

# Program `luafindfont`

—

0.04 (November 29, 2021)

Herbert Voß  
[hvoss@tug.org](mailto:hvoss@tug.org)

## Contents

1	Introduction	2
1.1	Syntax . . . . .	3
2	How it works	3
3	Examples	3
4	List of all fonts	6

Thanks to:  
Rolf Niepraschk;

# 1 Introduction

The Lua program `luafindfont` is a program for searching installed fonts which are usable for `LuaTeX` and `XTeX`. The already existing Lua program `luaotfload-tool` can also be used for searching, but the search-interface is somewhat cryptic and too complex for a user, who wants only to know if a font is present or not. And if present, where can it be found. For example:

```
H-MacBook:~ voss$
H-MacBook:~ voss$ luaotfload-tool --find=times
luaotfload | resolve : Font "times" found!
luaotfload | resolve : Resolved file name "/System/Library/Fonts/Times.ttc", subfont nr. 0
H-MacBook:~ voss
H-MacBook:~ voss$ luaotfload-tool --fuzzy --find="times new roman"
luaotfload | resolve : Font "times new roman" found!
luaotfload | resolve : Resolved file name "/System/Library/Fonts/Supplemental/Times New Roman.ttf"
H-MacBook:~ voss$
```

But this are not *all* Times fonts. Compare it with the output of `luafindfont`, where the searchname *times* must only be a part of a longer name:

```
bash-3.2$ ./luafindfont.lua times
We are using Lua 5.3
Check for file /usr/local/texlive/texmf-var/luatex-cache/generic/names/luaotfload-names
```

Nr.	Fontname	Symbolic Name	Path
1.	Times New Roman Bold Italic.ttf	timesnewroman	/Users/voss/Library/Fonts/Times/
2.	Times New Roman Bold Italic.ttf	timesnewroman	/System/Library/Fonts/Supplemental/
3.	Times New Roman Bold.ttf	timesnewroman	/System/Library/Fonts/Supplemental/
4.	Times New Roman Bold.ttf	timesnewroman	/Users/voss/Library/Fonts/Times/
5.	Times New Roman Italic.ttf	timesnewroman	/System/Library/Fonts/Supplemental/
6.	Times New Roman Italic.ttf	timesnewroman	/Users/voss/Library/Fonts/Times/
7.	Times New Roman.ttf	timesnewroman	/System/Library/Fonts/Supplemental/
8.	Times New Roman.ttf	timesnewroman	/Users/voss/Library/Fonts/Times/
9.	Times.ttc	times	/System/Library/Fonts/
10.	Times_Sans_Serif.ttf	timesansserif	/Users/voss/Library/Fonts/Times/
11.	TimesNewRomanMTStd-Bold.otf	timesnewromanmtstd	/Users/voss/Library/Fonts/Times/
12.	TimesNewRomanMTStd-BoldCond.otf	timesnewromanmtstd	/Users/voss/Library/Fonts/Times/
13.	TimesNewRomanMTStd-BoldIt.otf	timesnewromanmtstd	/Users/voss/Library/Fonts/Times/
14.	TimesNewRomanMTStd-Cond.otf	timesnewromanmtstd	/Users/voss/Library/Fonts/Times/
15.	TimesNewRomanMTStd-CondIt.otf	timesnewromanmtstd	/Users/voss/Library/Fonts/Times/
16.	TimesNewRomanMTStd-Italic.otf	timesnewromanmtstd	/Users/voss/Library/Fonts/Times/
17.	TimesNewRomanMTStd.otf	timesnewromanmtstd	/Users/voss/Library/Fonts/Times/
18.	TimesNewRomanPS-BoldItalicMT.otf	timesnewromanpsmt	/Users/voss/Library/Fonts/Times/
19.	TimesNewRomanPS-BoldMT.otf	timesnewromanpsmt	/Users/voss/Library/Fonts/Times/
20.	TimesNewRomanPSMT.otf	timesnewromanpsmt	/Users/voss/Library/Fonts/Times/
21.	TimesNewRomanPSStd-Bold.otf	timesnewromanpsstd	/Users/voss/Library/Fonts/Times/
22.	TimesNewRomanPSStd-BoldIt.otf	timesnewromanpsstd	/Users/voss/Library/Fonts/Times/
23.	TimesNewRomanPSStd-Italic.otf	timesnewromanpsstd	/Users/voss/Library/Fonts/Times/
24.	TimesNewRomanPSStd-Regular.otf	timesnewromanpsstd	/Users/voss/Library/Fonts/Times/

## 1.1 Syntax

The syntax is

```
luafindfont [...] <font>
```

where [...] are optional arguments, either in short or long form which, of course, can be mixed:

```
parameter handling
-q,--quiet
-h,--help
-o,--otfinfo (default 0)
-i,--info (default 0)
-n,--nosymbolicnames
-v...      Verbosity output
-m,--max_string (default 90)
<font> (string)
```

For example:

```
luafindfont times
luafindfont palatino -o 3
luafindfont -i 3 -m 50 arial
```

1. -q: quiet;
2. -m <columns>: How many columns are used for the font with full path. This can be really long, but with e.g. -m 50 the length is limited to 50 characters.
3. -o <number>: For the font with the given number from the font list the program otfinfo is called for some generell font informations.
4. -i <number>: For the font with the given number from the font list the existing font styles are listed.

## 2 How it works

luafindfont uses the data file luaotfloadtool-names.lua which is created by Lua<sup>T</sup><sub>E</sub>X. If it is missing it will be created by luafindfont itself. The name of the font should be in lowercase characters and must not be the complete name. A time for finding all fonts with time in its names is sufficient.

## 3 Examples

```
bash-3.2$ luafindfont segoe
```

### 3 Examples

We are using Lua 5.3

Check for file /usr/local/texlive/2021/texmf-var/luatex-cache/generic/names/luatload-names

1.	Segoe UI Symbol.ttf	segoeuisymbol	/Users/voss/Library/Fonts/Segoe/Segoe UI Symbol.ttf
2.	Segoe_Print.ttf	segoeprint	/Users/voss/Library/Fonts/Segoe/Segoe_Print.ttf
3.	Segoe_Print_Bold.ttf	segoeprint	/Users/voss/Library/Fonts/Segoe/Segoe_Print_Bold.ttf
4.	Segoe_Script.ttf	segoescript	/Users/voss/Library/Fonts/Segoe/Segoe_Script.ttf
5.	Segoe_Script_Bold.ttf	segoescript	/Users/voss/Library/Fonts/Segoe/Segoe_Script_Bold.ttf
6.	Segoe_UI.ttf	segoeui	/Users/voss/Library/Fonts/Segoe/Segoe_UI.ttf
7.	Segoe_UI_Bold.ttf	segoeui	/Users/voss/Library/Fonts/Segoe/Segoe_UI_Bold.ttf
8.	Segoe_UI_Bold_Italic.ttf	segoeui	/Users/voss/Library/Fonts/Segoe/Segoe_UI_Bold_Italic.ttf
9.	Segoe_UI_Italic.ttf	segoeui	/Users/voss/Library/Fonts/Segoe/Segoe_UI_Italic.ttf

```
bash-3.2$ luafindfont -m 40 libertineus
```

We are using Lua 5.3

Check for file /usr/local/texlive/2021/texmf-var/luatex-cache/generic/names/luatload-names

1.	LibertinusKeyboard-Regular.otf	libertinuskeyboard	/usr/local/texlive/2021/te...Regular.otf
2.	LibertinusMath-Regular.otf	libertinusmath	/usr/local/texlive/2021/te...Regular.otf
3.	LibertinusMono-Regular.otf	libertinusmono	/usr/local/texlive/2021/te...Regular.otf
4.	LibertinusSans-Bold.otf	libertinussans	/usr/local/texlive/2021/te...ns-Bold.otf
5.	LibertinusSans-Italic.otf	libertinussans	/usr/local/texlive/2021/te...-Italic.otf
6.	LibertinusSans-Regular.otf	libertinussans	/usr/local/texlive/2021/te...Regular.otf
7.	LibertinusSerif-Bold.otf	libertinusserif	/usr/local/texlive/2021/te...if-Bold.otf
8.	LibertinusSerif-BoldItalic.otf	libertinusserif	/usr/local/texlive/2021/te...dItalic.otf
9.	LibertinusSerif-Italic.otf	libertinusserif	/usr/local/texlive/2021/te...-Italic.otf
10.	LibertinusSerif-Regular.otf	libertinusserif	/usr/local/texlive/2021/te...Regular.otf
11.	LibertinusSerif-Semibold.otf	libertinusserif	/usr/local/texlive/2021/te...emibold.otf
12.	LibertinusSerif-SemiboldItalic.otf	libertinusserif	/usr/local/texlive/2021/te...dItalic.otf
13.	LibertinusSerifDisplay-Regular.otf	libertinusserifdisplay	/usr/local/texlive/2021/te...Regular.otf
14.	LibertinusSerifInitials-Regular.otf	libertinusserifinitials	/usr/local/texlive/2021/te...Regular.otf

```
bash-3.2$ luafindfont -i 9 sego
```

We are using Lua 5.3

Check for file /usr/local/texlive/2021/texmf-var/luatex-cache/generic/names/luatload-names

1.	Segoe UI Symbol.ttf	segoeuisymbol	/Users/voss/Library/Fonts/Segoe/Segoe UI Symbol.ttf
2.	Segoe_Print.ttf	segoeprint	/Users/voss/Library/Fonts/Segoe/Segoe_Print.ttf
3.	Segoe_Print_Bold.ttf	segoeprint	/Users/voss/Library/Fonts/Segoe/Segoe_Print_Bold.ttf
4.	Segoe_Script.ttf	segoescript	/Users/voss/Library/Fonts/Segoe/Segoe_Script.ttf
5.	Segoe_Script_Bold.ttf	segoescript	/Users/voss/Library/Fonts/Segoe/Segoe_Script_Bold.ttf
6.	Segoe_UI.ttf	segoeui	/Users/voss/Library/Fonts/Segoe/Segoe_UI.ttf
7.	Segoe_UI_Bold.ttf	segoeui	/Users/voss/Library/Fonts/Segoe/Segoe_UI_Bold.ttf
8.	Segoe_UI_Bold_Italic.ttf	segoeui	/Users/voss/Library/Fonts/Segoe/Segoe_UI_Bold_Italic.ttf
9.	Segoe_UI_Italic.ttf	segoeui	/Users/voss/Library/Fonts/Segoe/Segoe_UI_Italic.ttf

Font: segoeui

Fonttype ttf(system) --> | Regular | Bold | Italic | BoldItalic |

```
bash-3.2$ luafindfont -o 6 arial
```

We are using Lua 5.3

Check for file /usr/local/texlive/2021/texmf-var/luatex-cache/generic/names/luatofload-names

1.	Arial Black.ttf	arialblack	/System/Library/Fonts/Supplemental/Arial Black.ttf
2.	Arial Bold Italic.ttf	arial	/System/Library/Fonts/Supplemental/Arial Bold Italic.ttf
3.	Arial Bold.ttf	arial	/System/Library/Fonts/Supplemental/Arial Bold.ttf
4.	Arial Italic.ttf	arial	/System/Library/Fonts/Supplemental/Arial Italic.ttf
5.	Arial Narrow Bold Italic.ttf	arialnarrow	/System/Library/Fonts/Supplemental/Arial Narrow Bold Italic.ttf
6.	Arial Narrow Bold.ttf	arialnarrow	/System/Library/Fonts/Supplemental/Arial Narrow Bold.ttf
7.	Arial Narrow Italic.ttf	arialnarrow	/System/Library/Fonts/Supplemental/Arial Narrow Italic.ttf
8.	Arial Narrow.ttf	arialnarrow	/System/Library/Fonts/Supplemental/Arial Narrow.ttf
9.	Arial Rounded Bold.ttf	arialroundedmtbold	/System/Library/Fonts/Supplemental/Arial Rounded Bold.ttf
10.	Arial Unicode.ttf	arialunicodems	/Library/Fonts/Arial Unicode.ttf
11.	Arial Unicode.ttf	arialunicodems	/System/Library/Fonts/Supplemental/Arial Unicode.ttf
12.	Arial.ttf	arial	/System/Library/Fonts/Supplemental/Arial.ttf
13.	Arial.ttf	arial	/Users/voss/Library/Fonts/Arial/Arial.ttf
14.	ArialHB.ttc	arialhebrew	/System/Library/Fonts/ArialHB.ttc
15.	ArialHB.ttc	arialhebrewdeskinterface	/System/Library/Fonts/ArialHB.ttc
16.	ArialHB.ttc	arialhebrewscholar	/System/Library/Fonts/ArialHB.ttc
17.	ArialHB.ttc	arialhebrew	/System/Library/Fonts/ArialHB.ttc

Run otfinfo:6

Family: Arial Narrow  
Subfamily: Bold  
Full name: Arial Narrow Bold  
PostScript name: ArialNarrow-Bold  
Version: Version 2.38.1x  
Unique ID: Arial Narrow Bold : 2007  
Description: Monotype Drawing Office 1982. A contemporary sans serif design, Arial contains more humanist characteristics than many of its predecessors and as such is more legible than most sans serif designs.  
Designer: Robin Nicholas, Patricia Saunders  
Manufacturer: The Monotype Corporation  
Trademark: Arial is a trademark of The Monotype Corporation in the United States and/or other countries.  
Copyright: © 2007 The Monotype Corporation. All Rights Reserved.  
License Description: You may use this font to display and print content as permitted by the license terms for the product in which this font is included. You may only (i.e., you may not) use this font in any way that would violate the license terms for the product in which this font is included.  
Vendor ID: TMC

### 4 List of all fonts

This possible with the symbolic fontname "\*" instead of a real fontname:

```
bash-3.2$ luafindfont "*"

```

This list maybe really long and is shortend here!

We are using Lua 5.3  
Looking for font "\*"
Check for file /usr/local/texlive/texmf-var/luatex-cache/generic/names/luatload-names

Nr.	Fontname	Path
1.	Aboensis-Regular.otf	/usr/local/texlive/texmf-dist/fonts/opentype/public/aboensis/
2.	academicons.ttf	/usr/local/texlive/texmf-dist/fonts/truetype/public/academicons/
3.	Academy Engraved LET Fonts.ttf	/System/Library/Fonts/Supplemental/
4.	ACaslonPro-Bold.otf	/Users/voss/Library/Fonts/Caslon/
5.	ACaslonPro-BoldItalic.otf	/Users/voss/Library/Fonts/Caslon/
6.	ACaslonPro-Italic.otf	/Users/voss/Library/Fonts/Caslon/
7.	ACaslonPro-Regular.otf	/Users/voss/Library/Fonts/Caslon/
8.	ACaslonPro-Semibold.otf	/Users/voss/Library/Fonts/Caslon/
9.	ACaslonPro-SemiboldItalic.otf	/Users/voss/Library/Fonts/Caslon/
10.	Acathist-Regular.otf	/usr/local/texlive/texmf-dist/fonts/opentype/public/fonts-churchslavonic/
11.	AccanthisADFStdNo3-Bold.otf	/usr/local/texlive/texmf-dist/fonts/opentype/arkandis/accanthis/
12.	AccanthisADFStdNo3-BoldItalic.otf	/usr/local/texlive/texmf-dist/fonts/opentype/arkandis/accanthis/
13.	AccanthisADFStdNo3-Italic.otf	/usr/local/texlive/texmf-dist/fonts/opentype/arkandis/accanthis/
14.	AccanthisADFStdNo3-Regular.otf	/usr/local/texlive/texmf-dist/fonts/opentype/arkandis/accanthis/
15.	ACE.ttc	/Users/voss/Library/Fonts/AppleSymbols/
16.	ACE.ttc	/Users/voss/Library/Fonts/AppleSymbols/
17.	AdineKirnberg-Script.otf	/Users/voss/Library/Fonts/AdineScript/
18.	AdobeArabic-Bold.otf	/Users/voss/Library/Fonts/Adobe/
19.	AdobeArabic-BoldItalic.otf	/Users/voss/Library/Fonts/Adobe/
[...]	[...]	[...]
6847.	□□_Pro.ttf	/Users/voss/Library/Fonts/KozukaPro/
6848.	□□□□.ttf	/Users/voss/Library/Fonts/KozukaPro/
6849.	□□□□.ttf	/Users/voss/Library/Fonts/KozukaPro/
6850.	□□□□.ttf	/Users/voss/Library/Fonts/KozukaPro/

```
bash-3.2$ luafindfont -n minion
```

We are using Lua 5.3

Looking for font "minion"

Check for file /usr/local/texlive/2021/texmf-var/luatex-cache/generic/names/luatofload-names

Nr.	Fontname	Path
1.	MinionMath-Bold.otf	/Users/voss/Library/Fonts/MinionMath/
2.	MinionMath-Regular.otf	/Users/voss/Library/Fonts/MinionMath/
3.	MinionPro-Bold.otf	/Users/voss/Library/Fonts/MinionPro/
4.	MinionPro-BoldCn.otf	/Users/voss/Library/Fonts/MinionPro/
5.	MinionPro-BoldCnIt.otf	/Users/voss/Library/Fonts/MinionPro/
6.	MinionPro-BoldIt.otf	/Users/voss/Library/Fonts/MinionPro/
7.	MinionPro-Capt.otf	/Users/voss/Library/Fonts/MinionPro/
8.	MinionPro-Disp.otf	/Users/voss/Library/Fonts/MinionPro/
9.	MinionPro-It.otf	/Users/voss/Library/Fonts/MinionPro/
10.	MinionPro-Medium.otf	/Users/voss/Library/Fonts/MinionPro/
11.	MinionPro-MediumIt.otf	/Users/voss/Library/Fonts/MinionPro/
12.	MinionPro-Regular.otf	/Users/voss/Library/Fonts/MinionPro/
13.	MinionPro-Semibold.otf	/Users/voss/Library/Fonts/MinionPro/
14.	MinionPro-SemiboldIt.otf	/Users/voss/Library/Fonts/MinionPro/
15.	MinionPro-Subh.otf	/Users/voss/Library/Fonts/MinionPro/

## Index

### A

argument, 3

### L

luafindfont program, 2

luaotfload-tool program, 2

luaotfloadtool-names.lua file, 3

### O

otfinfo program, 3

### S

syntax, 3