Lisnoti

A sans serif font for text and maths

Version 2.006 (2026-11-02) · Tim Gordon

https://lisnoti.com · https://github.com/Lisnoti/Lisnoti

1 Introduction

Lisnoti (/lɪz'nəʊti:/) is a proportional sans serif font for everyday use, with clear, unambiguous letters and coverage of Latin, Greek, Cyrillic and Devanagari character sets. It is particularly strong for maths, science and actuarial work, including typesetting equations, and comes in regular, *italic*, **bold** and ***bold italic***.

Lisnoti is derived from Google's Noto fonts, including Khaled Hosny's 2024 redesign of Noto Sans Math, but with numerous amendments to improve clarity and consistency.

The font includes OpenType MATH tables, which means unicode-math can use Lisnoti for equations as well as text – this document is set entirely in Lisnoti.

Lisnoti differences from Noto:

- No lookalikes: capital I, small l and number 1 are always distinct, as are capital O and number 0:

  Il1 O0 *Il1 O0* **Il1 O0** ***Il1 O0***

- Character classes redrawn (set operators and radicals) or rescaled (*n*-ary operators):

  $\in \notin \subset \not\subset \subseteq \not\subseteq \cap \cup \surd \bigcap \bigcup \sum \prod$

- Consistent Unicode superscripts and subscripts, which means plain text such as $x^2 + y^2 = r^2$, H_2O and a_{ij} can be written without maths mode.

- Relevant characters grouped in a single font, including Greek, Cyrillic, Unicode mathematical alphanumerics, arrows, geometric shapes, ticks and crosses, box drawing and every currency sign in Unicode.

2 Installing

The lisnoti package installs its four font files where your TeX distribution can find them:

- In TeX Live, run tlmgr install lisnoti.
- In MiKTeX, open MiKTeX Console, go to *Packages*, search for lisnoti, select it and click +. Or, at a command prompt, run miktex packages install lisnoti.

Or you can install the fonts via your operating system in the usual way and let fontspec find them there. The font files are available at https://github.com/Lisnoti/Lisnoti.

3 Using Lisnoti

Lisnoti is an OpenType font, so it needs LuaLaTeX or XeLaTeX with fontspec. (This document compiles with both.)

3.1 Text

```
\usepackage{fontspec}
\setmainfont{Lisnoti}
\setsansfont{Lisnoti}
```

fontspec automatically finds all styles, i.e. regular, italic, bold and bold italic.

Include \setsansfont{Lisnoti} to ensure \textsf and other commands requesting sans serif text get the same font.

3.2 Maths

```
\usepackage{unicode-math}
\setmathfont{Lisnoti}
\setmathfont{Lisnoti Bold}[version=bold]
\setmathfont{Lisnoti}[range=\mathcal, StylisticSet=1]
```

If you use amsmath, load it *before* the above.

The [version=bold] line makes \boldmath and \mathversion{bold} work.

The [range=\mathcal, StylisticSet=1] line ensures standard behaviour for \mathcal, i.e. $\mathcal{ABC}$. (Without it, Lisnoti sets \mathcal as $\mathscr{ABC}$).

NB The order matters – the \mathcal, StylisticSet line must follow the bold version line, otherwise unicode-math (version 0.8r) drops the calligraphic capitals altogether.

3.3 Mathematical alphabets

Every unicode-math alphabet is available.

Command	Sample	Command	Sample
\symup	ABCDEF abcdef αβγδεζ	\mathbb	$\mathbb{ABCDEF}$
\symit	$ABCDEF\ abcdef\ \alpha\beta\gamma\delta\varepsilon\zeta$	\mathfrak	$\mathfrak{ABCDEF}$ abcdef
\symbf	**ABCDEF abcdef αβγδεζ**	\mathscr	$\mathscr{ABCDEF}$
\symbfit	$\boldsymbol{ABCDEF\ abcdef\ \alpha\beta\gamma\delta\varepsilon\zeta}$	\mathcal	$\mathcal{ABCDEF}$
\mathsf	ABCDEF abcdef	\mathbfscr	$\boldsymbol{\mathscr{ABCDEF}}$
\mathbfsf	**ABCDEF abcdef**		
\mathtt	ABCDEF abcdef		

4 Specimen

4.1 Text

The quick brown fox jumps over the lazy dog. Sphinx of black quartz, judge my vow! *Pack my box with five dozen liquor jugs.* **How vexingly quick daft zebras jump.**

ABCDEFGHIJKLMNOPQRSTUVWXYZ abcdefghijklmnopqrstuvwxyz 0123456789
ABCDEFGHIJKLMNOPQRSTUVWXYZ abcdefghijklmnopqrstuvwxyz 0123456789
ABCDEFGHIJKLMNOPQRSTUVWXYZ abcdefghijklmnopqrstuvwxyz 0123456789
ABCDEFGHIJKLMNOPQRSTUVWXYZ abcdefghijklmnopqrstuvwxyz 0123456789

Ελληνικά: Αλφάβητο, άλφα βήτα γάμμα δέλτα. Кириллица: Съешь же ещё этих мягких французских булок.

4.2 Code

Lisnoti keeps l, I and 1 apart, and O and 0, which matters most in code. The listing below is set in Lisnoti itself.

```
def premium(l1, I0, O1):
    """Return the level annual premium."""
    return (l1 * I0) / max(O1, 1e-9)
```

4.3 Mathematics

The quadratic formula and the binomial theorem:

$$x = \frac{-b \pm \sqrt{b^2 - 4ac}}{2a} \qquad (x + y)^n = \sum_{k=0}^{n} \binom{n}{k} x^k y^{n-k}$$

The Gaussian integral, Euler’s identity and a Fourier transform:

$$\int_{-\infty}^{\infty} e^{-x^2/2}\,dx = \sqrt{2\pi} \qquad e^{i\pi} + 1 = 0 \qquad \hat{f}(\xi) = \int_{\mathbb{R}} f(x)\, e^{-2\pi i x \xi}\,dx$$

Maxwell’s equations, with **E** and **B** in bold:

$$\nabla \cdot \mathbf{E} = \frac{\rho}{\varepsilon_0} \qquad \nabla \cdot \mathbf{B} = 0 \qquad \nabla \times \mathbf{E} = -\frac{\partial \mathbf{B}}{\partial t} \qquad \nabla \times \mathbf{B} = \mu_0\left(\mathbf{J} + \varepsilon_0 \frac{\partial \mathbf{E}}{\partial t}\right)$$

Survival probability and the present value of an annuity-due, from actuarial work:

$${}_tp_x = \exp\left(-\int_0^t \mu_{x+s}\,ds\right) \qquad \ddot{a}_{\overline{n}|} = \sum_{k=0}^{n-1} v^k = \frac{1 - v^n}{d}$$

Matrices and nested radicals:

$$\det\begin{pmatrix} a & b \\ c & d \end{pmatrix} = ad - bc \qquad A^{-1} = \frac{1}{\det A}\begin{bmatrix} d & -b \\ -c & a \end{bmatrix} \qquad \varphi = \sqrt{1+\sqrt{1+\sqrt{1+\sqrt{1+\cdots}}}}$$

Continued fractions and stretchy delimiters:

$$\sqrt{2} = 1 + \cfrac{1}{2 + \cfrac{1}{2 + \cfrac{1}{2 + \cdots}}} \qquad \left\| \sum_{i=1}^{n} \frac{x_i}{\sqrt[3]{1 + y_i^2}} \right\| \leq \left(\sum_{i=1}^{n} |x_i|^p \right)^{1/p}$$

Sets, logic and limits:

$$\{ x \in \mathbb{R} : x^2 < 2 \} = \left(-\sqrt{2}, \sqrt{2}\right) \qquad A \cap (B \cup C) = (A \cap B) \cup (A \cap C) \qquad \neg(p \wedge q) \Leftrightarrow \neg p \vee \neg q$$

$$\forall \varepsilon > 0 \; \exists \delta > 0 : |x - a| < \delta \Rightarrow |f(x) - L| < \varepsilon \qquad \lim_{n \to \infty} \left(1 + \frac{1}{n}\right)^n = e$$

Big operators, inline and displayed: $\sum_{i=1}^{n} i = \frac{n(n+1)}{2}$ and $\prod_p (1 - p^{-s})^{-1}$ in text, and on display

$$\sum_{i=1}^{n} \quad \prod_{i=1}^{n} \quad \coprod_{i=1}^{n} \quad \bigcup_{i \in I} A_i \quad \bigcap_{i \in I} A_i \quad \bigoplus_{k} V_k \quad \bigotimes_{k} V_k \quad \int_a^b \quad \iint_D \quad \oint_C$$

And in bold, with \boldmath:

$$\boldsymbol{x = \frac{-b \pm \sqrt{b^2 - 4ac}}{2a}} \qquad \boldsymbol{\int_{-\infty}^{\infty} e^{-x^2/2}\,dx = \sqrt{2\pi}} \qquad \boldsymbol{\sum_{k=0}^{n} \binom{n}{k} x^k y^{n-k}}$$

5 Licence

Lisnoti is provided under the SIL Open Font License, version 1.1.

See the file Licence.txt in this package for the licence text.

6 Feedback and links

Comments are welcome on Lisnoti's GitHub discussions page.

The website lisnoti.com shows Lisnoti on the web and lets you try it out.

Why Lisnoti exists is the subject of an article on timgord.com.