

# LightCV

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## LightCV

LightCV is a LaTeX class for creating a simple CV or resume. It is based on the article class, with additions for a CV. There are several good (and probably better) CV classes and packages available. Some include: [biblatex-cv](#), [cv](#), [EuropeCV](#), [moderncv](#), [currvita](#), [simplecv](#), and [readablecv](#). All are worth checking out. I wanted to figure out how LaTeX classes worked so I created one for myself. I am sharing it here in case it is useful to others.

## Usage

The class is used like any other LaTeX class. Take the `lightcv.cls` and put it in the same directory as your `.tex` file. Then add `\documentclass{lightcv}` to the top of your `.tex` file.

The following is a minimal example:

```
\documentclass{simplecv}
```

## Options

Since the `lightcv` is based on the article class, it accepts the same options. The following are two common options:

- `11pt` or `12pt` - Font size
- `letterpaper` or `a4paper` - Paper size

In addition, the `lightcv` class accepts an option based on whether you want a header on the first page. The default is to not have a header on the first page.

```
- \documentclass{lightcv} % No header on first page  
- \documentclass[p1noheader]{lightcv} % No header on first page-  
- \documentclass[p1header]{lightcv} % Header on first page
```

Some of the `article` class options are not compatible with the `lightcv` class. For example, `twocolumn` will produce an error message since the `lightcv` class is not designed for two columns.

## Commands and Environments

The `lightcv` class provides several environments and commands for creating a CV. Let's consider each.

### Author and Contact Information

`\author{}`: Sets the author's name, which is used in the header and in the contact information section.

This should be set in the preamble as follows:

```
\author{John Doe}
```

`\ContactInfo{left}{right}`: Creates a two-column contact information section. Each column consists of itemized lists of contact details. Each row of the contact details is created using the `\crow{}` command. The optional argument is the contact detail type / label. The mandatory argument is the contact detail. The `\crow` command can be used multiple times to create multiple rows of contact details.

The `\ContactInfo{left}{right}` should be used after the `\begin{document}` command as follows:

```
\ContactInfo{
  \crow{123 Main St, Anytown, USA}
  \crow{(123) 456-XXXX}
}{
  \crow{linkedin.com/in/johndoe}
  \crow{github.com/johndoe}
}
```

The `\contactleftmargin` and `\contactrightmargin` lengths determine the left and right margins of the contact details section. The `\contactsep` length determines the space between the left and right columns of the contact details section. The default of these lengths are 1in, 1in, and 1cm, respectively. You can customize these lengths by using the `\setlength` command:

```
\setlength{\contactleftmargin}{2em} % adjust this value as needed
\setlength{\contactrightmargin}{2em} % adjust this value as needed
\setlength{\contactsep}{1em} % adjust this value as needed
```

Personally, I like using `fontawesome icons` for the labels of the contact details. The following replaces the labels with fontawesome icons:

```
\ContactInfo{
  \crow{123 Main St, Anytown, USA}
  \crow{(123) 456-XXXX}
  \crow[\faEnvelope]{john.doe@example.com}
}{
  \crow{linkedin.com/in/johndoe}
}
```

```

\crow[\faGithub]{github.com/johndoe}
}

```

In the future, I plan to implement a command that will allow to specify the number of columns in the contact details section and work on the spacing of the contact details section.

## The Dated Environment

The `dated` environment can be used as follows:

```

\begin{dated}[title]
  date-date & details \\
  date-date & details \\
  date-date & details \\
\end{dated}

```

The `dated` environment takes an optional environment that is used as the section title. The default is “Employment”. The environment creates a section title using `\section*` and then makes use of the `longtable` environment to create a two column table. The first column is set as left-aligned, but the width of the second column is set using a length titled `\details`: This length determines the width of the second column of the `longtable` in the `dated` environment. It is set to `0.85\textwidth` by default, which means it will take up 85% of the text width. You can customize this length by using the `\setlength` command:

```

\setlength{\details}{0.75\textwidth} % adjust this value as needed

```

Since the environment is just a table with a section, you could use the environment in a different way. For example, you could set the section title to “Student Comments” and use the environment to create a table of student comments. The following is an example:

```

\begin{dated}[Student Comments]
  Class & Student comment \\
  Class & Student comment \\
  Class & Student comment \\
\end{dated}

```

Alternatively, you can avoid using this environment and use the `section*` command and `longtable` environment directly.

## The rlist Environment

The `rlist` or “reverse list” environment can be used as follows:

```

\begin{rlist}[title][type]
  \item details \\
  \item details \\

```

```

\item details \\\end{rlist}

```

The `rlist` environment takes two optional arguments. The first is the section title, which defaults to “Publications”. The second is the list type, which defaults to “etaremun”. This is a reverse enumerated list. If there are 12 items in the list, it will count 12, 11, 10. Here is an example from my CV:

```

\begin{rlist}[Publications]
\item Pollock, R. \& Agler, D. W. (2016). Article Details.
\item Agler, D. W. \& Stango, M. (2015). Article Details.
\end{rlist}

```

If you need a different type of list, you can specify that the `rlist` environment uses the `enumerate` environment. For example, the following creates a regular enumerated list:

```

\begin{rlist}[title][enumerate]
item & details \\\item & details \\\item & details \\\end{rlist}

```

The environment makes use of the `rlistleftmargin` length, which determines the left margin of the enumerated list in the `rlist` environment. It is set to 2.5em by default. You can customize this length by using the `\setlength` command in your document:

```

\setlength\rlistleftmargin{2em} % adjust this value as needed

```

## The Catsec Environment and Related Commands

The `catsec` environment is useful for putting the `catbox` and `catlist` commands. The environment is used as follows:

```

\begin{catsec}[title]
% Stuff
\end{catsec}

```

It only creates a `section*` title and then adds some vertical space below the environment. So, the environment’s only use is probably to group the `catbox` and `catlist` commands.

The `catbox` command can be used as follows:

```

\catbox{Category}{details}

```

It creates two minipages with the first being a one with category name and the second being one with the details. The two minipages are separated using `\catsep`. So, for example, the following creates a category titled “Languages” with the details “Python, HTML, CSS, JavaScript, L<sup>A</sup>T<sub>E</sub>X”:

```

\begin{catsec}[Skills]
\catbox{Languages}{Python, HTML, CSS, JavaScript, \LaTeX}
\catbox{Frameworks}{Flask, React, Angular}
\catbox{Databases}{MySQL, PostgreSQL, MongoDB}
\end{catsec}

```

Finally, `\catlist{left}{right}` is similar to `catbox` in that it creates two minipages separated by `\catsep`, but the second column is a itemized list. The following is an example:

```

\begin{catsec}[Powers]
\catlist{Super}{
\item Flight
\item Telepathy
\item Telekinesis}
\catlist{Normal}{
\item Running
\item Biking
\item Swimming}
\end{catsec}

```

## Templates

Here is a template for a CV (a text version is available on Github):

```

% A LaTeX template for a modern simple academic
% CV using the Lightcv Class by David W. Agler
\documentclass[pinoheader, 12pt]{lightcv}
\author{John Doe}
\begin{document}

\ContactInfo{
\crow[\faHome ]{123 Main St, Anytown, USA}
\crow[\faPhone]{(123) 456-XXXX}
\crow[\faEnvelopeO]{john.doe@example.com}
}{
\crow[\faLinkedin]{linkedin.com/in/johndoe}
\crow[\faGithub]{github.com}
\crow[\faTwitter]{twitter.com/davidagler}
}

\begin{dated}[Education]
2010 - 2014 & \textbf{Bachelor of
Science in Computer Science}, University of Anytown \\
2014 - 2016 & \textbf{Master of Science in Computer Science},
University of Anytown
\end{dated}

```

```

\begin{rlist}[Publications]
  \item Doe, J. 2015. An important paper. \textit{Journal of
    Important Research}, 123(4), 567-890.
  \item Doe, J. 2016. Another important paper. \textit{Journal
    of More Important Research}, 234(5), 678-901.
\end{rlist}

\begin{rlist}[Independent Studies][enumerate]
  \item Advanced Study in Computer Science. John Doe. 2016.
  \item Advanced Study in Complexity. John Doe. 2014.
\end{rlist}

\begin{dated}[Courses Taught]
  PHIL 001& Introduction to Philosophy\\
  PHIL 003& Philosophy of Well-being\\
  PHIL 004& The Human Condition\\
\end{dated}

\begin{catsec}[Skills]
  \catbox{Languages}{Python, HTML, CSS, JavaScript, \LaTeX}
  \catbox{Frameworks}{Flask, React, Angular}
  \catbox{Databases}{MySQL, PostgreSQL, MongoDB}
\end{catsec}

\begin{catsec}[Powers]
  \catlist{Super}{
    \item Flight
    \item Telepathy
    \item Telekinesis}
  \catlist{Normal}{
    \item Running
    \item Biking
    \item Swimming}
\end{catsec}
\end{document}

```