

The *nacv* class ^{*}

Jesse Knight [†]

October 6, 2024

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 *BibTeX* file, and some commands for listing contact info using *fontawesome* icons.

Contents

1	Usage	2
1.1	Options	2
1.2	Commands	2
1.2.1	Dates Column	2
1.2.2	Name & Contact	3
1.2.3	Publications	3
1.2.4	Style Hooks	3
2	Implementation	4

^{*}vo.2.2 [2024/09/16], ctan.org/pkg/nacv (coming soon), github.com/jessexknight/nacv
[†]maintainer, contact: jesse.x.knight@protonmail.com

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.

`<bibstyle=>` (`numeric`) The *Bib_AT_EX* style to apply in `\publications`.

`<bibNamebold=>` (`true`) Whether the CV author's name is 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>` (flush with margin)

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

`\name {given}{family}` Stores the name of the CV author for `\maketitle` and `\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 \DeclareStringOption[numeric]{bibstyle}
11 \DeclareBoolOption[true]{bibnamebold}
12 \DeclareOption*{\PassOptionsToClass{\CurrentOption}{article}}
13 \ExecuteOptions{}
14 \ProcessKeyvalOptions*
15 \ProcessOptions\relax
16 \LoadClass{article}
17 % packages
18 \RequirePackage[nomarginpar,margin=\nacv@margin]{geometry}
19 \RequirePackage{calc}
20 \RequirePackage{fontawesome5}
21 % misc lengths
22 \setlength\parindent{0pt}
23 \setlength\parskip{0pt}
24 \newlength\nacv@w@itemsep
25 \setlength\nacv@w@itemsep{\nacv@itemsep}
26 % date lengths
27 \newlength\nacv@w@date
28 \newlength\nacv@w@datesep
29 \newlength\nacv@w@dategap
30 \newlength\nacv@w@datex
31 \newlength\nacv@w@contentx
32 \newcommand{\nacv@w@update}[1]{%
33   \setlength\nacv@w@datex{\dimexpr#1}%
34   \setlength\nacv@w@contentx{\dimexpr\linewidth-\nacv@w@datex-\nacv@w@dategap}}
35 \newcommand{\nodate}{\nacv@w@update{-\nacv@w@dategap}}
36 \newcommand{\onedate}{\nacv@w@update{\nacv@w@date}}
37 \newcommand{\twodate}{\nacv@w@update{2\nacv@w@date+\nacv@w@datesep}}
38 \AtBeginDocument{%
39   \setlength\nacv@w@date{\nacv@datewid}%
40   \setlength\nacv@w@datesep{\widthof{\nacv@datesep}}%
41   \setlength\nacv@w@dategap{\nacv@dategap}%
42   \twodate}
43 % date boxes
```

```

44 \newcommand{\ifempty}[3]{\if\relax\detokenize{#1}\relax#2\else#3\fi}
45 \newcommand{\nacv@datestr}[2]{%
46   \ifempty{#1}{\hfill#2}{#1\hfill\nacv@datesep\hfill#2}}
47 \newcommand{\nacv@datebox}[3]{%
48   \ifdim\nacv@w@datex<0pt\hskip\nacv@w@datex\fi%
49   \parbox[t]{\nacv@w@datex}{\datestyle{\nacv@datestr{#1}{#2}}\par}%
50   \hskip\nacv@w@dategap%
51   \parbox[t]{\nacv@w@contentx}{\contentstyle{#3}\par}}
52 \newcommand{\dated}[4][\nacv@w@itemsep]{\par%
53   \addvspace{#1}\nacv@datebox{#2}{#3}{#4}\par}
54 \renewcommand{\bullet}[1][\nacv@w@itemsep]{\par%
55   \addvspace{#1}\hskip\dimexpr\nacv@w@datex+\nacv@w@dategap%
56   {\bulletsymbol}\hskip\labelsep\ignorespaces}
57 % name & title
58 \newcommand{\name}[2]{
59   \gdef\nacv@name@given{#1}
60   \gdef\nacv@name@family{#2}}
61 \name{(First)}{(Last)}
62 \renewcommand{\title}[1]{
63   \gdef\nacv@title{#1}}
64 \title{(Title)}
65 % contact info & icons
66 \newcommand{\nacv@contact@list}{}
67 \newcommand{\nacv@icon}[1]{%
68   \parbox{1em}{\centering\small\ifempty{#1}{~}{\faIcon{#1}}}}
69 \newcommand{\nacv@iconlink}[3]{%
70   \ifempty{#1}{#3~\nacv@icon{#2}}{\href{#1#3}{#3~\nacv@icon{#2}}}}
71 \newcommand{\contact}[3][\]{%
72   \g@addto@macro\nacv@contact@list{\nacv@iconlink{#1}{#2}{#3}\par}}
73 % maketitle
74 \renewcommand{\maketitle}{%
75   \thispagestyle{empty}%
76   \parbox[t]{\textwidth}{%
77     {\namestyle{\nacv@name@given~\nacv@name@family}}\par%
78     \addvspace{1ex}%
79     {\titlestyle{\nacv@title}}\par}%
80   \hspace{-\textwidth}%
81   \parbox[t]{\textwidth}{%
82     \raggedleft\contactstyle{\nacv@contact@list}\par}}
83 % bib stuff
84 \RequirePackage[
85   backend=biber,
86   sorting=symd,
87   style=\nacv@bibstyle,
88   defernumbers=true,

```

```

89 ]{biblatex}
90 \DeclareSortingTemplate{synd}{
91   \sort[direction=descending]{\field{sortyear}\field{year}}
92   \sort[direction=descending]{\field{month}}
93   \sort[direction=descending]{\field{day}}
94 \newcommand{\nacv@mkbibname}[1]{\ifthenelse{%
95   \equal{\nacv@name@given}{\namepartgiven} \AND
96   \equal{\nacv@name@family}{\namepartfamily} \AND
97   \boolean{nacv@bibnamebold}}{%
98   {\mkbibbold{#1}}{#1}}
99 \let\mkbibnamegiven\nacv@mkbibname
100 \let\mkbibnamefamily\nacv@mkbibname
101 \setlength{\biblabelsep}{\labelsep}
102 \DeclareFieldFormat{labelnumberwidth}{#1\adddot\hfill}
103 \newcommand{\publications}[2][\nocite{#1}\par%
104   \addvspace{\nacv@w@itemsep}%
105   \printbibliography[resetnumbers=true,heading=none,#2]}
106 % hyperref hack: https://tex.stackexchange.com/questions/484088
107 \AtEndOfClass{\ifx\ver@hyperref\relax%
108   \hypersetup{pdftitle={CV},pdfauthor={\nacv@name@first\ \nacv@name@last}}%
109   \relax\else\newcommand{\href}[2]{#2}\fi}
110 % hooks
111 \renewcommand{\@secntformat}[1]{}
112 \newcommand{\datestyle}[1]{\strut#1}
113 \newcommand{\contentstyle}[1]{\strut#1}
114 \newcommand{\namestyle}[1]{\huge#1}
115 \newcommand{\titlestyle}[1]{#1}
116 \newcommand{\contactstyle}[1]{#1}
117 \newcommand{\bulletsymbol}{\textbullet}
118 % end

```