The iconfonts package Up-to-date LuaLTEX support for Font Awesome Free and Academicons

Marc Penninga*

Version 1.0.0 (2025-04-11); includes Font Awesome Free version 6.7.2 and Academicons version 1.9.4

Contents

1	Introduction	1
2	Installation	1
3	Usage	2
4	Copyright	2
5	License	2
A	List of Font Awesome icons	3
В	List of Font Awesome brand icons	11
\mathbf{C}	List of Academicons icons	14

1 Introduction

There already exist several packages on CTAN that provide access to the *Font Awesome Free* and *Academicons* icon fonts, but these have all become outdated and are missing many icons from newer versions of those fonts. The iconfonts package attempts to deal with the update problem by building the IATEX support dynamically from data in the fonts themselves; updating the package is then as simple as replacing the font files with newer ones. The drawback of this approach is that the package only works with LuaIATEX.

2 Installation

This package is not (yet?) available from CTAN, and hence also not included in TEX Live and other TEX distributions. It must therefore be installed manually; this is done by copying the

^{*}URL: github.com/drs-p/iconfonts

contents of the texmf/ directory to either your \$TEXMFLOCAL or your \$TEXMFHOME tree. Installing it in \$TEXMFLOCAL will make the package available to all users on the system, but may require administrator rights; installing it in \$TEXMFHOME makes it available only for your user. The precise values of \$TEXMFLOCAL and \$TEXMFHOME depend on your TFX installation; see your installation's documentation for more information.

If you are using TFX Live (or another TFX distribution that uses the kpathsea library), you can find the value of these variables by running

kpsewhich -expand-var '\$TEXMFLOCAL'

and similarly for \$TEXMFHOME.

$\mathbf{3}$ Usage

The iconfonts package contains all icons from the Academicons and Font Awesome Free fonts. \fontawesome The package provides two commands to access those icons: \fontawesome and \academicons. \academicons Each of these has a single, mandatory argument: the $\langle name \rangle$ of the icon.

Some Font Awesome icons have light or open variants, such as Θ and Θ . Those variants are accessed by adding -o to the icon name: \fontawesome{face-smile-o} instead of \fontawesome{face-smile}. A list of all icons and their names is included in the appendices.

\fontawesome*

The icons have varying widths. Both commands have starred variants, \fontawesome* and \academicons* \academicons*, that produce fixed-width icons (by centering them in a 1.25em wide box).

Copyright 4

- The Font Awesome fonts are Copyright 2024 Fonticons, Inc. (https://fontawesome.com), with Reserved Font Name "Font Awesome".
- The Academicons font is Copyright 2023 James Walsh, Katja Bercic (https://jpswalsh. github.io/academicons), with Reserved Font Name "Academicons".
- All other files are Copyright 2025 Marc Penninga.

5 License

Both the Font Awesome fonts and the Academicons font are released under the SIL Open Font License, version 1.1. The rest of this package is released under the LaTeX Project Public License, version 1.3c.

All brand icons are trademarks of their respective owners. The use of these trademarks does not indicate endorsement of the trademark holder by Font Awesome or the author, nor vice versa. Please do not use brand logos for any purpose except to represent the company, product, or service to which they refer.

A List of Font Awesome icons

8 address-book address-book-o address-card <u>=</u>= address-card-o 多条三三三 align-center align-justify align-left align-right anchor anchor-circle-check ₽ L anchor-circle-exclamation g anchor-circle-xmark ₫₽ anchor-lock angle-down < angle-left > angle-right angle-up angles-down **«** angles-left **>>** angles-right angles-up ankh apple-whole archway arrow-down arrow-down-1-9 13 arrow-down-9-1 **↓** arrow-down-a-z arrow-down-long ĮΞ arrow-down-short-wide arrow-down-up-across-line arrow-down-up-lock †Ξ arrow-down-wide-short ₽¥ arrow-down-z-a \leftarrow arrow-left arrow-left-long K arrow-pointer \rightarrow arrow-right arrow-right-arrow-left arrow-right-from-bracket arrow-right-long arrow-right-to-bracket arrow-right-to-city arrow-rotate-left arrow-rotate-right arrow-trend-down arrow-trend-up arrow-turn-down **1** arrow-turn-up 1 arrow-up 13 arrow-up-1-9 11 arrow-up-9-1 咎 arrow-up-a-z **↑** arrow-up-from-bracket arrow-up-from-ground-water arrow-up-from-water-pump arrow-up-long arrow-up-right-dots arrow-up-right-from-square arrow-up-short-wide arrow-up-wide-short

arrow-up-z-a arrows-down-to-line arrows-down-to-people \leftrightarrow arrows-left-right |↔| arrows-left-right-to-line \mathbb{C} arrows-rotate arrows-spin 4 arrows-split-up-and-left arrows-to-circle arrows-to-dot **"O**" arrows-to-eye * Ch \$1 ↔ arrows-turn-right arrows-turn-to-dots arrows-up-down arrows-up-down-left-right arrows-up-to-line atom audio-description award baby baby-carriage backward backward-fast backward-step bacon bacteria bacterium bag-shopping bahai 0 ban ❷ ban-smoking bandage barcode bars bars-progress bars-staggered baseball baseball-bat-ball basket-shopping basketball bath battery-empty battery-full battery-half battery-quarter battery-three-quarters bed bed-pulse beer-mug-empty bell-concierge bell-o bell-slash bell-slash-o bezier-curve ळे bicycle İÌ binoculars biohazard blender 怎 blender-phone

В bold bolt bolt-lightning bomb bone bong book **⊕** book-atlas 8 book-bible book-bookmark ₩. book-journal-whills 8 book-medical book-open ů book-open-reader C book-quran * book-skull book-tanakh bookmark bookmark-o ⊞ border-all border-none border-top-left U bore-hole bottle-droplet Ē bottle-water bowl-food bowl-rice bowling-ball box box-archive box-open box-tissue boxes-packing boxes-stacked braille brain bread-slice T ₩ bridge 两 bridge-circle-check bridge-circle-exclamation ₩ bridge-circle-xmark ₩. bridge-lock \mathbf{II} bridge-water briefcase Ô briefcase-medical ď broom broom-ball brush bucket bug × bug-slash bugs Ħ building Ro building-circle-arrow-right Ro building-circle-check **Re** building-circle-exclamation ₩e building-circle-xmark 盦 building-columns building-flag building-lock building-ngo

blog

:	building-o
Ro	building-shield
	building-un
#	building-user
m #	building-wheat
Ħ	bullhorn
0	bullseye
₩ @ @	burger
*	burst
	bus
	bus-simple
	business-time
苗	cable-car
	cake-candles
	calculator
	calendar
	calendar-check
$\overline{\mathbf{Q}}$	calendar-check-o
<u> </u>	calendar-day
▦	calendar-days
#	calendar-days-o
	calendar-minus
፱	calendar-minus-o
<u> </u>	calendar-o
	calendar-plus
±	calendar-plus-o calendar-week
=	calendar-xmark
	calendar-xmark-o
	camera
គ	camera-retro
	camera-rotate
Ā	campground
Å er ² ₩	candy-cane
*	cannabis
90	capsules
\blacksquare	car
€	car-battery
*	car-burst
Ä	car-on
A	car-rear
A	car-side
A	car-tunnel
<u>.</u>	caravan
4	caret-down caret-left
	caret-right
•	caret-up
,	carrot
'n	cart-arrow-down
<u>u</u>	cart-flatbed
<u> </u>	cart-flatbed-suitcase
Ħ	cart-plus
Ħ	cart-shopping
	cash-register
L	cat
*	certificate
<u>—</u>	chair
므	chalkboard
ام ہ	chalkboard-user
1	champagne-glasses
<u>₩</u> √	charging-station
_	chart-area

E	chart-bar
匡	chart-bar-o
□禹□≥♣〓>≫■	chart-column
杰	chart-diagram
15.	chart-gantt
4	chart-line
C7	chart-pie
ılı	chart-simple
~	check
4	check-double
	check-to-slot
	cheese
i y	chess
Ł	chess-bishop
8	chess-bishop-o
8	
889	chess-board
±	chess-king
₾	chess-king-o
9	chess-knight
<u>5</u>	chess-knight-o
≅	
Ī	chess-pawn
표	chess-pawn-o
Ė	chess-queen
₾	chess-queen-o
₩	chess-rook
<u>=</u>	
프	chess-rook-o
Y	chevron-down
<	chevron-left
>	chevron-right
^	chevron-up
6	child
1TT ● 1	
πŧ	child-combatant
Ħ	child-dress
Ÿ	child-reaching
**	children
π n	church
(T)	
	circle
0	circle-arrow-down
(circle-arrow-left
Š	circle-arrow-right
ă	
Y	circle-arrow-up
Ø	circle-check
\odot	circle-check-o
lacktriangle	circle-chevron-down
3	circle-chevron-left
ŏ	circle-chevron-right
X	
8	circle-chevron-up
<u>9</u>	circle-dollar-to-slot
0	circle-dot
(•)	circle-dot-o
ŏ	circle-down
\sim	
lacksquare	circle-down-o
Ð	circle-exclamation
(1)	circle-h
lacksquare	circle-half-stroke
Ă	circle-info
Ž	
Š	circle-left
•	circle-left-o
0	circle-minus
	circle-nodes
Ò	circle-notch
\preceq	circle-o
\simeq	

```
circle-pause-o
circle-play
     circle-play-o
     circle-plus
     circle-question
     circle-question-o
     circle-radiation
     circle-right
     circle-right-o
     circle-stop
     circle-stop-o
     circle-up
①
     circle-up-o
8
     circle-user
<u></u>
     circle-user-o
8
     circle-xmark
\otimes
     circle-xmark-o
曲
     city
     clapperboard
     clipboard
     clipboard-check
clipboard-list
     clipboard-o
     clipboard-question
     clipboard-user
     clock
     clock-o
     clock-rotate-left
     clone
ج
     clone-o
CC
     closed-captioning
СС
     closed-captioning-o
     cloud
8
     cloud-arrow-down
4
     cloud-arrow-up
     cloud-bolt
     cloud-meatball
     cloud-moon
     cloud-moon-rain
     cloud-rain
     cloud-showers-heavy
     cloud-showers-water
     cloud-sun
*
     cloud-sun-rain
     clover
</>
     code
     code-branch
-0-
     code-commit
     code-compare
     code-fork
     code-merge
it
     code-pull-request
     coins
     comment
     comment-dollar
Ø
6
     comment-dots
\odot
     comment-dots-o
Q
     comment-medical
S
     comment-nodes
     comment-o
     comment-slash
     comment-sms
     comments
```

circle-pause

comments-dollar	Ø	droplet-slash		face-grin-tears
comments-o	F	drum	@	face-grin-tears-o
compact-disc	8	drum-steelpan	(+)	face-grin-tongue
compass	•	drumstick-bite	⊕	face-grin-tongue-o
compass-drafting	4-1	dumbbell	(4)	face-grin-tongue-squin
compass-o	**	dumpster	₩	face-grin-tongue-squin
compress	# ô	dumpster-fire	9	face-grin-tongue-wink
computer		dungeon	9	face-grin-tongue-wink-
computer-mouse	Ą	ear-deaf	•	face-grin-wide
cookie	'	ear-listen	@	face-grin-wide-o
cookie-bite	6	earth-africa	9	face-grin-wink
сору	3	earth-americas	9	face-grin-wink-o
copy-o	@	earth-asia	•	face-kiss
copyright	©	earth-europe	•	face-kiss-beam
copyright-o	•	earth-oceania	<u> </u>	face-kiss-beam-o
couch		egg	3	face-kiss-o
cow		eject	?	face-kiss-wink-heart
credit-card	ÊĚ	elevator	$_{\mathfrak{F}}$	face-kiss-wink-heart-o
credit-card-o	•••	ellipsis	•	face-laugh
crop	:	ellipsis-vertical	•	face-laugh-beam
crop-simple	ightharpoons	envelope	©	face-laugh-beam-o
cross	$ \sum_{i} $	envelope-circle-check	⊕	face-laugh-o
crosshairs	\square	envelope-o	8	face-laugh-squint
crow		envelope-open	⊗	face-laugh-squint-o
crown	\bigcirc	envelope-open-o	ĕ	face-laugh-wink
crutch	=	envelope-open-text	Θ	face-laugh-wink-o
cube	5	envelopes-bulk	•	face-meh
cubes	•	eraser	•	face-meh-blank
cubes-stacked	_	ethernet	ŏ	face-meh-blank-o
database	[]	expand	☺	face-meh-o
delete-left	<u>عند</u>	explosion	•	face-rolling-eyes
democrat	<u> </u>	eye	<u></u>	face-rolling-eyes-o
desktop	Ø.	eye-dropper	**	face-sad-cry
dharmachakra	100	eye-low-vision	60	face-sad-cry-o
diagram-next	©	eye-o	8	face-sad-tear
diagram-predecessor	ğ	eye-slash	€	face-sad-tear-o
diagram-project	®	eye-slash-o	9	face-smile
diagram-successor	8	face-angry	9	face-smile-beam
diamond	8	face-angry-o	©	face-smile-beam-o
diamond-turn-right	8	face-dizzy	©	face-smile-o
<u> </u>	⊗	•		face-smile-wink
dice		face-dizzy-o	9	
dice-d20	9	face-flushed	☺	face-smile-wink-o
dice-d6	<u>@</u>	face-flushed-o	8	face-surprise
dice-five	8	face-frown	⊙	face-surprise-o
dice-four	8	face-frown-o	8	face-tired
dice-one	8	face-frown-open	⊗	face-tired-o
dice-six	⊗	face-frown-open-o	4	fan
dice-three	•	face-grimace	~	faucet
dice-two		face-grimace-o	~	faucet-drip
disease	•	face-grin	l <u>e</u>	fax
display	9	face-grin-beam	2	feather
dna	©	face-grin-beam-o	2	feather-pointed
dog	e	face-grin-beam-sweat	٩	ferry
dolly	<u>©</u>	face-grin-beam-sweat-o		file
door-closed	9	face-grin-hearts	<u>6</u>	file-arrow-down
door-open	☺	face-grin-hearts-o	<u>6</u>	file-arrow-up
dove	<u> </u>	face-grin-o	5	file-audio
down-left-and-up-right-to-center	8	face-grin-squint	<u>.</u>	file-audio-o
down-long	ٺ	face-grin-squint-o	To	file-circle-check
download	B	face-grin-squint-tears	T o	file-circle-exclamation
dragon	\mathfrak{G}	face-grin-squint-tears-o		file-circle-minus
draw-polygon	⊕	face-grin-stars	Ò	file-circle-plus
droplet	☺	face-grin-stars-o	O	file-circle-question

®	file-circle-xmark		folder-plus	F D	hand-point-left-o
6	file-code	t :	folder-tree	Ç	hand-point-right
O	file-code-o	A	font	@	hand-point-right-o
	file-contract		font-awesome	Ę.	hand-point-up
CSV	file-csv	፟	font-awesome-o	P	hand-point-up-o
X	file-excel		football	P	hand-pointer
×	file-excel-o	>>	forward		hand-pointer-o
₽ →	file-export	H	forward-fast	7	hand-scissors
5	file-fragment	H	forward-step	ಕು	hand-scissors-o
	file-half-dashed	A	frog	•₩.	hand-sparkles
	file-image	⊙	futbol	₩	hand-spock
	file-image-o	⊙	futbol-o	%	hand-spock-o
-5	file-import	Æ	gamepad	ර්ර්	handcuffs
	file-invoice	₽)	gas-pump	3	hands
-5 ====================================	file-invoice-dollar	⊕	gauge	Ę	hands-asl-interpreting
	file-lines	Ø	gauge-high		hands-bound
▤	file-lines-o	Ŏ	gauge-simple	₩	hands-bubbles
6	file-medical	ŏ	gauge-simple-high	**************************************	hands-clapping
Ö	file-o	*	gavel	60	hands-holding
PDF	file-pdf	•	gear	L †J	hands-holding-child
PDF PDF	file-pdf-o	φ _α	_		hands-holding-circle
LPDF		♥	gears	77	hands-praying
	file-pen	♥	gem		. , ,
	file-powerpoint		gem-o		handshake
P	file-powerpoint-o	0	genderless	₽	handshake-angle
Ŗ	file-prescription	•	ghost	(S)	handshake-o
to	file-shield	***	gift		handshake-simple
	file-signature		gifts		handshake-simple-slash
48 (3 43 4 3	file-video		glass-water		handshake-slash
	file-video-o	•	glass-water-droplet	<u> </u>	hanukiah
	file-waveform	69	glasses		hard-drive
₩	file-word	(globe		hard-drive-o
W	file-word-o	©	golf-ball-tee		hat-cowboy
	file-zipper	A	gopuram		hat-cowboy-side
	file-zipper-o		graduation-cap	<u> </u>	hat-wizard
~	fill	***	grip	₽.	head-side-cough
\$,	fill-drip	=	grip-lines		head-side-cough-slash
B	film	II	grip-lines-vertical	*	head-side-mask
▼	filter	::	grip-vertical	<u> </u>	head-side-virus
(5)	filter-circle-dollar	(9)	group-arrows-rotate	H	heading
₹	filter-circle-xmark	ď	guitar	$\hat{\Omega}$	headphones
<u></u>	fingerprint	Ť	gun	o o	headphones-simple
Ó	fire	>	hammer	Õ	headset
<u>.</u>	fire-burner	, H	hamsa	•	heart
*	fire-extinguisher	Ŭ	hand	•	heart-circle-bolt
1	fire-flame-curved	7	hand-back-fist	**	heart-circle-check
0	fire-flame-simple	Ŷ	hand-back-fist-o	%	heart-circle-check
×	fish	\? !!!	hand-dots	%	heart-circle-exclamation
*	fish-fins	*	hand-fist	€	
		_			heart-circle-plus
124	flag	*	hand-holding	€	heart-circle-xmark
⊠	flag-checkered	÷	hand-holding-dollar	V	heart-crack
	flag-o	Ż	hand-holding-droplet	\circ	heart-o
₽	flag-usa		hand-holding-hand	.₹	heart-pulse
4	flask	ž	hand-holding-heart	(E)	helicopter
<u>u</u>	flask-vial	Ė	hand-holding-medical	⊕	helicopter-symbol
8	floppy-disk	3	hand-lizard	—	helmet-safety
	floppy-disk-o	ਡੀ	hand-lizard-o	₽	helmet-un
	folder	•	hand-middle-finger	枠	hexagon-nodes
	folder-closed	•	hand-o	Hô	hexagon-nodes-bolt
	folder-closed-o	%	hand-peace	ø	highlighter
	folder-minus	® ₽	hand-peace-o	N ë	hill-avalanche
$\overline{\Box}$	folder-o	គ្គ	hand-point-down	₹.	hill-rockslide
	folder-open	P	hand-point-down-o	~	hippo
	lolder open	U	nana pomit aowii o		
	folder-open-o	ġ	hand-point-left		hockey-puck

Ä	holly-berry	₩	jedi	ď	mars
Ħ	horse	-	jet-fighter	Ç "	mars-and-venus
Ø	horse-head	- ★	jet-fighter-up	¥Ç"	mars-and-venus-burst
añe	hospital		joint	O	mars-double
	hospital-o	Ô	jug-detergent	ď	mars-stroke
9.	hospital-user		kaaba	O#	mars-stroke-right
~	hot-tub-person	P	key	♦ Y Y	mars-stroke-up
(I)	hotdog		keyboard	Y	martini-glass
囲	hotel	<u> </u>	keyboard-o	$\bar{f Y}$	martini-glass-citrus
X	hourglass	(khanda	Ÿ	martini-glass-empty
$\overline{\mathbf{X}}$	hourglass-end	(🖾)	kit-medical	ထ	mask
ጃ	hourglass-half	<u> </u>	kitchen-set		mask-face
₹	hourglass-half-o	•	kiwi-bird	(mask-ventilator
\overline{X}	hourglass-o	<u> </u>	land-mine-on	(masks-theater
	hourglass-start	孟	landmark		mattress-pillow
Ā	house	m	landmark-dome	*	maximize
Ä	house-chimney	並	landmark-flag	8	medal
Ħ	house-chimney-crack	ΑŻ	language	<u> </u>	memory
ä	house-chimney-medical		laptop	m 	menorah
ä	house-chimney-user	<u></u>	laptop	품	
4	house-chimney-window	Ē	laptop-code laptop-file	Ť	mercury
f o	house-circle-check	<u> </u>		<u></u>	message
		\$	laptop-medical	6	message-o
f e	house-circle-exclamation		layer-group		meteor
f ⊗	house-circle-xmark	•	leaf	:##: . .	microchip
13	house-crack	—	left-long	∰₽₽%₹≦₩	microphone
1 0	house-fire	+	left-right	√ €.	microphone-lines
♠ T	house-flag		lemon	756	microphone-lines-slash
	house-flood-water	0	lemon-o	<u>ζ</u> .	microphone-slash
	house-flood-water-circle-arrow-right	® ⊗ •	life-ring	<u> </u>	microscope
	house-laptop	(8)	life-ring-o		minimize
	house-lock	Ţ	lightbulb	1	mitten
•	house-medical	♡	lightbulb-o		mobile
Co	house-medical-circle-check	//	lines-leaning		mobile-button
Co	house-medical-circle-exclamation	<i>®</i>	link		mobile-retro
€ ⊗	house-medical-circle-xmark	<i>∑</i> 2	link-slash	0	mobile-screen
Ŏ,	house-medical-flag	∷	list	<u> </u>	mobile-screen-button
% □	house-signal	žΞ	list-check	©	money-bill
	house-tsunami	1 2 =	list-ol	O	money-bill-1
8	house-user	≔	list-ul	0	money-bill-1-o
♦	hurricane	1	location-arrow	(0)	money-bill-1-wave
ţ	i-cursor	•	location-crosshairs	(2)	money-bill-transfer
	ice-cream	0	location-dot	6	money-bill-trend-up
***	icicles	•	location-pin	Ø	money-bill-wave
9 57	icons	P	location-pin-lock	÷>>> ECOR	money-bill-wheat
	id-badge		lock		money-bills
	id-badge-o		lock-open		money-check
	id-card	AR .	locust	\$=	money-check-dollar
Ė	id-card-clip	63	lungs	▲	monument
≗ ≡	id-card-o	(#)	lungs-virus	C	moon
Æ	igloo	Ü	magnet	C	moon-o
	image	Q	magnifying-glass	¥	mortar-pestle
	image-o	Q	magnifying-glass-arrow-right	îm	mosque
8	image-portrait	Q	magnifying-glass-chart	*	mosquito
	images	Q	magnifying-glass-dollar	₩#	mosquito-net
	images-o	Q	magnifying-glass-location	e ₹	motorcycle
	inbox	Q	magnifying-glass-minus		mound
互	indent	Q	magnifying-glass-plus		mountain
	industry	N	map	∆ th	mountain-city
∞	infinity	181	map-location	<u> </u>	mountain-sun
	info	121	map-location-dot	*	mug-hot
i I	italic	$\widetilde{\mathbb{Z}}$	map-o		mug-saucer
ō	jar	9	map-pin	1	music
	jar-wheat	Ż	marker	器	network-wired

Q neuter À person-digging poop person-dots-from-line newspaper power-off person-dress prescription newspaper-o F note-sticky person-dress-burst prescription-bottle note-sticky-o person-drowning prescription-bottle-medical notes-medical person-falling print 回 person-falling-burst object-group pump-medical object-group-o person-half-dress pump-soap ** 맙 object-ungroup person-harassing puzzle-piece 次本家 object-ungroup-o person-hiking grcode person-military-pointing 66 oil-can quote-left 凼 99 oil-well person-military-rifle quote-right ***** 4.4 **ॐ** person-military-to-person om radiation €) 囡 otter person-praying radio 坖 ത outdent person-pregnant rainbow person-rays ٠Ž. ranking-star pager 貫 paint-roller receipt person-rifle 0 paintbrush person-running record-vinyl Ad rectangle-ad palette person-shelter pallet person-skating rectangle-list ⊞ person-skiing rectangle-list-o panorama paper-plane person-skiing-nordic rectangle-xmark <u>₹</u> 1 lacksquarepaper-plane-o person-snowboarding rectangle-xmark-o چ2 **:** paperclip person-swimming recycle 4 闳 0 parachute-box person-through-window registered \P R 숬 person-walking registered-o paragraph SX. person-walking-arrow-loop-left repeat passport ĥ ጵ→ person-walking-arrow-right paste reply **(** ٦ ጵት person-walking-dashed-line-arrowreply-all paste-o æ pause right republican person-walking-luggage ėlė restroom paw tı retweet person-walking-with-cane peace 1010000000 2 phone ribbon pen (→ right-from-bracket phone-flip pen-clip pen-fancy phone-slash right-left pen-nib phone-volume right-long photo-film **→**] right-to-bracket pen-ruler 0 piggy-bank pen-to-square ring 00 A pills road pen-to-square-o M 7///4 pencil pizza-slice road-barrier ₹B people-arrows place-of-worship road-bridge ķή tò road-circle-check people-carry-box plane άφ̈́Þ **F**è road-circle-exclamation people-group plane-arrival <u>***</u> Fà. plane-circle-check road-circle-xmark people-line *XII* Yii **de M** people-pulling plane-circle-exclamation road-lock people-robbery plane-circle-xmark road-spikes people-roof plane-departure robot plane-lock rocket pepper-hot Ċ plane-slash rotate person Ĉ ∳↓ person-arrow-down-to-line plane-up rotate-left č <u>†</u>1 person-arrow-up-from-line plant-wilt rotate-right රෑර چ plate-wheat person-biking route person-booth 7 play rss Ġ person-breastfeeding plug rug ** plug-circle-bolt ruler person-burst person-cane plug-circle-check ruler-combined 祀 person-chalkboard plug-circle-exclamation حسب ruler-horizontal person-circle-check plug-circle-minus ruler-vertical ÎO sack-dollar person-circle-exclamation plug-circle-plus Ťо sack-xmark person-circle-minus plug-circle-xmark Ťо **@** sailboat Ťο person-circle-plus podcast person-circle-question poo satellite Îø satellite-dish person-circle-xmark ÎØ poo-storm

414	scale-balanced	•	sort-up		store
4	scale-unbalanced	٠	spa	\rightarrow	store-slash
412	scale-unbalanced-flip	3	spaghetti-monster-flying		street-view
Ŕ	school	AB.	spell-check	چ	strikethrough
₽°6	school-circle-check	*	spider	∑ાનું	stroopwafel
B ² 0	school-circle-exclamation		spinner	X_1	subscript
B	school-circle-xmark	•	splotch		suitcase
e f e	school-flag	7	spoon	(<u>6</u>)	suitcase-medical
	school-lock	ٿ ^ي	spray-can	Ä	suitcase-rolling
*	scissors	o.	spray-can-sparkles	4	sun
	screwdriver	Ĭ	square	iği	sun-o
*	screwdriver-wrench	7	square-arrow-up-right	ት የነው	sun-plant-wilt
Ë	scroll	83	square-binary	‡ ₽	superscript
	scroll-torah		square-caret-down		swatchbook
	sd-card	▼	square-caret-down-o	Ã	synagogue
§	section		square-caret-left		syringe
3	seedling	1	square-caret-left-o	É	table
Y	server		square-caret-right	=	table-cells
Ā	shapes	Þ	square-caret-right-o		table-cells-column-lock
~	share		square-caret-up		table-cells-large
(*	share-from-square		square-caret-up-o	=	table-cells-row-lock
<u>।</u>	share-from-square-o		square-check	=	table-cells-row-unlock
ک مہ	share-nodes		square-check-o		table-columns
	sheet-plastic		square-envelope	H	table-list
	shield		square-full		
0	shield-cat		•	×:	table-tennis-paddle-ball tablet
0	shield-dog		square-full-o		tablet-button
Ď	shield-halved		square-h		tablet-screen-button
ŏ	shield-heart	⊡	square-minus	= 0	tablets
×	shield-virus		square-minus-o		
©		NFI	square-nfi	•	tachograph-digital
~	ship		square-o	•	tag
***	shirt		square-parking	_ '	tags
	shoe-prints		square-pen	<u>o</u>	tape
	shop		square-person-confined		tarp
	shop-lock	C	square-phone		tarp-droplet
N	shop-slash	2	square-phone-flip	A	taxi
<u>~~</u>	shower	•	square-plus	==	teeth
₫Ď	shrimp	±	square-plus-o	=	teeth-open
7 ¢	shuffle		square-poll-horizontal	0†	temperature-arrow-down
-	shuttle-space		square-poll-vertical	؆	temperature-arrow-up
=	sign-hanging	√×	square-root-variable	ß	temperature-empty
الي	signal	<u> </u>	square-rss	<u> </u>	temperature-full
. <u>∂-</u> -	signature	₹	square-share-nodes	₩ W	temperature-half
#⊕⊕#	signs-post		square-up-right ·	Ű.	temperature-high
Ē	sim-card	*	square-virus	ŷ.	temperature-low
÷	sink 	×	square-xmark	ß	temperature-quarter
Ť.	sitemap	\$	staff-snake	0	temperature-three-quarters
@	skull	<u> م</u> رد	stairs	N.	tent
	skull-crossbones	<u>=</u>	stamp	*	tent-arrow-down-to-line
	slash	Ď	stapler	X	tent-arrow-left-right
Ž	sleigh	*	star	*	tent-arrow-turn-left
*	sliders	(*	star-and-crescent	×	tent-arrows-down
=	smog	1	star-half	ý	tents
- "	smoking	1	star-half-o	>_	terminal
*	snowflake	₽	star-half-stroke	Ţţ	text-height
*	snowflake-o	₩	star-half-stroke-o	$\overline{\mathcal{X}}$	text-slash
7	snowman	$\stackrel{\leftrightarrow}{\Omega}$	star-o		text-width
;	snowplow	\$	star-of-david	Pine	thermometer
٥	soap	*	star-of-life	16	thumbs-down
/] 热息后来来专用记录中中	socks	ر ئ	stethoscope	i3	thumbs-down-o
祌	solar-panel	ļ	stop	ı¢	thumbs-up
\Pi	sort	Ģ	stopwatch	Ď	thumbs-up-o
•	sort-down	ð	stopwatch-20	¥	thumbtack

thumbtack-slash ticket ticket-simple ፠ timeline **①** toggle-off toggle-on **₽** toilet toilet-paper M toilet-paper-slash toilet-portable toilets-portable ₾ toolbox Ħ tooth torii-gate tornado tower-broadcast は記録 tower-cell tower-observation tractor traffic-light 竺 trailer 国の国が自合自 train train-subway train-tram transgender trash trash-arrow-up trash-can $\overline{\uparrow}$ trash-can-arrow-up 画 trash-can-o tree tree-city triangle-exclamation trophy trowel trowel-bricks truck truck-arrow-right truck-droplet truck-fast truck-field truck-field-un truck-front truck-medical truck-monster truck-moving truck-pickup 畑 truck-plane truck-ramp-box tty turn-down turn-up

umbrella

umbrella-beach <u>U</u> underline universal-access unlock unlock-keyhole up-down up-down-left-right up-long up-right-and-down-left-from-center up-right-from-square upload user user-astronaut user-check user-clock user-doctor user-gear user-graduate user-group user-injured user-large user-large-slash user-lock user-minus user-ninja user-nurse user-o user-pen user-plus user-secret user-shield user-slash user-tag user-tie user-xmark users users-between-lines users-gear users-line users-rays users-rectangle users-slash users-viewfinder utensils van-shuttle vault Ħ vector-square Q venus venus-double venus-mars vest 酚 vest-patches vial

ŧ\$ vial-virus UU vials video Z video-slash vihara 杂 virus * virus-covid virus-covid-slash virus-slash ** viruses മ voicemail ā volcano volleyball **∢**») volume-high **4**, volume-low 4 volume-off **⋖**× volume-xmark Ø vr-cardboard walkie-talkie wallet wand-magic wand-magic-sparkles wand-sparkles warehouse water \mathfrak{H} water-ladder Ⴠ wave-square web-awesome weight-hanging ō weight-scale wheat-awn wheat-awn-circle-exclamation wheelchair ð wheelchair-move whiskey-glass wifi wind window-maximize window-maximize-o window-minimize window-minimize-o window-restore window-restore-o wine-bottle **₽** wine-glass wine-glass-empty Ŋ worm wrench x-ray X xmark ××× xmarks-lines yin-yang

vial-circle-check

B List of Font Awesome brand icons

В 42-group 500px ði accessible-icon accusoft adn ad adversal affiliatetheme @ airbnb ଷ algolia 麦 alipay a, amazon pay amazon-pay a amilia android 8 angellist ANGRY CREATIVE angrycreative angular (A)app-store Ą. app-store-ios apper Ć apple **≰** Pay apple-pay 4 artstation A asymmetrik atlassian **>** audible -Aautoprefixer × avianex OTAIVA aviato aws aws 0 bandcamp battle-net Βē behance \Box bilibili b bimobject V bitbucket **(3)** bitcoin (P) bity I black-tie ::: blackberry ₿ blogger 8 blogger-b bluesky 8 bluetooth * bluetooth-b В bootstrap bġts bots 8 brave (\$3) brave-reverse ₿ btc \$ buffer buromobelexperte **@** buy-n-large Α buysellads * canadian-maple-leaf pay cc-amazon-pay **₩** cc-amex cc-apple-pay

 \odot

cc-diners-club

cc-discover

cc-jcb

cc-mastercard cc-paypal cc-stripe cc-visa centercode centos 6 chrome \mathbb{Z} chromecast cloudflare 0 cloudscale **♦** cloudsmith (C): cloudversify d:11 cmplid ✨ codepen **(3**) codiepie confluence connectdevelop contao cotton-bureau cpanel 6 creative-commons **①** creative-commons-by 鯯 creative-commons-nc € creative-commons-nc-eu € creative-commons-nc-jp ⊜ creative-commons-nd ➌ creative-commons-pd ℗ creative-commons-pd-alt creative-commons-remix **③** creative-commons-sa ● creative-commons-sampling ● creative-commons-sampling-plus ❿ creative-commons-share 0 creative-commons-zero critical-role CSS CSS 3 css3 딥 css3-alt C cuttlefish ಹಿ d-and-d d-and-d-beyond BEYOND d dailymotion dart-lang Q dashcube debian deezer delicious dd deploydog deskpro dev Z deviantart dhl * diaspora digg digg ာ digital-ocean discord discourse D dochub docker draft2digital (A) dribbble

dropbox drupal dyalog earlybirds ebav edge e edge-legacy elementor ello ember ⊛ empire Ø envira erlang **\$** ethereum E etsy 4 evernote **(1)** expeditedssl A facebook facebook-f facebook-messenger ◈ fantasy-flight-games Fed≣∞ fedex Ð fedora \$ figma files-pinwheel 0 firefox firefox-browser first-order first-order-alt ķ firstdraft •• flickr G flipboard flutter fly font-awesome fî fonticons fi fonticons-fi m fort-awesome fort-awesome-alt 1/1 forumbee Ø foursquare (4) free-code-camp freebsd * fulcrum * galactic-republic \Rightarrow galactic-senate lacksquareget-pocket gg ⊗ gg-circle git git ♦ git-alt **(7**) github **6** github-alt gitkraken gitlab gitter д glide glide-g G gofore golang goodreads

а	
□ O 4 € ▲ 6 6 6 6 7 0 8 < \$ 5 7 1 4 4 4 6	goodreads-g google
V	google-drive
G Pay	google-pay
>	google-play
G	google-plus
G+	google-plus-g
7	google-scholar
O	google-wallet gratipay
B	grav
6	gripfire
	grunt
ਓ	guilded
7	gulp
	hacker-news hackerrank
ŏ	hashnode
hips	hips
⊞ ♦≫	hire-a-helper
\}	hive
Shooli 124	hooli
7	hornbill hotjar
h	houzz
♡~FB×®	html5
\$	hubspot
	ideal
IMDb	imdb instagram
	instalod
	intercom
E in	internet-explorer
	invision ioxhost
	itch-io
Ø	itunes
Ü	itunes-note
× O	java
₩	jedi-order jenkins
<u>≥≈</u>	jira
ě	joget
×	joomla
JS	js
	jsfiddle · ·
目 k	jxl kaggle
A	keybase
Ø	keycdn
	kickstarter
	kickstarter-k
	korvue Iaravel
os	lastfm
	leanpub
{less}	less
•	letterboxd
© in	line linkedin
in	linkedin-in
Err	linode
Δ	linux

ly₽	lyft
Ŵ	magento
E	mailchimp
4	mandalorian
Mŧ	markdown
@	mastodon
m	maxcdn
MDB	mdb
⊕	medapps
••	medium
⊕ ⊕ ⊕ × ⊗	medrt
Ø	meetup
₩	megaport
M	mendeley
∞	meta
Q 2	microblog
## #2	microsoft
יים, רדין	mintbit mix
M-×	mixcloud
> <	mixer
(1)	mizuni
×	modx
	monero
408@Z08	napster
\mathbb{M}	neos
(4)	nfc-directional
(8)	nfc-symbol
6	nimblr
	node
(§)	node-js
@ Nee	npm
® ×s8	ns8 nutritionix
*	octopus-deploy
Š	odnoklassniki
Ĝ	odysee
Ŝ	old-republic
·.	opencart
	openid
•	opensuse
Ò	opera
	optin-monster
	orcid
\ \	osi
	padlet page4
7	pagelines
<i>ф</i>	palfed
	patreon
P	paypal
•:	perbyte
•	periscope
③	phabricator
	phoenix-framework
0	phoenix-squadron
(php)	php
Ø	pied-piper
.: + C @ O © → C → C → C P : O O D D D B O F \ B O O O D D O D D D D D D D D D D D D D	pied-piper-alt
B.	pied-piper-hat pied-piper-pp
<u></u>	pinterest
õ	pintorest p

pix P pixiv B playstation 0 product-hunt pushed python qq G quinscape \mathbf{Q} quora R r-project 8 raspberry-pi 0 ravelry ₩ react reacteurope readme rebel 0 red-river **3** reddit Ó reddit-alien • redhat 1 renren replyd $R^{\scriptscriptstyle \text{G}}$ research gate3 resolving **(** rev rocketchat 0 rockrms ❸ rust safari salesforce salesforce Sass sass **#** schlix **Ü** screenpal $\tilde{\mathbf{s}}$ scribd searchengin S sellcast sellsy servicestack 8 shirtsinbulk shoelace Â shopify G shopware signal-messenger М simplybuilt Q sistrix sith sitrox sketch \mathcal{O} skyatlas 0 skype 44 slack **...** slideshare 3 snapchat soundcloud Q sourcetree A space-awesome 0 speakap **S**7 speaker-deck spotify Вē square-behance X square-bluesky \otimes square-dribbble square-facebook

pinterest-p

0 square-font-awesome square-font-awesome-stroke git square-git Ð square-github square-gitlab G٠ square-google-plus Υ square-hacker-news 0 square-instagram JS square-js cs square-lastfm 888 square-letterboxd ě square-odnoklassniki square-pied-piper P square-pinterest É square-reddit \mathbb{S} square-snapchat P square-steam **®** square-threads 0 square-tumblr V square-twitter υρ square-upwork ď square-viadeo V square-vimeo Ÿ square-web-awesome • square-web-awesome-stroke \odot square-whatsapp X square-x-twitter × square-xing lacksquaresquare-youtube squarespace stack-exchange stack-overflow stackpath staylinked steam steam-symbol sticker-mule strava stripe

S

stripe-s stubber

studiovinari J. stumbleupon ❿ stumbleupon-circle Ø superpowers (SUPPLE) supple €. suse swift F symfony **()** teamspeak telegram tencent-weibo the-red-yeti themeco Ø themeisle think-peaks threads ታ tiktok 1 trade-federation trello tumblr twitch twitter ľ typo3 uber ubuntu uikit ٥ umbraco ্ব uncharted uniregistry **∲** unity unsplash untappdups υp upwork **←** usb \geqslant usps ussunnah vaadin

₩

œ

viacoin

viadeo

viber

v vimeo v vimeo-v ß vine K vk VAV vnv V vueis 1 watchman-monitoring **(** waze web-awesome y webflow യ weebly ෯ weibo 4 weixin \odot whatsapp O whmcs W wikipedia-w 1 windows Ы wirsindhandwerk WiX wizards-of-the-coast Wodu. wodu * wolf-pack-battalion **(1)** wordpress W wordpress-simple 8 wpbeginner **₹** wpexplorer wpforms **②** wpressr X x-twitter Ö xbox × xing Υ y-combinator **y**! yahoo **V** yammer Я yandex γ yandex-international yarn ķ yelp **y** yoast youtube

zhihu

\mathbf{C} List of Academicons icons

A academia

A academia-square

ҳ acclaim

≈ acclaim-square

acm

\$ acm-square

Ф acmdl

DL acmdl-square

ø ads

ø ads-square 4

africarxiv

* africarxiv-square

 $\widehat{\mathbb{H}}$ archive

血 archive-square

X arxiv

X arxiv-square

Rχ biorxiv-square

[] ceur

ceur-square

<•**÷** cienca-vitae

(•• cienca-vitae-square

O clarivate

ø clarivate-square

8 closed-access

8 closed-access-square

O conversation

Q conversation-square

တ coursera

တ coursera-square

crossref

ş crossref-square

CV cv

cv cv-square

Ø datacite 6 datacite-square

ð dataverse

ဝိ dataverse-square

Ņ dblp

þį dblp-square

(1) depsy

()

depsy-square

6 doi

doi doi-square

4 dryad 0 dryad-square

E

elsevier

E elsevier-square Ö figshare

Ö figshare-square google-scholar

gi google-scholar-square

hal

** hal-square

h. hypothesis

h. hypothesis-square

(j) ideas-repec

(j) ideas-repec-square

ieee

 ieee-square

• impactstory

(1) impactstory-square

inaturalist

¥ inaturalist-square

8 inpn

Ø inpn-square

iΝ inspire

iΝ inspire-square

Ю isidore

ю isidore-square

isni isni

isni isni-square

J jstor

J jstor-square

6 lattes

6 lattes-square

 $m\boldsymbol{o}$ mathoverflow

 $\overline{\mathbf{m}}_{\boldsymbol{o}}$ mathoverflow-square

** mendelev

۸۸. mendeley-square

m moodle

ſ'n moodle-square

mt mt mtmt

mt mtmt-square

**** nakala

ত nakala-square

M obp

obp-square

9 open-access

8 open-access-square

0 open-data

0 open-data-square

0 open-materials

0 open-materials-square

Ç openedition

Q openedition-square

ø orcid

orcid-square

osf

٥ osf-square

Ő overleaf

Ø overleaf-square

 ${f P}$ philpapers-square

P phipapers

ρ piazza

ρ piazza-square

0 preregistered

Ø preregistered-square

protocols

3 protocols-square

ΨX psyarxiv

Ψ A X psyarxiv-square

p publons

p publons-square

M pubmed

M pubmed-square

Ø pubpeer

P pubpeer-square

R researcherid

R researcherid-square

 R^{G} researchgate

 $R^{\scriptscriptstyle \text{G}}$ researchgate-square

RÖR

ROR ror-square

• sci-hub

G sci-hub-square

Ψ scirate

Ψ scirate-square

SC scopus

SC scopus-square

V semantic-scholar

♥ semantic-scholar-square

springer

<u>₽</u> springer-square

SSRN ssrn

SSEN ssrn-square

stackoverflow

stackoverflow-square

Rχ uniE9A2

VI AF viaf $_{AF}^{VI}$ viaf-square

Ѿ wiley

(P) wiley-square

zenodo zenodo

Ζ zotero Z zotero-square