writeLatexCV v1.1.0 - User Guide

An easy way to create your résumé for academia

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Contents

1 Purpose

Create a fancy résumé file for research applications only. Three languages are predefined: English, Spanish and Catalan. The user must collect all relevant information in a specific format (see Section 5). Then, writeLatexCV converts it into a nice LaTeX format file and pdfLatex is used to convert it to PDF. LaTeX intermediate file is kept for further modifications, if needed.

2 Contents

The contents are described hereafter.

    – LICENSE   MIT license

    – writeLatexCV v1.1.0.pdf   User manual

Directory matlab

    – libLatexCV.m   MATLAB library file

    – texFormat_utf8.m   MATLAB function with UTF-8 encoding (for Unix OS)

    – texFormat_win1252.m   MATLAB function with Windows-1252 encoding (for Windows OS)

    – writeLatexCV.m   MATLAB main program

Directory sample

    – Connor_John_EN.inp   Input sample

    – Connor_John_EN.pdf   Output PDF sample

    – Connor_John_EN.tex   Intermediate LaTeX file

3 Prerequisites

Software:

- MATLAB
- pdfLatex[1]

LaTeX packages:

– array	New column types
– babel	Dictionary
– extsizes	Extra font sizes
– fancyhdr	Modify headers
– fontenc	Recommended font encoding
– geometry	Page geometry
– hhline	Black lines over colored cells
– hyperref	Add links and bookmarks
– lastpage	Get total pages
– lmodern	Latin Modern fonts
– longtable	Table spans multiple pages
– marvosym[2]	For €, ß and @ symbols
– multicol	Marge columns
– multirow	Marge rows
– textcomp	For ¥ and $ symbols
– xcolor	Color in tables

writeLatexCV was tested under:

- openSUSE Leap 42.3 with pdfTeX Version 3.14159265-2.6-1.40.17 (TeX Live 2016/TeX Live for SUSE Linux) and MATLAB R2016b (9.1.0.441655) 64-bit

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[1]Under Windows or macOS pdfLatex comes with MiKTeX, under Unix OS install it from the official repository
[2]Package marvosym is only used in Unix OS, some problems were found under Windows OS.

- Windows 10 64-bit with pdfTeX Version 3.14159265-2.6-1.40.18 (MiKTeX 2.9.6500 64-bit) and MATLAB R2016a (9.0.0.341360) 64-bit

- macOS Mojave 10.14.5 with pdfTeX, Version 3.14159265-2.6-1.40.20 (TeX Live 2019) and MATLAB R2019b (9.7.0.1190202) 64-bit

4 Usage

```
writeLatexCV(input, output, language, currency, font_size, blue_links,
             us_date, us_paper)
```

All input arguments are optional:

- input: input file name[1] with résumé data (default is `writeLatexCV.inp`)

- output: output PDF file name[1], without extension (default is `writeLatexCV`)

- language: language option, available options are:

    EN - English[2],[3] (default)

    ES - Spanish

    CA - Catalan

- currency: currency option, available options are:

    EUR - euros (€, default)

    USD - dollars ($)

    GBP - pounds (£)

    JPY - yens (¥)

- font_size: font size in output PDF, available options are 8, 9, 10, 11 (default), 12, 14, 17 and 20

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[1]Relative or absolute paths are also accepted.

[2]When `language` is EN superscript is automatically used when a number is followed by 'st', 'nd', 'rd' or 'th' in the input file.

[3]When `language` is EN amounts of money in the generated résumé are written as $1000, instead of 1000 $.

- blue_links: colored links, available options are:

    false - links are black, just as other text (default)

    true - links are blue, thus standing out from other text

- us_date: date format in front page, available options are:

    false - European date format, for example 24th of May, 2010 (default)

    true - American date format, for example May 24th, 2010

- us_paper: paper size, available options are:

    false - A4 paper size is used (default)

    true - letter paper size is used

The order of input arguments is strict, therefore, to change the paper size, `up_paper`, you must introduce all input arguments. For example, this command sets a user-specified option for the input and output names and the language but other options are set as default.

```
writeLatexCV('John_CV_ES.inp', 'John_CV_ES', 'ES')
```

Next command assigns all input arguments as the default values, therefore, it is the same as `writeLatexCV()`.

```
writeLatexCV('writeLatexCV.inp', 'writeLatexCV', 'EN', 'EUR', 11,
             false, false, false)
```

Input arguments can also be introduced following the keyword syntax, that is `keyword=value`.

```
writeLatexCV('input=writeLatexCV.inp', 'output=writeLatexCV',
             'language=EN', 'currency=EUR', 'font_size=11',
             'blue_links=false', 'us_date=false', 'us_paper=false')
```

With this syntax, input arguments can be introduced follow any order and are still all optional. For example, this command uses all input arguments by default but the currency and the paper size option:

```
writeLatexCV('currency = USD', 'us_paper = true')
```

Due to differences in character encoding among OS, it is **strongly recommended** to run writeLatexCV in the same OS in which the input file was created.

5 Input specifications

5.1 Allowed characters

The user must gather all relevant information in a ASCII input file according to the format specified in Chapter 5. The following characters can be used.

- Lower letters [a-z]
- Upper letters [A-Z]
- Numbers [0-9]
- Spaces
- Special lower vowels: áéíóú àèìòù äëïöü âêîôû ãõ
- Special upper vowels: ÁÉÍÓÚ ÀÈÌÒÙ ÄËÏÖÜ ÂÊÎÔÛ ÃÕ
- Special letters: ñ Ñ ç Ç ß
- Punctuation symbols: ¡!¿?;:,.‟'´ºª~_
- Math symbols: /|\<>^*-+=()[]{}
- Other symbols: €$£¥@&#

The character % **cannot** be used in the text. Characters # and + can be used in text but not at the beginning of the line. See Section 5.2 for more information on these symbols.

5.2 Special characters

The following characters have a special meaning and must be used according to this manual.

- Character % is used anywhere in a line to write comments
- Character # is used to introduce new cards (Section 5.3) or unknown information (Section 5.4)
- Character + is used to introduce a new item inside a card. See Section 5.3
- Character $ is used to introduce a new alias. See Section 5.5
- Character = is used to define an alias. See Section 5.5
- Character ^{} is used for superscript[1] in text, for example x^{2} will produce x^2
- Character _{} is used for subscript[2] in text, for example x_{i} will produce x_i

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[1]Nested superscripts are not allowed.
[2]Nested subscripts are not allowed.

5.3   Available cards

The symbol # introduces a new card. Table I lists all available cards along a brief description and the information in each card.

Card names in plural can have any number of items in it. For example, several books can be introduced into the BOOKS card. Items into to the same card MUST be separated with a + character, but NOT between the last item and the next card. Card names in singular only have one item. For example, only one company is allowed in COMPANY card. The information included in each card (or item in card) MUST follow a specific order (given by the third column of Table I).

All cards, except PERSONAL card, are optional and do not follow any specific order. However, each card, if used, may appear only once. If a card is used, all the information given by the third column of Table I must be filled, see Section 5.4 for unknown information. Cards and information in cards can start in any column (i.e. blank spaces before/after can be added).

Table 1 – Available cards, descriptions and specific information

Card	Description	Information
#ALIASES	Alias definitions	Any number of aliases can be defined, see Section 5.5
#BACKGROUNDS	Academic background	1. Academic title 2. University who issues the title 3. Year of issue
#BOOKS	Published books	1. List of authors separated by commas (do not use *and* between last items) 2. Title of book 3. Publication link 4. Publisher or editor 5. Book reference 6. Contribution (author, coauthor, editor, coordinator, reviewer...) 7. Number of pages 8. Publishing year

Table 1 – Available cards, descriptions and specific information

Card	Description	Information
#CODES	Developed codes	1. Code short name (acronym) 2. Code lone name (expand acronym) 3. Code brief description 4. Code link
#COLLABORATIONS	Collaborations with other groups or universities	1. Starting date 2. Ending date 3. Hosting group 4. Department the group belongs to 5. University the department belongs to
#COMPANY	Current company	1. Company name 2. Company address 3. Host department 4. Job in department 5. Telephone 6. Email
#COURSES	Teaching courses at university	1. Subject name 2. Department 3. University 4. Subject plan (bachelor's, master, PhD...) 5. Subject type (core, compulsory, optional, free choice...) 6. Grade 7. Teaching hours
#DEVELOPER_APPS	Software for developers	1. Software name
#GENERAL_APPS	General software	1. Software name

Table 1 – Available cards, descriptions and specific information

Card	Description	Information
#GIVEN_COURSES	Short courses given (see COURSES card for full courses)	1. Course name 2. Entity where the course is given (school, university, institute...) 3. Course duration in hours 4. Year the course is given
#GIVEN_SEMINARS	Seminars given	1. Seminar name 2. Entity where the seminar is given (school, university, institute...) 3. Seminar duration in hours 4. Year the seminar is given
#GIVEN_WORKSHOPS	Workshops given	1. Workshop name 2. Entity where the workshops is given (school, university, institute...) 3. Workshop duration in hours 4. Year the workshops is given
#INTERNATIONAL_ CONFERENCES	Participation in international conferences	1. List of authors separated by commas (do not use *and* between last items) 2. Contribution title 3. Conference name 4. Conference web link 5. Conference place 6. Conference reference 7. Contribution (presentation, poster, organizer, committee...) 8. Contribution pages 9. Date of celebration

Table 1 – Available cards, descriptions and specific information

Card	Description	Information
#INTERNSHIPS	Internships in other centers or universities	1. Starting date 2. Ending date 3. School, university, institute... 4. Location 5. Description of internship 6. Advisor
#JOBS	Professional experience	1. Starting date 2. Ending date 3. Company name 4. Job description
#LANGUAGE_COURSES	Language courses received	1. Course name 2. Entity who gives the course (school, university, institute...) 3. Place where the course if given 4. Year the course is given
#LANGUAGE_TITLES	Language titles	1. Language title 2. Entity who issues the title (school, university, institute...) 3. Year of issue
#LANGUAGES	Known languages	1. Language 2. Listening skills (A1, A2, B1, B2, C1 or C2) 3. Speaking skills (A1, A2, B1, B2, C1 or C2) 4. Writing skills (A1, A2, B1, B2, C1 or C2)

Table 1 – Available cards, descriptions and specific information

Card	Description	Information
#MATERIALS	Published academic materials	1. Name or title 2. Publisher or editor 3. Material reference 4. Year of publication
#NATIONAL_CONFERENCES	Participation in national conferences	1. List of authors separated by commas (do not use *and* between last items) 2. Contribution title 3. Conference name 4. Conference web link 5. Conference place 6. Conference reference 7. Contribution (presentation, poster, organizer, committee...) 8. Contribution pages 9. Date of celebration
#PAPERS	Published research papers	1. List of authors separated by commas (do not use *and* between last items) 2. Paper title 3. Publication link 4. Publisher name (or editorial) 5. Journal name 6. Paper reference 7. Contribution (main author, coauthor, editor, reviewer...) 8. Journal volume 9. Journal pages 10. Publishing year

Table 1 – Available cards, descriptions and specific information

Card	Description	Information
#PATENTS	Registered patents	1. List of authors separated by commas (do not use *and* between last items) 2. Patent title 3. Patent description 4. Patent number 5. Concession date 6. Patent type (national, European, cooperation treatment...)
#PERSONAL	Personal data (**mandatory card**)	1. Last name of person the résumé is being written 2. Name 3. ID number 4. Birth date 5. Contact telephone 6. Personal address 7. City 8. Postal code
#PROJECTS	Participation in research projects	1. Project title 2. Entity giving the project 3. Main researcher 4. Starting date 5. Ending date 6. Amount of money (currency symbol is introduced via input argument only) 7. Number of researchers
#RECEIVED_COURSES	Short courses received	1. Course name 2. Entity where the course is given (school, university, institute...) 3. Course duration in hours 4. Year the course is given

Table 1 – Available cards, descriptions and specific information

Card	Description	Information
#RECEIVED_SEMINARS	Seminars received	1. Seminar name 2. Entity where the seminar is given (school, university, institute...) 3. Seminar duration in hours 4. Year the seminar is given
#RECEIVED_WORKSHOPS	Workshops received	1. Workshop name 2. Entity where the workshops is given (school, university, institute...) 3. Workshop duration in hours 4. Year the workshops is given
#SCHOLARSHIPS	Scholarships awarded	1. Name of scholarship 2. Description of scholarship 3. Amount of money (currency symbol is introduced via input argument only) 4. Duration of scholarship in months 5. Location 6. Year
#SPECIFIC_APPS	Specific software	1. Software name 2. Software description

5.4   Unknown information

Information in cards follow a specific order (given by the third column of Table I), and MATLAB expects one line for each information item. However, if a piece of information is unknown, fill the line with ###. For example, a conference without reference number (ISBN/ISSN...) will be input as:

```
1
2      #INTERNATIONAL_CONFERENCES
3
4  S. Connor , J. Connor                    %list of authors
5  Methodology for programming a Terminator    %contribution title
```

```
6   International Geek Conference                    %conference
7   http://www.geekconference.com                    %link
8   San Francisco, USA                               %location
9   ###                                              %reference number (unknown)
10  Oral presentation                                %type of contribution
11  12                                               %number of pages
12  August 29, 1997                                  %date
13
```

5.5   Aliases

Aliases can be defined in ALIASES card and they will be substituted elsewhere in the input file. It could be as many aliases as desired in the ALIASES card but only one alias per line is allowed. Besides, aliases are case sensitive.

Aliases start with the $ character followed by the alias name, then a = character and, finally, the alias definition. Only alphanumeric characters and underscore are allowed in the alias name. The characters $ and = are not allowed in the alias definition.

For example, if the following card is used:

```
1
2       #ALIASES
3
4   $me      = S. Connor
5   $son     = J. Connor
6   $IGC     = International Geek Conference
7
```

Then, the card in previous subsection could be written as:

```
1
2       #INTERNATIONAL_CONFERENCES
3
4   $me, $son                                   %list of authors
5   Methodology for programming a Terminator    %contribution title
6   $IGC                                        %conference
7   http://www.geekconference.com               %link
8   San Francisco, USA                          %location
9   ###                                         %reference number (unknown)
10  Oral presentation                           %type of contribution
11  12                                          %number of pages
12  August 29, 1997                             %date
13
```

5.6   Résumé layout

The generated résumé follows a specific layout, given in Table 2. The second column shows the card where the information for each section/subsection is obtained from.

Table 2 – Layout followed in résumé

Section	Subsection	Card
General information	Personal data Current company Academic background	PERSONAL COMPANY BACKGROUNDS
Research	Projects Research publications Papers Books International conferences National conferences Patents Collaborations Internships Scholarships Developed codes	PROJECTS PAPERS BOOKS INTERNATIONAL_CONFERENCES NATIONAL_CONFERENCES PATENTS COLLABORATIONS INTERNSHIPS SCHOLARSHIPS CODES
Teaching	University teaching Given courses Given seminars Given workshops Academic materials	COURSES GIVEN_COURSES GIVEN_SEMINARS GIVEN_WORKSHOPS MATERIALS
Employment experience		JOBS
Other achievements	Languages Official titles Courses and seminars Received courses Received seminars Received workshops Language courses Computer knowledge General software Developer software General software	LANGUAGES LANGUAGE_TITLES RECEIVED_COURSES RECEIVED_SEMINARS RECEIVED_WORKSHOPS LANGUAGE_COURSES GENERAL_APPS DEVELOPER_APPS SPECIFIC_APPS

6 To-do list

There is no plan to make further versions of writeLatexCV, but hereafter some ideas are presented.

- Manage longtable break[1]
- Include thesis supervised under the teaching title
- Include teaching innovation projects under the teaching title
- Include artistic works under the research title
- Sort items in cards according to their date or year
- Load publications from a bibtex file

7 Changelog

Version: v1.1.0 - 01/11/19

- Web page created: https://writelatexcv.wordpress.com/
- User guide created in html and PDF
- Input argument names modified to be more readable
- Input argument `date_format` is redefined
- New input arguments `font_size`, `blue_links` and `us_paper`
- Some card names are changed
- Two new cards `GIVEN_WORKSHOPS` and `RECEIVED_WORKSHOPS`

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[1]Currently, page breaks are set before all sections and pdfLatex decides the page break inside sections. However, feel free to add or remove `\newpage` command into/from the tex file for a better table format.

- If English is chosen, the currency symbol is always in front of amounts despite the currency

- Add special characters ^{} and _{} for subscript and superscript in text

- Add bookmarks in produced pdf

- Add link to email in `PERSONAL` card

- Minor bugs fixed and code refactor for readability

Version: v1.0.3 - 26/05/18

- `CODES` card added for developed codes

Version: v1.0.2 - 14/02/18

- Bug fixed: syntax error in last item of last card is handled properly

Version: v1.0.1 - 13/02/18

- Links added to publications

- Minor bugs fixed

Version: v1.0.0 - 05/02/18

- Create résumé in pdf format (via Latex)

- Create résumé in three languages: English, Spanish and Catalan

- Five main sections: general, research, teaching, experience and others

- Each section with different subsections

- Two distributions tested: Unix and Windows

- Minor bugs identified

Please, **contact me** for any suggestion or bug.

Visit the project **web page**.

Thank you for using writeLatexCV!