Title

Author(s)

January 15, 2024

1 Section

This is the report for DRP 2024 at McGill University and as to do with SGD [Wik22].

1.1 Subsection

This is a subsection. In LaTeX, you can use inline math like this: $\int_0^x f(x)\mathrm{d}x$. You can also put longer/bigger equations in math mode like this:

$$\begin{bmatrix} A & B^T \\ B & Q \end{bmatrix}^{-1} = \begin{bmatrix} (A - B^T Q^{-1} B)^{-1} & -(A - B^T Q^{-1} B)^{-1} B^T Q^{-1} \\ -Q^{-1} B (A - B^T Q^{-1} B)^{-1} & Q^{-1} + Q^{-1} B (A - B^T Q^{-1} B)^{-1} B^T Q^{-1} \end{bmatrix}.$$

Use punctuation like you would do in a regular sentence.

1.1.1 Subsubsection

If you want to refer to an equation, use

$$a^2 + b^2 = c^2. \tag{1}$$

Later in the text, you can refer to equation (1) using the cleveref package. You can do the same for theorem, lemma, etc.

Theorem 1.1. *First theorem*

Theorem 1.2 (Named theorem)**.** *Named theorem*

Lemma 1.1. *Some lemma*

Proof. Put the proof here □

Remark 1. You can put *emphasis* on a word using the command emph.

Initialize some things
Continuing
for $n = 1, \ldots, 10$ **do**
    if True **then**
        SOME FUNCTION(x,y,z)
    else
        Do nothing
output Done

References

[Wik22] Wikipedia contributors. Stochastic gradient descent — Wikipedia, the free encyclopedia, 2022. [Online; accessed 1-February-2022].