin]{geometry}
18 \RequirePackage{calc}
19 \RequirePackage{fontawesome5}
20% misc lengths
21\setlength\parindent{0pt}
22\setlength\parskip{0pt}
23 \newlength\nacv@w@itemsep
24\setlength\nacv@w@itemsep{\nacv@itemsep}
25% date lengths
26 \newlength\nacv@w@date
27 \newlength\nacv@w@datesep
28 \newlength\nacv@w@dategap
29 \newlength\nacv@w@datex
30 \newlength\nacv@w@contentx
31 \newcommand{\nacv@w@update}[1]{%
   \setlength\nacv@w@datex{\dimexpr#1}%
   \setlength\nacv@w@contentx{\dimexpr\linewidth-\nacv@w@datex-\nacv@w@dategap}}
34 \newcommand{\nodate}{\nacv@w@update{-\nacv@w@dategap}}
35 \newcommand{\onedate}{\nacv@w@update{\nacv@w@date}}
36 \newcommand{\twodate}{\nacv@w@update{2\nacv@w@date+\nacv@w@datesep}}
37 \AtBeginDocument {%
   \setlength\nacv@w@date{\nacv@datewid}%
    \setlength\nacv@w@datesep{\widthof{\nacv@datesep}}%
   \setlength\nacv@w@dategap{\nacv@dategap}%
   \twodate}
42% date boxes
43\newcommand{\ifempty}[3]{\if\relax\detokenize{#1}\relax#2\else#3\fi}
```

```
44 \newcommand {\nacv@datestr}[2]{%
   \ifempty{#1}{\hfill#2}{#1\hfill\nacv@datesep\hfill#2}}
46 \newcommand{\nacv@datebox}[3]{%
   \ifdim\nacv@w@datex<0pt\hskip\nacv@w@datex\fi%
   \parbox[t]{\nacv@w@datex}{\datestyle{\nacv@datestr{#1}{#2}}\par}%
48
   \hskip\nacv@w@dategap%
   \parbox[t]{\nacv@w@contentx}{\contentstyle{#3}\par}}
51 \newcommand{\dated}[4][\nacv@w@itemsep]{\par%
    \addvspace{#1}\nacv@datebox{#2}{#3}{#4}\par}
53 \renewcommand{\bullet}[1][\nacv@w@itemsep]{\par%
    \addvspace{#1}\hskip\dimexpr\nacv@w@datex+\nacv@w@dategap%
    {\bulletsymbol}\hskip\labelsep\ignorespaces}
56% name & title
57 \newcommand{\name}[2]{
   \gdef\nacv@name@given{#1}
   \qdef\nacv@name@family{#2}}
60 \name{(First)}{(Last)}
61 \renewcommand{\title}[1]{
62 \qdef\nacv@title{#1}}
63 \title{(Title)}
64% contact info & icons
65 \newcommand{\nacv@contact@list}{}
66 \newcommand {\nacv@icon}[1]{%
   \parbox{1em}{\centering\small\ifempty{#1}{~}{\faIcon{#1}}}}
68 \newcommand{\nacv@iconlink}[3]{%
   \left\{ \frac{41}{3} \right\} 
70 \newcommand{\contact}[3][]{%
   \g@addto@macro\nacv@contact@list{\nacv@iconlink{#1}{#2}{#3}\par}}
72% maketitle
73 \renewcommand { \maketitle } {%
   \thispagestyle{empty}%
    \parbox[t]{\textwidth}{%
75
      {\namestyle{\nacv@name@given~\nacv@name@family}}\par%
76
      \addvspace{1ex}%
      {\titlestyle{\nacv@title}}\par}%
   \hspace{-\textwidth}%
   \parbox[t]{\textwidth}{%
      \raggedleft\contactstyle{\nacv@contact@list}\par}}
82% bib stuff
83 \RequirePackage[
84 backend=biber,
85 sorting=symd,
86 style=numeric,
87 defernumbers=true,
88 ]{biblatex}
```

```
89 \DeclareSortingTemplate{symd}{
    \sort[direction=descending]{\field{sortyear}\field{year}}
    \sort[direction=descending]{\field{month}}
    \sort[direction=descending]{\field{day}}}
93 \newcommand{\nacv@mkbibname}[1]{\ifthenelse{%
    \equal{\nacv@name@given}{\namepartgiven} \AND
    \equal{\nacv@name@family}{\namepartfamily} \AND
95
    \boolean{nacv@bibnamebold}}%
96
    {\mkbibbold{#1}}{#1}}
98 \let\mkbibnamegiven\nacv@mkbibname
99 \let\mkbibnamefamily\nacv@mkbibname
100 \setlength{\biblabelsep}{\labelsep}
101 \DeclareFieldFormat{labelnumberwidth}{#1\adddot\hfill}
102 \newcommand{\publications}[2][]{\nocite{#1}\par%
    \addvspace{\nacv@w@itemsep}%
103
    \printbibliography[resetnumbers=true,heading=none,#2]}
105% hyperref hack: https://tex.stackexchange.com/questions/484088
106 \AtEndOfClass{\ifx\ver@hyperref\relax\else\newcommand{\href}[2]{#2}\fi}
107% hooks
108 \renewcommand { \@seccntformat } [1] { }
109 \newcommand{\datestyle}[1]{\strut#1}
110 \newcommand{\contentstyle}[1]{\strut#1}
111 \newcommand{\namestyle}[1]{\huge#1}
112 \newcommand{\titlestyle}[1]{#1}
113 \newcommand{\contactstyle}[1]{#1}
114 \newcommand{\bulletsymbol}{\textbullet}
115% end
```