Sample document

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1 LLAlignAnd

$$
\begin{aligned}
\&= \quad & \begin{aligned} a &= b \\ c &= d \end{aligned} \quad \text{ok} \\
=\& \quad & \begin{aligned} a &=b \\ c &=d \end{aligned} \quad \text{ng} \\
=\{\}\& \quad & \begin{aligned} a &= b \\ c &= d \end{aligned} \quad \text{ok}
\end{aligned}
$$

2 LLAlignSingleLine

Long line before display (same result)

Lorem ipsum.

$$f(x) = ax^2 + bx + c$$

This is an equation environment.

Lorem ipsum.

$$f(x) = ax^2 + bx + c$$

This is an align environment.

Short line before display (different result)

Lrm:

$$f(x) = ax^2 + bx + c$$

This is an equation environment.

Lrm:

$$f(x) = ax^2 + bx + c$$

This is an align environment.

Single-line alignat environment is also detected.

$$f(x) = ax^2 + bx + c$$

Multi-line alignat environment is not detected.

$$
\begin{aligned}
f(x) &= ax^2 + bx + c \\
g(x) &= dx^2 + ex + f
\end{aligned}
$$

3 LLColonEqq

x := y	$x := y$	ng
x \coloneqq y	$x \coloneqq y$	ok
x ::= y	$x ::= y$	ng
x \Coloneqq y	$x \Coloneqq y$	ok

4 LLColonForMapping

A : B	$A : B$	ok
A \colon B	$A \colon B$	ng
f(x) : \mathbb{R}\to\mathbb{R}	$f(x) : \mathbb{R} \to \mathbb{R}$	ng
f(x) \colon \mathbb{R}\to\mathbb{R}	$f(x) \colon \mathbb{R} \to \mathbb{R}$	ok

We detect all of : in the following

Here are examples of colons we detect.

- $X : Y \to Z$,
- $X : Y \mapsto Z.$,
- $X : \mathbb{R}^{n^2+2n+1} \to \mathbb{R}$

and

$$X : (Y \text{ at new line in tex file}) \to (Z \text{ at new line in tex file}). \tag{1}$$

We do NOT detect any of : in the following

Here are examples of ':' we do not detect.

- $X \colon Y \to Z$, the correct use of colon.
- $A : B : C = 1 : 2 : 3$, the colon for ratio.
- $A : B = 1 : 2$ and $\alpha \to \beta$, separated by dollar sign.
- f : (some very very very very very long long long long words) $\to \mathbb{R}$, the false negative.

5 LLCref

Theorem 1. *This is a sample theorem.*

Use Thm. 1 with cref instead of Theorem 1 with ref to avoid mistakes.

6 LLDoubleQuotation

Use “XXX” instead of “XXX” or "XXX".

7 LLENDash

- Erdos-Renyi (random graph, Erdős–Rényi)
- Einstein-Podolsky-Rosen (quantum physics, Einstein–Podolsky–Rosen)
- Fruchterman-Reingold (graph drawing, Fruchterman–Reingold)
- Gauss-Legendre (numerical integration, Gauss–Legendre)
- Gibbs-Helmholtz (thermodynamics, Gibbs–Helmholtz)
- Karush-Kuhn-Tucker (optimization, Karush–Kuhn–Tucker)

Exception: Fritz-John (optimization, name of a person)
False Positive: Wrong-Example

8 LLEqnarray

We should not use eqnarray. It has some spacing issues.

$$x = y \tag{2}$$
$$a = b \tag{3}$$

9 LLLlGg

n \ll m	$n \ll m$	ok
n << m	$n << m$	ng

I like human <<< cat <<<<<<<<<<<<<<<<< dog.

10 LLRefEq

To refer to the equation, use (1) with eqref instead of (1) with ref.
You can avoid the mistakes of forgetting to add parentheses.

11 LLSharp

\#	$\#A$	ok
\sharp	$\sharp A$	ng

12 LLNonASCII

The following line contains non-ASCII characters.
！＂＃＄％＆＇（）＊＋，－．／

日本語の文章は、upLaTeX でフツウに書けます。
(You can write Japanese sentences as usual with upLaTeX.)

13 LLSI

Example: 10 KB, 3.5MiB, 500 GB.
Some Awesome Command.This is not ExaByte..
This 1EB is one ExaByte.

14 LLT

$$X^{T} \quad X^{\top} \quad X^{\intercal}$$

15 LLTitle

15.1 non title case words

15.1.1 This Is a Correct Title

SubParagraph: Test With Ref 1

16 LLUserDefined

You can define your own rule, such as prohibiting the use of a f^a.

$$f^{a}(X) \quad f^{\mathrm{a}}(X)$$